

THE LANGUAGE OF EMOTION IN ENGLISH AND PORTUGUESE

- A CORPORA-BASED APPROACH

by **Belinda Maia**

PLEASE NOTE:

This is NOT the original thesis (1994), but a revised version done in 1996, and adapted in 2004 to .html format. It is impossible to retrieve the 1994 digital version now but, if anyone is remotely interested in what I did ten years ago, the revised version should be easier to read.

The following summary was written in 2004 with the benefit of hindsight and a better understanding of the (ir?) relevance of what I was trying to do at the time.

SUMMARY

This thesis looks at the way the emotion words in English and Portuguese behave lexically, syntactically and semantically. The Brain/Mind debate was in full swing when the thesis was written and the first three chapters deal with various aspects of this debate and how it affects - and is affected by - the whole area of emotion. The objective of the linguistic analysis in the following chapters was to see how actual usage of these words in context gives us clues as to how we conceptualise emotion through language. At the time, seeking for evidence of how we conceptualize by examining linguistic items in corpora was not popular in mainstream linguistics, but today, as a result of movements within cognitive linguistics and further sophistication of corpora linguistics, such an objective would not seem unusual.

The process involved collecting words that could be considered as describing emotion in any way from corpora, examining them through concordancing, and classifying them according to several parameters. A general view of the area was obtained using the COBUILD corpus in Birmingham, and using a much larger corpus than that on which the thesis results are based, proved very useful. However, for copyright reasons, I was obliged to make my own corpora of literary texts: about 778,650 words were digitalized for English and about 819,500 for Portuguese. From these corpora about 25,000 examples were extracted and analysed.

The lexical items were grouped according to the cognitive structure of the emotions described by Ortony, Clore & Collins (1998:19). Although it is possible to recognize the concepts behind their categories, some categories are not lexicalized in English or Portuguese. On the other hand, SURPRISE, which they do not recognize as an emotion, turned out to be similar in semantic structure linguistically, and the generic words for emotion, like *feeling* and *sentimento*, also merited our attention. We recognize that emotional states can be described without using the emotion lexicon - for example, by describing body language - but this type of analysis was beyond the scope of our thesis.

Each lexical item was extracted with the related sentence from the corpus and classified according to parts-of-speech categorization and also according to its semantic role. Using Halliday's terminology

of Senser for the person who feels emotion - as with *frightened* - and Phenomenon for what is seen to cause or trigger the emotion - as with *frightening*, all lexical items were classified as Senser focusing (SFoc) or Phenomenon focusing (PFoc). The lexicon was then examined and quantified as to how the items behaved when analysed using functional sentence analysis and other syntactic criteria, with a view to demonstrating the influence of semantics on syntax. The emotion lexicon accepts and rejects certain types of syntax quite clearly.

Finally, since the emotion lexicon behaves in ways that overlap with verbs of cognition, and the Mind/Brain debate essentially focuses the relationship of emotion to the way human beings understand the world, each Phenomenon was classified according to the degree to which the Senser consciously reasoned about the Phenomenon in the sentence or, whenever possible, the context.

This multi-level analysis produced results which we hope you may find interesting. Despite the apparent inadequacy of the corpora and their literary content, we were able to discern some patterns that could now merit further investigation. As was to be expected, the two languages varied most at the level of the lexicon. The semantic aspects of the syntax also showed some interesting differences that hint at underlying cultural differences that, as a late bilingual, I had always felt existed. However, the deeper semantic analysis of the Senser and Phenomenon focused items and the analysis of the degree of conscious reasoning about the Phenomenon by the Senser resulted in remarkably similar results for both languages. Whether this demonstrates anything more universal about the underlying cognitive apparatus with which the two languages conceptualize emotion is something that can only gain credibility if the same exercise is repeated with more representative corpora in both these and other languages.

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When one reaches the end of this sort of work, one realizes how many factors played a part in the process, and understands that, without the help and cooperation of everyone in one's life, nothing would have happened.

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My interest in linguistics has grown slowly over the years, but perhaps the single most influential contribution to the process was made by Professor Doutor Oscar Lopes when he introduced me to the relationship between language and thought during the seminars of my Master's Degree. Although I was already interested in linguistics from a more professional point of view, this aspect of the subject is what has led me on.

Some years before this, however, I had rather unceremoniously presented myself in the office of Professor Reinhard Hartmann in Exeter, and demanded to know what help he could give me, as a lector of English Language, in integrating an element of linguistics into my courses. Over the years, I have returned to him for advice, and I should now like to thank him for his patience on these occasions, and for all the valuable help he has given me over the last few years in organizing my research, and controlling my natural tendency to go off at a tangent.

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when I tell them I love them.

PREFACE

0.1 Keywords

The two key-words in the title of this book are *emotion* and *corpora* - the first referring to the subject, the second to the method of study. I originally set out to study the subject of emotion because it seemed an interesting area in which to investigate the various claims of language universals and linguistic relativism. Only later did I understand the wider implications of such a study.

My use of electronic corpora was prompted by the need I felt for judging ideas about the language of emotion on a quantitative as well as a qualitative basis. I knew that there were interesting and conflicting views about the linguistic expression of emotion, and yet it seemed to me that a lot of it needed examining in the light of real language in texts, rather than just relying on the linguist's intuitions about what was merely acceptable. The work described here was carried out over several years, and should be seen as one person's attempt to find a use for the quantitative analysis offered by the corpora being developed, rather than on the present state-of-the-art corpora.

0.2 The Language of Emotion as a subject for study

Although I was drawn to this subject by a variety of factors, I soon found that others were interested in emotion for reasons I had not originally contemplated. At a more philosophical level, emotions, and the general language and specific concepts with which we attempt to express our experience of them, are at the centre of contemporary arguments about the nature of human brains and/or minds, human consciousness and about the (im)possibility of consciousness existing in artificial intelligence. Emotion, and the relationship between cognition and emotion, is something which interests psychologists, AI experts, philosophers, and others, and some of them have approached the subject by looking at the language of emotion.

The study of the language of emotion focuses an interesting paradox. Most of us feel we know what is meant by words such as *fear*, *love*, or *anger*, and the lexicon would seem to describe an area of human behaviour which could arguably be considered innate. However, different languages vary significantly in the way they provide concepts for this area of human experience, and experiments by psychologists and linguists have shown that the way the individual uses and interprets the lexicon of Emotion varies more widely than with most other lexical fields. Some psychologists and linguists have, in fact, abandoned study of the official lexicon altogether and concentrated on the paraphrases and metaphors with which people sometimes prefer to describe their experience. Others, however, have continued to study the official Emotion nomenclature and, in recent years, a large body of research has built up around it, most, but not all, from the point of view of psychology.

The semantics and syntax of the lexicon of Emotion have provided linguists with food for thought for some time, as a study of semantic classes of verbs or of deep case theory will show. Certain syntactic uses of lexemes of Emotion have, in fact, been at the centre of arguments between the different schools of linguistics. It is also significant that these analyses have very often been affected by current theories in psychology and philosophy. I believe that separating the study of the lexicon from that of the syntax in which it is typically embedded contributes to some of the confusion that exists in this field. I also believe that neither lexemes nor sentences should be considered abstractly, or without reference to at least some immediate situation or context. The language of Emotion can only really be studied significantly if the three broad levels of the lexicon, syntax and context are studied in conjunction.

It was my aim, therefore, to bring together the ideas of the linguists and the psychologists, and test them against the qualitative and quantitative findings of a relatively large corpus of examples taken from unedited texts. In this way, I hoped to be able to demonstrate the problems of universality and relativity more effectively.

The material I have accumulated leads me to propose that there is a similarity between English and Portuguese, which could be used as a basis from which to search for a possible level of universality when comparing these findings to those for other languages, but that this is not specifically localized in the lexicon or the syntax, but rather in a combination of both in conjunction with the needs of language users in context. On the other hand, I hope to demonstrate that both the lexicons and the syntax of the two languages offer rather different options for interpreting the experiences we call emotion.

I believe that language is inextricably bound up with human experience and that they cannot be considered separately. Whether one believes that human experience formed language, or that language affects that experience, and also affects the analysis of the same experience, I hope to demonstrate the benefits of attempting a more holistic view which takes both into account.

0.3 The use of electronic corpora

My first direct contact with an electronic corpus was with the Birmingham Corpus, which I was able to consult for a week in March, 1990. This visit drew my attention to the fact that lexemes favour distinct syntactic patterns which are, in their turn, influenced by semantic factors. At that time, the corpus consisted of about 7 million words, but, by my second visit, for ten days in October, 1991, this had been increased to about 17,5 million, and I was able to examine these patterns in more detail, and take notes on the frequency of the different syntactic forms of the lexemes involved.

However, although the results of this study were valuable as a norm against which to compare the quantitative lexical and syntactic findings from my own corpus, two factors were missing for the purposes I had in mind. First of all, I needed much more time in which to analyse the semantic and contextual levels and, in the second place, I needed a comparable corpus of

Portuguese. I resolved, therefore, to build my own corpora. I realize that using literary texts for linguistic analysis naturally invites criticism, but at the time I was preparing my corpus the English texts available in electronic form for academic use from the Oxford University Computing Service were largely literary. In order to scan a comparable Portuguese Corpus, therefore, I turned to Portuguese literary texts.

There are, of course, more theoretical justifications for using literary texts, and the most important is that this is precisely the type of text which is most likely to contain the Emotion lexicon. About 40% of the Birmingham Corpus I consulted consisted of literary texts, and when I was searching it for examples, it was perfectly clear that the vast majority of these examples came from that 40%. If literary texts yield the most examples of the lexicon of Emotion, there must be a reason for it. This is almost certainly because writers of fiction are exceptionally interested in describing the emotional states and reactions of their characters. The defence of my usage of literary texts is, therefore, based on the conviction that this type of text is the best source of examples for the lexicon of Emotion.

In the end I was able to base my findings on an English corpus which consisted of approximately 778,500 words and a Portuguese Corpus of 819,500 words. From these corpora I collected 9,755 examples for the Emotion groups in English, and 11,893 in Portuguese. A further 1,545 examples were collected for Desire in English and 2,051 for Portuguese. This gave a total of over 25,000 examples on which to work.

The methodology involved taking the examples found in the corpora of the lexical sets in English and Portuguese of the semantic field of Emotion, and analysing:

- a. the lexemes in relation to the others within each set, and to those in the other language;
- b. the syntactic form of the lexemes, and the syntactic structures in which they tend to co-occur;
- c. the semantic nature of the syntax involved;
- d. the semantic roles of the participants in the Emotion situation, whether expressed at the level of the sentence or the context,
- e. certain more pragmatic factors which are only observable after consideration of the type of quantitative data available in such corpora.

0.4 The Texts

The choice of texts was dictated by many factors, but availability and a search for texts which had official translations were the most important ones. The texts I used in my corpus are as follows. The numbers of words are approximate, as not all the electronic versions were free from repeated parts and omissions.

The English Corpus

Author	Date	Title	*No. of words
CARROLL, Lewis	1865.	<i>Alice in Wonderland.</i>	27,000
CONRAD, Joseph	1900	<i>Lord Jim.</i>	143,000
DICKENS, Charles	1860	<i>Great Expectations</i>	190,000
GREENE, Graham	1978	<i>The Human Factor</i>	85,000
FITZGERALD, F. S.	1925	<i>The Great Gatsby</i>	48,000
LAWRENCE, D.H.	1930	<i>The Virgin and the Gypsy</i>	31,500
LE CARRÉ, John	1963	<i>The Spy who came in from the Cold</i>	69,000
WAUGH, Evelyn	1945	<i>Brideshead Revisited</i>	115,000
WOOLF, Virginia.	1927	<i>To the Lighthouse.</i>	70,000
TOTAL			778,500

Portuguese Texts

Author	Date	Title	*No. of words
BAPTISTA, António Alçada	1989	Tia Susana, Meu amor	27,000
LUIS, Agustina Bessa	1953	A Sibila	84,000
MONTEIRO, Luís de Sttau	1961	Angústia para o Jantar	49,500
NAMORA, Fernando	1949	Retalhos da Vida de um Médico	40,500
PIRES, José Cardoso	1982	Balada da Praia dos Cães	76,000
RIBEIRO, Aquilino	1913	O Jardim das Tormentas	59,000
RIBEIRO, Aquilino	1922	Malhadinhas	34,000
RIBEIRO, Aquilino	1957	A Casa Grande dos Romarigães	90,000
RIBEIRO, Aquilino	1958	A Mina de Diamantes	41,500
RIBEIRO, Aquilino	1958	Quando Os Lobos UIvam	84,500
QUEIROZ, Eça de	1888	Os Maias	214,000
TORGA, Miguel	1940	Os Bichos	20,000
TOTAL			819,500

*The number of words is approximate, given the problems with scanning and digitalization at the time.

0.5 Key to Abbreviations and Printing Conventions in the Text

Printing conventions

Word in CAPITALS = specific semantic term, e.g. SENSER

= specific syntactic term, e.g. -ING clause, -SE pronoun

Word / phrase in [CAPITALS] + square brackets = semantic primitive

Emotion word with capital letter = refers to a lexical group or semantic field, e.g. Joy

Italics used when:

- a) when word considered as lexeme.
- b) examples included in text
- b) with non-English/Portuguese word, e.g. Latin *qua*
- c) Book titles

“ + titles of articles

“ + individual words = used to focus specific terms.

“” + words, phrases or sentences = quotations from works referred to.

Abbreviations in the text

General

AI = Artificial Intelligence

BC = Birmingham Corpus

BI = Biological Intelligence

CA = Contrastive Analysis

(E) = Used to mark data from English Corpus

EA = Error Analysis

EC = English Corpus

(P) = Used to mark data from Portuguese Corpus

PC = Portuguese Corpus

PFoc = PHENOMENON focusing

PH. type = Phenomenon type

S-R = Stimulus - Response

S.O.E.D. = Shorter Oxford English Dictionary

SFoc = SENSER focusing

TEFL = Teaching English as a Foreign Language

Syntax

Object types (see 3.3.8)

a = noun phrase

b = non-finite infinitive clause (S = same as main clause)

c = non-finite infinitive clause (S = different from main clause)

d = non-finite -ING clause (S = same as main clause)

e = non-finite -ING clause (S = different from main clause)

f = finite (THAT) / QUE clause (S = same as main clause)

g = finite (THAT) / QUE clause (S = different from main clause)

h = finite WH-/ O QUE clause

Semantics

PHENOMENON types (see (3.1.2))

1. Unknown, or unspecified in the immediate context.
2. Self, or permanent quality of SENSER
3. State or situation of SENSER
4. Emotion, perception or cognitive processes of SENSER
5. Action by SENSER
6. The Other
7. State or situation of the Other
8. Emotion, perception or cognitive processes of the Other
9. Action by the Other
10. A non-human object, concrete or abstract.
11. A complex proposition about the world.

Abbreviations after examples from the corpora

A = from *Angústia para o Jantar*
Aq = from Aquilino Ribeiro's books
Ba = from *A Balada da Praia dos Cães*
Bh = from *Brideshead Revisited*
Bi = from *Os Bichos*
Ge = from *Great Expectations*
Gg = from *The Great Gatsby*
Hf = from *The Human Factor*
Lj = from *Lord Jim*
M = from *Os Maíias*
N = from *Retalhos da Vida dum Médico*
Si = from *A Sibila*
Spy = from *The Spy who came in from the Cold*
Su = from *Tia Suzana, meu Amor*
Vg = from *The Virgin and the Gypsy*
W = from *Alice in Wonderland*
Wo = from *To the Lighthouse*

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CHAPTER 1

EMOTION - A CONTROVERSIAL SUBJECT

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1.1 Introduction

Everyone thinks that they know what is meant by emotion. After all, we feel what we *emotion* all the time in our daily lives. However, once one tries to define what we feel give those feelings names, one finds oneself in an ever-widening intellectual quicksand. Definitions of *emotion* use terms such as *physical*, *psychological*, *psychical* and *mental*, assume easy distinctions between *emotion*, *cognition* and *volition*. One has first to question what is meant by these terms, and one cannot do this without being involved in the highly controversial issue, the Mind-Brain debate, with all its philosophical and ideological implications. Recent research into emotion is at, or near, the centre of this debate and can therefore, be ignored.

1.2 The Mind-Brain Debate

If one consults the Shorter Oxford English Dictionary (1973), one finds that *mind* is "the seat of consciousness, thoughts, volitions, and feelings", or "memory", and that *brain* is "taken to be the seat of sensation, the organ of thought, memory, or imagination". *Mental* is "concerned with the phenomena of mind", and *physical* is "of or pertaining to material nature; pertaining to or connected with matter; material; opp(osite) to psychical, mental, spiritual". *Emotion* is "a mental feeling or affection (e.g. of pain, desire, hope, etc.) as distinct from cognition and volitions". Although these definitions may seem quite satisfactory for everyday use, they raise a lot of questions if one starts to analyse them more carefully. For psychologists, who have spent a lot of energy arguing whether emotion is a mental or physical phenomenon, the definitions from the S.O.E.D. are clearly inadequate.

If one uses terms like *spiritual*, used above as an antonym of *physical*, in certain scientific contexts, one risks being treated with derision or simply ignored. Many people, who are aware of this, yet believe the term to have a real meaning, are careful to point out that they use it only in the context of religious experience, claiming that one cannot mix science and religion. Yet those who so easily deride the believers, do not hesitate to use the mental/physical distinction freely, not only in everyday conversation, where language, often unconsciously, reflects more traditional ways of thought, but also in academic contexts where care with terminology is so essential. The careless use of the word *mind* in the latter context can lay one open to classification as a 'monist' or 'dualist', with all the implications this involves.

The problem of distinguishing between *mental* and *physical*, and related concepts, is by means new, and it reappears whenever human behaviour is under discussion. From the early times, some people, the dualists, have argued that mind and body are two separate entities whereas others, the monists, prefer the idea that they are different aspects of the same phenomenon. Although most philosophical and ideological theories from the early Greek to the present day fit roughly into one category or the other, the single or dual principles in each case involve different concepts and, with dualism, different relations between these concepts. For example, Plato made the distinction between body and soul, and regarded the latter as pilot of the former, a belief that was continued in Judaeo-Christian thought. He also saw brain as the seat of the soul.

However, the terms *dualism* and *monism* were only coined in the 18th century, and are usually associated with Descartes' dualism of mind and matter. Johnson-Laird (1987: 250), quotes Descartes as saying that "the body is an automaton, but the mind has free will and therefore exists outside the realm of scientific explanation". According to Descartes' theory, however, the human material mind functioned through the pineal gland in the brain, and controlled the natural animal instincts of the automaton-like body. This posed a problem about the nature of the pineal gland, or brain, as a sort of interface between mind and matter, which set in motion a chain of thought that led to the Brain-Mind identity theory held by materialists today.

The scientific method of subjecting everything to empirical testing developed in the following centuries, and materialism was given increased impetus by Darwin's theory of evolution. Belief in a soul or mind, and the notion that it distinguished man from the animals, was therefore undermined by the impossibility of physically verifying its existence, and by the logic of evolutionary theory. If one adds to this the growing view in the 19th and 20th centuries of the individual as a product of the social environment, the refutation of dualism of mind and matter by Ryle (1949) seemed to many to be the ultimate conclusion to be drawn.

Ryle's negation of the "ghost in the machine", a soul or mind controlling the automaton of body, was seen as a philosophical vindication of the scientific approach to psychology by Behaviourists. As he said (Ryle 1949: 308): "The general trend of this book will undoubtedly and harmlessly, be stigmatized as "behaviourist"". The brain was a physical organ, part of the body, and the subject of physically-based analysis. Any notion of Mind, as neuroscientists such as Bunge (1977) pointed out, is thus "unexplainable by science". These opinions, of course, conflict strongly with a long tradition in philosophy and religion which would consider such a materialistic conclusion as simplistic. However, before turning to the controversial problem of the nature of mind, let us take a brief look at the research on the brain which fuelled this debate.

1.3 The Brain

Whatever the arguments about the existence of mind, one point on which modern monists and dualists are in agreement is the existence of the human brain. Both will marvel at its complexity and agree that it is the physical organ which is either identical with or somehow related to mind. People have been trying to describe its structure and how it functions for centuries, yet the more we understand about the brain, the more complex it appears.

One of the more interesting results of the theory of evolution has been the research that has been carried out to discover how the human brain evolved. The brains of various species have been examined both from the point of view of physical shape and size in relation to body mass and from that of the development of brain functions to suit different physical, environmental and social needs. A comparative study of this kind shows that the more intelligent an animal the more complex the brain structure, that the development of intelligence follows a certain evolutionary pattern, and that the brains of apes are the most similar to human brains. M

are the theories that have been proposed for the why and how of the development of superiority of the human brain over that of other species, and long have been the discussion over the exact quality of this superiority. Some theorists suggest that the evolution of the brain is still in progress: Carl Sagan (1977)^[1] expresses the hope that, aided by super-computer, our brain power will now evolve ever more quickly.

A considerable amount is already known about the anatomy of the brain. Although it is not the purpose to discuss either this anatomy, or how the different areas of the brain, including those which appear to be involved with language, function or develop, as far as the Mind-Brain Debate is concerned, it is important to make certain points clear.

One of the positive results of Behaviourism was the stimulus it gave to research into the brain. A theory which saw the brain as a sort of 'black box' which processed the stimuli received from sensory information and then produced a response was naturally interested in working out the mechanics involved. Some of these experiments have been done on animal brains and what they tell us a lot about the animal brains, they are also considered important for the information that can be deduced from them about the human brain, a fact which in itself presumes a certain type of evolutionary process. Experiments on normal human brains can be conducted using technology like electrode systems and brain scanners, as well as drugs. Scientists using the latest techniques, like NMR, or nuclear-magnetic-resonance imaging, and EPI, or echo-planar imaging, in conjunction with high-powered computers, even claim that they are able to record the brain's activity accurately enough to show which areas process different aspects of conceptualisation and language^[2]. Much of the more traditional research has, however, been based on the observation of people suffering from different forms of brain damage.

The mechanisms which transmit sensory information from various parts of the body to the areas of the brain responsible for receiving the information have been studied in detail. For example, research into visual perception has demonstrated how neurons conduct the image received from the retina to the visual cortex, and research into other senses, such as hearing and touch, has produced similar data^[3]. Certain types of cells which typically appear in the different areas have been identified. Neuroscientists, such as Hundert (1987), believe they are able to identify the areas of the brain which receive, process and, presumably, understand different sensory information. However, it is also recognised that the pathways of the brain cannot be described as simple one-way stimulus-response systems. Information supplied by the senses would appear to enter the brain at certain known points. However, the processing and eventual comprehension of the information, which in its turn prompts an appropriate response, would seem to involve complex systems of inter-communication between several parts of the brain. Researchers have managed to analyse the way some of these complex systems work, and, although few will doubt the difficulties involved, there is a certain optimism that, with time, a fairly complete account of how the different parts of brain work and interrelate can be given. What would appear to be lacking is some generally acceptable theory on what actually coordinates all these functions.

One of the most complex areas of brain research is related to the nature of memory. It would seem that there are different types of memory for different functions ranging from a short-term memory, which is useful for immediate recollection, to the long-term memory which enables us to remember things from our early childhood, and which is somehow stored in the brain. Experiments have shown that memories of the distant past can be stimulated by the application of electrodes to the brain^[4]. This has encouraged the view that the brain resembles a computer in which information can be stored and retrieved by mechanical means, and has led people to speculate on just how this physical mechanism works. One of the most difficult problems to solve would seem to be not so much how we form memory, but how and why we select and reject the material to be memorised.

1.3.1 The Brain as the motor of communication

The big difference between animal and human brains is the human brain's capacity for language. The parts of the brain associated with language, and in particular those known as Broca's and Wernicke's areas, have little or no counterpart in the brains of other species although some scientists claim that traces of them can be found in the brains of the highest primates. Yet this does not mean that other species do not communicate, and one can point to a certain evolution of this type of communication into language.

While the Behaviourists were working in their laboratories elaborating on their S-R (stimulus-response) and conditioning theories, others observed behaviour in the world about them. It is significant that so much of this research is centred on the problem of intra- and inter-species communication. In the 30s, 40s and 50s, Konrad Lorenz and Niko Tinbergen, who became known as ethologists, studied the behaviour of birds and animals, and were able to show that animal behaviour and communication were, to a large extent, genetically imprinted. Konrad Lorenz (1952) discovered that greylag goslings will accept the first moving object they see after hatching as their 'mother', whereas ordinary farm ducklings are fussier - they expect 'mother' to be nearer the ground and to quack! In much of the animal world the maternal instinct is genetically imprinted, as anyone who has witnessed even domestic animals such as cats, bitches or cows giving birth, will know. Man and the higher primates, however, have to acquire the knowledge of looking after their young from their social groups.

Bird and animal signals and sounds appear to be universal within the species and even develop in individuals kept in isolation from the rest of their species. The dance 'language' of the bee studied by Frisch (1967) showed that this type of communication can be highly complex. Animal communication seems to evolve in the interests of survival of the species, the genetic imprinting probably mutating to keep pace with changing needs. Psychologists such as Maynard Smith (1976), and Krebs (1987) have shown how animal signals evolve and become ritualised from more primitive behaviour, so that the present meaning of the signal may not be immediately apparent to the untrained observer.

The behaviour of the higher primates is of particular interest in any comparison of human and animal intelligence. There has been some well-publicised research into the behaviour of chimpanzees and gorillas in the wild by people such as Jane Goodall and Dian Fossey. Not as well-known are the experiments to train chimpanzees to use American Sign Language or other symbol systems, for communication with the human experimenters. The emphasis of this research is on how these animals can, or could be made to, reason and communicate. Sceptics (and behaviourists?) tend to view attempts at intra-species communication as mere conditioning by the experimenters. Although, despite the genetic imprinting described above, no-one doubts that behaviour can also be controlled and modified by conditioning, in the present intellectual climate which, according to Blakemore and Greenfield (1987: vii), allows that "even the humble laboratory rat [has] proved too resourceful, too thoughtful, too rich in insight to be treated as if it were a mindless machine", perhaps attitudes are changing.

The research into animal communication had eventually to point to the possibility of something similar for human beings. However, because of the traditional belief that animals and humans are essentially different, Chomsky's proposal that certain language structures are part of our genetic heritage produced strong reactions in research both inside and outside linguistics, as the implications were important not only to philosophy and linguistics, but also to the natural sciences. Neurobiologists felt justified in treating language as another function of the brain and Harris (1987: 507) quotes the biologist J.Z. Young (1978) as defining *grammar* as "the set of brain programs by which sentences are generated". However, the philosopher, Peter Hacker (1987: 487), describes the analogy used by Young as a "conceptual confusion". Harris (1987: 516), a linguist, goes on to describe this definition as a grossly simplistic view of what

known as either syntax or semantics, and describes the biologists' claim as so much "nonsense". What started as the theory of a philosopher /linguist has led to biological work based on his theory, but is contested by others in his own discipline.

It is significant, though, that neurobiologists feel the need to face the challenge presented by language. Recent research by neurologists such as Damasio and Damasio (1992) has shown that phonemes and syntax are processed in a specific part of the brain, that conceptual systems can be allocated to other parts, and that there are a third set of structures which mediate between the two. This research has been based on tests with people who previously had no language faculties but who, because of brain lesions, now suffer from damage to parts of the three systems. Since lesions to the specific areas of the brain produce specific language disabilities, one can only conclude that a certain language capacity is innate. The extent to which we can postulate the innateness of whole syntactic or semantic structures, in a Chomskian sense, is still a controversial question, but there seems little doubt that such language function is innate which, as a result of the developmental process, in the Piagetian sense, develops during childhood in a definable manner.

1.3.2 The Brain and emotion

Emotion, too, seems to have its space in the brain, particularly in the limbic system. It is, as Sagan (1977: 64), says that we find the pituitary gland which dominates the human endocrine system, and "the mood-altering qualities of endocrine imbalances give us the important insight about the connection of the limbic system with states of mind". One can also say the reverse that states of mind (which can be emotional) cause endocrine imbalances which provoke psychosomatic illness; for example, gastric ulcers. Another part of the limbic system, the amygdala, is particularly associated with fear and aggression. If stimulated electrically in animals it can "rouse them to unbelievable states of fear or frenzy" and, if extirpated from "ferocious animals" they "become docile"(ibid: 64). Drugs which are used to control mood usually act on the limbic system.

In the human brain, as Eccles, in Popper and Eccles (1977: 247), observes, the limbic system has developed from "the old olfactory (smell) brain", which is of major importance to lower mammals both as regards actual area of the brain and its function. It may be for this reason that the sensory information from our sense of smell projects directly into the limbic system before being processed by other parts of the brain^[5]. However, the way in which somesthetic, visual and auditory systems project sensory information is far more complex and would appear that although the information is projected semi-directly to the limbic system, it is simultaneously processed along other pathways of the brain to the prefrontal lobes, which in turn project to the limbic system in a way that shows that "the prefrontal and limbic systems are in reciprocal relationship and have the potentiality for continuous looping interaction" (Popper and Eccles 1977: 273). This means that our conscious perception is modified by emotion and the other appetite drives, such as hunger, thirst, sex and aggression which depend on the limbic system. The "looping interaction" also means that there is cross-reference of information between different senses. The limbic system also, in some as yet not totally clearly understood fashion, has an important part to play in the formation of memory.

Another factor about emotion which is of interest when one is thinking of the brain and its structures, is that, like language and psycho-motor development, it, too, seems to develop according to a certain pre-established pattern in the individual. Whether one is talking about normal development, on which to base theories of primary and secondary emotions, or abnormal development, with a view to showing how early interpersonal and social factors may affect behaviour, an individual's emotions would also seem to depend both on genetic and environmental factors, as biologists like McNaughton (1989) are at pains to demonstrate.

A well-known neurologist, António Damasio, has recently ventured into this debate. His book (1995), called *Descartes' Error*, uses neurological evidence to argue that Descartes' theory of dualism was essentially flawed, and that not just the brain, but the sensory information fed into every fibre of our bodies contributes to the way we function. He further argues that a specific area of the brain, the pre-frontal lobe, is responsible for emotion. If this area of the brain is destroyed or damaged by accident, the subject not only ceases to feel emotion, but also becomes unable to collate sensory information in a way which helps him/her interact with the social environment satisfactorily. Apparently neither memory nor acquired knowledge are affected, but the individual becomes unable to make decisions, or react either sensibly or sensitively to other people. Furthermore, primates who have been subjected to excision of the pre-frontal lobe become such social misfits that they are rejected by their group in a way in which physically handicapped individuals are not.

If, as this type of research tends to suggest, emotion is so inextricably bound up with how the brain physically perceives and what it remembers about the world, and yet, in its turn, emotion affects and is affected both by the more rational brain processes, and by what are referred to as the 'subconscious' and 'unconscious', one can begin to understand why there has recently been so much interest in the relationship between the processes of the mind / brain and emotion.

1.4 The Mind and the Self

Once one turns from the discipline of biology to those of psychology, linguistics and Artificial Intelligence, or AI, one finds the term *mind* is preferred over *brain* even by those who would consider themselves materialists or monists. More often than not no specific justification for this is given, but those who do feel uneasy about not making a distinction prefer to avoid *mind*. Chomsky talks about *Language and Mind*, yet neurologists would point out that when he says that our faculty for language is genetically programmed, he is presumably claiming this to be true of the physical brain, and not some immaterial mind. A dualist will understand the distinction, but a strict monist will claim that mind and brain are identical and the distinction irrelevant. Some like to think of the brain as the 'structure' and the mind as the 'function', while others prefer to make a distinction between the brain as the 'hardware' and the mind as 'software' of the same phenomenon. If one uses this metaphor, Chomsky might be said to be referring to the 'electronic circuits' rather than the programmes - an area where the distinction between hardware and software sometimes becomes more difficult to draw.

Some writers use the word *self* rather than *mind*, either to distinguish something they regard as interacting with the brain but somehow distinct from it, or to refer to some sort of global consciousness which, while remaining part of the brain, is, in some way, the sum of all functions of the brain. Others prefer to discuss the problem using the term *consciousness*. A couple of decades ago or even less, to contemplate a discussion about concepts such as *self* or *consciousness* in a scientific context, would have been considered old-fashioned and at best, embarrassing. Now that the intellectual climate has changed, and mechanistic materialism has been found to be less than satisfactory, the debate has reopened, and it is not just the philosophers who are taking part, or even the representatives of the 'softer' scientific fields, such as psychologists or sociologists; distinguished mathematicians, physicists, biologists and neurologists are heavily involved as well.

When the philosopher/neurologist team, Karl Popper and John Eccles, two eminent figures in their particular fields, decided to publish their book *The Self and Its Brain* in 1977, in which they argue for a type of dualism they call Interactionism, they realised how controversial they were being. The very construction of their book suggests that their intention was to stir controversy. Each presents strong arguments based on their own discipline and research in the first two sections, and the third section is devoted to transcriptions of their discussions of the

views. However, the fact that the controversy has gathered momentum since then shows others, while not necessarily agreeing with them, feel the subject to be important and relevant. In the following sections I shall attempt a brief outline of their views as well as some of more recent controversial theories which should demonstrate the complexity of the problem. I shall not be contemplating any obviously religious theories here, although, quite obviously any debate of this kind must reflect aspects of religious thought, either consciously or unconsciously.

1.4.1 Popper and Eccles (1987) - Interactionism

Popper starts by challenging materialist reductionism, in which every level of life is the result of the one below, until one reaches the basic combinations of (particles of particles of?... atoms. He claims it is invalid because it is highly simplistic and does not take into account "downward causation" (the effect of higher on lower levels), and goes on to say that it implies a mechanistic determinism which no longer conforms to the findings of modern quantum physics. He argues instead in favour of emergent evolution and cosmic evolutionary stage follows:

- | | |
|---|--|
| World 3
(the products of the human mind) | (6) Works of Art and Science (including Technology)
(5) Human Language, Theories of Self and of Death |
| World 2
(the world of subjective experiences) | (4) Consciousness of Self and of Death
(3) Sentience (Animal Consciousness) |
| World 1
(the world of physical objects) | (2) Living organisms
(1) The Heavier Elements; Liquids and Crystals
(0) Hydrogen and Helium |

He then discusses the various theories down the ages that have argued for or against a distinction between mind and body. He describes himself as an agnostic who does not accept the idea of a soul, and agrees that he shares a lot of the materialists' views on material reality. His arguments in favour of Self take most theories about the evolution of the brain for granted as well as the various theories of innate and acquired knowledge, and the importance of language in the development of human consciousness. He also points out that only the most extreme forms of materialism refuse to admit the existence of consciousness, and explores the relationship between the conscious and unconscious aspects of Mind or Self.

He argues that "the human consciousness of self transcends..... all purely biological thought and that although "animals are conscious", "only a human being capable of speech can reflect upon himself". He continues, "I think that every organism has a programme. But I also think that only a human being can be conscious of parts of this programme, and revise them critically" (ibid: 144). He develops this theme with reference to various aspects of human consciousness, and yet does not claim to offer any grand solution, for he feels that "We know that, but we do not know *how*, mind and body interact" and "that this is not surprising since we have really no definite idea how physical things interact" or "how mental events interact" (ibid: 153). He predicts "that we shall not be able to build electronic computers with conscious subjective experience" because "computers are totally different from brains, whose function is not primarily to compute but to guide and balance an organism and help it stay alive. It is for this reason that the first step of nature towards an intelligent mind was the creation of life, and I think that should we artificially create an intelligent mind, we would have to follow the same path". (ibid: 208) He believes that neither philosophy nor science can explain, or explain away, human self-consciousness satisfactorily.

Eccles' contribution to the book is first to explain the principal discoveries made in relation to how the brain is constructed and how it functions. He then proceeds to examine the separation of self and brain from the neurological standpoint. He first draws attention to experiments done by Libet and Mountcastle to establish the time factor between a subject's receiving a stimulus and the cortex of the brain showing suitable signs of stimulation. The crucial, highly controversial, point of these experiments was that subjects reported experiencing skin stimulus before cortical stimulation was reported. This would suggest that something (self? a mind?) is conscious of what is happening without relying entirely on brain function. This position which is obviously contrary to the monist view that our understanding of experience can only be the result of the processing of information by the brain.

Eccles then goes on to discuss the interesting research done on 'split-brain' patients. These are people who have been subjected to commissural section, or commissurotomy, an operation which used to be performed in an attempt to alleviate acute forms of epilepsy. This operation meant that the corpus callosum was severed and that the two hemispheres of the brain became physically separated. Experiments seem to show that the subjects appear to be only conscious of the activities controlled by the dominant hemisphere, usually the left, which, amongst other things, is where the language centre of the brain is to be found. The right hemisphere continues to function and respond to stimuli which are received by it, in a way which Eccles describes as "having a status superior to that of the non-human primate brain" displaying "intelligent reactions" and "learning responses", but "it gives no conscious experience to the subject" (ibid: 328).

Eccles puts forward the hypothesis that these experiments show that the conscious self is not what the monists presume, the synthesis of all neural activities, and that a case can be put for the conscious self in World 2, which is related to the brain in World 1 through a "liaison brain" which is adjacent to that part of the left hemisphere which controls ideational and linguistic competence (ibid: 327).

Eccles is not afraid to question what happens to the self-conscious mind after death nor does he assume his position in favour of a "strong dualist-interactionist hypothesis" (ibid: 374). Later in Eccles (1987: 203) he is considering the "possibility of being able to account for the mind-brain interaction in terms of the action of non-material fields, such as the probability field of quantum mechanics", but he concludes that "modern physics presents no insuperable objection to dualist-interactionism" although "we are only at the beginning of our attempts to understand the *interaction* [his italics] of mental events with neural events".

1.4.2 Scientifically orientated theories about the Self

The theory of Self put forward by Popper and Eccles is, obviously, not as simple as it appears here, and it should be considered in the context of other proposals to explain the phenomenon referred to as Self, Consciousness and Mind. Much of contemporary discussion of these concepts has taken place since 1977, perhaps partly in reaction to Popper and Eccles' publication. There is no doubt that the fact that Eccles is a Catholic makes the scientific world suspicious that he may be trying to identify the idea of Self with the notion which is taboo in certain scientific circles, Soul.

Szengtágothai (1987) probably sums up scientific reaction to the hypothesis of an interactionist form of dualism when he says that "If understood and used metaphorically, the *three-world concept* [his italics] envisaged originally by Popper and elaborated by Eccles is a fascinating view of great beauty, which may be of heuristic value", but he feels that, in order to follow the idea to its logical conclusion "we should have to leave the domain of legitimate science and enter that of religion and faith". He himself, as a biologist, prefers an idea of Self which can

understood roughly as some kind of 'wholeness' which is observable in most animals developing into "the still rudimentary self-consciousness of a non-human primate" and finally into "true human self-awareness". He believes in some kind of evolution of 'selfness', and finds emergent materialism insufficiently explanatory.

The idea of Self, or person, has two main interpretations in more scientifically based psychology, which Parfit (1987) describes as the Ego Theory and the Bundle Theory. An Ego theorist believes that there is a person, or subject, who serves to unify someone's consciousness, and that this person is a "persisting purely mental thing", the best-known form of which is the Cartesian soul, or spiritual substance. The Bundle theorist argues that one cannot impose the sort of unity proposed in a person on what is claimed is a whole life of different mental states and events which are "unified by various kinds of causal relation, such as the relations that hold between experiences and later memories of them. Each series is thus a bundle tied up with string". A more extreme version of the Bundle theory argues against real individualism, because each person is merely the sum of a combination of cultural, social, and, possibly, genetic factors.

Not every scientist who talks about Self makes this type of distinction overtly, although one may sometimes deduce which of the interpretations is implicitly being used from the more general context. The term *consciousness* or the more passive *awareness*, is sometimes used in a scientific context in order to avoid *self*, but I shall not enter here into the implications of what each individual means by these terms at this stage, or what complications arise with the distinction between *consciousness* and *self-awareness* - I include these points merely to demonstrate the complexity of the problem.

The idea of consciousness, or self-awareness, is developed by other scientists from the point of view of the individual and his relationship to others. Biologists like Barlow (1987), and experiments on animal behaviour like Humphrey (1987), see consciousness as a phenomenon that has developed for evolutionary reasons to promote the type of social life of which human society is the richest and most complex. Barlow points out that studying individual nerve cells, or even groups of nerve cells and the relations between them, may provide interesting information, but that "the picture changes dramatically if you consider whole brains, for then types of behaviour occur that result from one brain interacting with another" (ibid: 363).

It is this type of reasoning that leads to what some call 'top-down' materialism, often used to counteract the type of attack made by Popper against the reductionists who favour 'bottom-up' materialism. Attempts have been made to account for higher level or macro-properties which are not causally explainable by lower level or micro-properties. These terms are taken from Searle (1987) when he argues for Mind and Brain as two aspects of the same phenomenon. Searle asserts that the mind is the macro property which produces consciousness, whereas the brain can be divided and reduced to its basic neurons or micro-properties. He considers his approach as an "obvious and common-sense view" and argues that "one conclusion [that] emerges clearly from even the most cursory investigation of the functioning of the brain [is that] "*mental phenomena, whether conscious or unconscious, whether visual or auditory, pains, tickles, itches, thoughts and all the rest of our mental life, are caused by processes going on in the brain.*" [his italics] (ibid: 220) He also claims that "in principle, we could have all of our mental life without any of the appropriate stimuli or any of the normal external causes of behaviour" (ibid: 231). It is important that although a materialist and, from his point of view, a reductionist, who believes in mind-brain identity, one of the reasons for developing the above arguments is to help support his refutation of the claim by strong AI supporters that a computer "literally has a mind in exactly the same sense that you and I do".

1.4.3 Psychoanalytical theories of Self

Psychologists, in their efforts to be considered a science, still shy away from the concept of Individual. They prefer to discuss something that is physically verifiable, like neurophysiology of the brain or other physiological phenomena, or something which it is not respectable to study scientifically, using statistics and group testing, like social groups. The notion of an individual is so complex that it is safer to study tendencies in groups and the way they eventually affect the individual.

The scientific doubts about the nature of Self expressed above may be all very well for psychologists and scientists, but psychiatrists and psychoanalysts, who dedicate their lives to unravelling the complexity of individuals, become impatient with such theories. As Von Franz (1972: 15) says, the idea that we each have a concept of Self, or an 'ego', "is the common and most normal complex among human beings". Besides, most languages distinguish various forms of Self and Other, albeit in differing forms, and, at least in the Western religious and philosophical tradition, there is a complex linguistic system for referring to these phenomena.

Individual is seen as a complex concept which has different aspects. Most people who speak English or Portuguese will easily recognise *body*, *mind* and *soul*, or *corpo*, *mente* and *alma* as different aspects of the individual, even if they have reservations about their exact interpretation. Philosophical theories on the nature of the phenomena thus expressed about but perhaps a brief look at how the two most influential figures in psychoanalysis in the 20th century, Freud and Jung, have dealt with the problem is one way of giving an idea of complexity.

The view of Freud was that the psyche of an individual could be shown to have three defined aspects, which he called the *id*, *ego* and *superego*. The *id* is the unconscious function which is formed partly by genetically programmed instinctual elements, and partly by acquired elements which, for various reasons, are repressed and not recognized by the conscious mind. The *ego*, although much of its activity is unconscious, is responsible for voluntary movement, thought, and functions "at the interface of the perceptual system and the internal demand system" (Badcock, 1992: 168). The *superego* forms part of the ego and exercises "functions of self-judgement, reality-testing and ethical and aesthetic evaluation" (ibid:173).

Furthermore, although Freud used the term *subconscious* in his early work, later on, he and his followers preferred to make the distinction between the *conscious*, the *pre-conscious* and the *unconscious*. From this point of view, as expressed by Badcock (1992), the *conscious* is what "occupies the attention at any given moment" (ibid:167), and the *pre-conscious* is "that which is not present in consciousness, but which may have access to it" (ibid: 172). According to this analysis, the *unconscious* refers to the contents of the mind which are not present in consciousness at any given time [6]. These definitions by Badcock, who readily admits the influence of evolutionary theory on his interpretation of Freud, fit in quite neatly with views on the Mind or Brain expressed above.

Freud recognized that certain aspects of human behaviour were attributable to primal instincts which were inherited, and Neo-Freudians have been at pains to validate his theories in the light of modern genetic and evolutionary theory. However, the focus of his work was on the way the individual's instinctual behaviour developed dynamically under the influence of the family and the social environment.

Jung was more interested in discovering a blueprint for the human psyche which attempted to account not only for types of personality, but also for the symbols and myths found in human culture which seem to have a universal validity. At the level of the human individual, Jung distinguished a *persona*, as the personality or 'mask' which the individual presents to society and the *ego* which was "a complex of ideas which constitutes the centre of my field of consciousness and appears to possess a high degree of continuity and identity". He further

distinguishes between the *ego*, "which is only the subject of my consciousness", and the *Self*, "which is the subject of my total psyche, which also includes the unconscious" (Jung, 1954, 425).

Jung's view of the unconscious is very complex, and, he believes it is ultimately unknown for this reason, but he insists that it is "an *exclusively psychological* concept, and not a philosophical concept of a metaphysical nature" (ibid: 483 [his italics]). He argues for a genetically transmitted 'collective unconscious' which includes far more than the primitive instincts necessary for survival. Although he does not go so far as to argue in favour of innate ideas, he believes that tendencies to formulate certain ways of thinking are inherited [7]. The collective unconscious is dynamic and evolves both to promote and to keep pace with human cultural development. The individuation process, which is the subject of psychoanalytic analysis, is that by which the individual ego develops as a conscious entity, separate from, but dependent on the collectivity. In his opinion, although the tendency to individuality is present in all human beings, and particularly in more culturally and intellectually developed people, it does not mean everyone undergoes an individuation process to a degree high enough to differentiate them substantially from this collective entity.

Like Lorenz's theories on the genetic programming of animal signals, Jung's ideas, which implicitly suggested the notion of cultural evolution and, at the same time, recognized different individual capacities for development, were used to support the cause of Nazism. It is surprising, therefore, that their theories were not acceptable to the intellectual establishment which espoused the more egalitarian cause of Behaviourism, or the analysis of Freud of primitive instincts being strongly influenced by the individual's environment. Their theories are now more acceptable for several reasons, but perhaps the most important ones are the findings of modern genetics, and the current view of the symbiotic relationship between the individual and society.

Like most disciplines, there are various schools of thought in the area of psychiatry and psychoanalysis. Some will describe themselves as neo-Freudians, by which they mean they maintain many of Freud's theories, albeit in a modified form, about the effect of primitive instincts and early experiences. There are those who follow in Jung's footsteps and endeavor to probe the collective unconscious of Man by examining mythology, religion, dreams and various forms of literature, old and new. Others follow Adler and his disciples and give more importance to the complex effects of social background as well as family structure on the individual throughout life. Much of this previous theory has been re-analysed in the light of neo-evolutionary theory, and yet others turn to the evidence of new drugs to show that psychic life is the result of physical reactions anyway.

So nowadays a rampantly promiscuous man may have his behaviour explained in several different ways, depending on the point of view of his analyst. It may be seen as the result of some Freudian childhood experience, or as a manifestation of the 'Don Juan' Jung archetype. On the other hand it may be described as the result of familial / social competition, and influence from, his father, siblings or peers. Evolutionary theory will describe it as a sign that he possesses strong genes and is doing his best to ensure they are transmitted to the next generation, and the more physically-minded will describe it as simply a problem of chemical imbalance of hormones.

Whatever the explanation, and few sensible people would interpret the problem from the exclusivity of one point of view, there seems little doubt that the individuality and complexity of the Self is unquestioned. Psychiatry and psychoanalysis grapple every day with this phenomenon and, despite the similarity of the experiences, fantasies and dreams of many of their patients or clients, few would argue that each individual is not different and complex. Naturally, psychiatrists and psychoanalysts, whatever their differences, regard the individual

and his / her emotions as their special field of interest, and perhaps have a vested interest promoting this point of view, but most would probably view with horror the possibility anyone might want to reproduce these phenomena in machines, or artificial intelligence.

1.5 Artificial Intelligence and the Mind-Brain debate

One of the principal reasons why so many people are now engaged so heatedly in the Mind-Brain debate is because of certain claims made by cognitive scientists for AI. Science fiction is full of talking robots, and the popularity of Science Fiction films, in which they are far more believable, in comparison with some of the weirder monsters dreamed up by Hollywood, has contributed to making the possibility of their existence acceptable, if not highly desirable, to the general consciousness. Since so much science fiction, of the more serious variety, has a tendency to reflect future fact, the hypothesis of such machines (?beings) should be taken seriously. According to strong AI enthusiasts, we shall one day be able to build computers or robots which will be equal, and probably superior, to men in intelligence, able to take decisions, think, believe and - why not? - fear, or love. Followers of the television series *Star Trek* will be familiar with the problems that Lieutenant Data, the computer in human shape, has been having over learning to have emotional experience and 'self-awareness'.

Now that computer science has increased the possible brain power of the computer to a level unimaginable even a couple of decades ago, cognitive science, which works towards the development of AI as an imitation, or a parallel, of Biological Intelligence (= BI), and attracts people from the disciplines of psychology and linguistics as well as computer programmers working towards this end. The ability of the computer, once properly programmed, to perform most human attempts at mathematical calculations, to memorise vast quantities of information that can be recalled almost instantly, and to carry out certain mechanical but time-consuming tasks more rapidly, has encouraged this research.

Those studying the physiology of the brain may not believe that it is either possible or necessary to imitate it in order to produce a robot, but an understanding of the mechanics of the brain is expected to provide insights into how AI can simulate the functions of the brain. The mechanics by which the brain receives information from the foot, or instructs it how to move, are of interest in helping solve the problem of how to teach a robot to manoeuvre itself. A difficult problem to solve, however, is how this information can be coordinated with the perception of its surroundings so that, having lifted its (heavy steel-plated) foot, it then avoids placing it on the experimenter's big toe. This perception in the animal world is a function of the brain, and if language is the function of the human brain, by means of which we conceptualise and express our perceptions, the crucial problems for AI are to discover how the brain perceives, how it thinks and how it encodes its thoughts in language.

If a computer is to use language, language must be formally encoded in a way that is acceptable to the computer. The emphasis of the Structuralists on syntax encouraged the idea of the formalisation of language, and Chomsky's view that these structures, and possibly certain semantic universals, were somehow programmed into the brain fueled the hopes of AI. Semantics, too, could be formalised. The idea of deep level phrase structures and transformational rules was appealing. A lot of work had already been done on showing which verbs used which structures, and deep case theory and componential analysis of lexemes was expected to help the computer avoid sentences like *The chair bit the man* and make sure it produced *The dog bit the man*. However, *The man bit the dog* posed greater problems. How can one simply rule it out as too unusual? If not, how did one construct the necessary semantic premises for the computer to know when to allow it? Rules of collocation and context provide some help and are still proving difficult nuts to crack. Some experts continue to search for further refinement of analysis from the phoneme to the text; others try to work from the knowledge implicit in a certain state of affairs to the text and thence to the units of text. Many are sceptical.

that any mechanical device, however sophisticated, can ever imitate more than the simpler more literal aspects of human speech. Others, like Johnson-Laird (1988), declare that altho "the enterprise [of making knowledge explicit] is enormously time-consuming.. if there are insuperable barriers to it, they have yet to be discovered".

Strong AI enthusiasts will argue that even the humble thermostat, a concrete example of a simple Turing machine, has the basic elements of intelligence. Searle (1987: 211) describes how he once asked the inventor of the term *artificial intelligence*, John McCarthy, who claimed that "machines as simple as thermostats can be said to have beliefs", what beliefs the thermostat had. The perfectly serious answer he got was "My thermostat has three beliefs. The thermostat believes it's too hot in here, it's too cold in here, and it's just right in here".

This line of thought argues that providing a Turing machine, or computer, can be implemented in a way that a human subject is unable to distinguish between the answers provided by it and those of another human being, it is demonstrating the same 'intelligence' as that human being. Examples of this type of experiment are the computer programmes which 'interview' patients either for diagnostic or psychoanalytic reasons. The 'diagnostic' type programme asks the patient a series of questions and then computes a possible diagnosis from the data at disposal. Claims have been made for a degree of accuracy of diagnosis surpassing that of a human (and possibly overworked) doctor. The 'psychoanalytic' programme keeps the patient talking by picking up clues from the patient's answers with which to form the next question for the interview. For example, if the patient mentions his father in response to a question *who do you consider the most important figure in your childhood?*, the machine will perhaps respond with *Tell me more about your father*. If the interview satisfies the physical and psychological needs of the patient, certain strong AI enthusiasts might argue, what is the functional difference between the machine and a human doctor or psychoanalyst?

When AI experts talk about the future of computers they usually restrict themselves to the term *intelligence*, and yet the more enthusiastic clearly include in this what others would prefer to discuss as *consciousness*. As we have seen, Popper did not believe it possible to produce consciousness mechanically and this theme has been taken up and expanded upon by others. One of the better known refutations of the possibility of consciousness for computers is known as Searle's 'Chinese room'^[8].

With this argument, Searle rejects the mind/brain = program/ hardware equation. He further adds that his argument has nothing to do with the difference between the 'wetware' of the brain and the 'hardware' of the computer, or whether the hardware is made of "silicon chips", "transistors" or "some quite unknown chemical substances", and insists that "you cannot duplicate the causal powers of the brain solely in virtue of instantiating a computer program, because a computer program has to be defined purely formally" (1987: 215). He believes that "it is a typical but unstated tacit assumption behind many of the implausible contemporary doctrines concerning the mind - doctrines such as behaviourism and artificial intelligence - that it is simply impossible to accommodate a naive common-sense account of the mind with an over-scientific world-view", and that it is "the sense of desperation" caused by this assumption that leads people to propose these implausible doctrines. He then goes on to put forward his view of mind-brain identity described above.

AI experts such as Gregory (1987) defend AI by saying that Searle is assuming that a computer will remain unable to perceive the world about it and therefore be incapable of learning through experience. He asks us to "consider bringing up a baby in the Chinese room. How could it learn the meaning of the Chinese or any other symbols, in such a restricted environment?" (ibid: 240) He puts forward the case that computers can eventually be made to 'learn' in the way a child may be said to learn, and thus acquire a wider knowledge of the world similar to that of a human being - it is just a question of discovering the best way to conc

this learning process. He admits that, given that both BI, and AI have "a finite number of operating states", BI has evolved strategies for preventing itself from being overwhelmed by information, whereas AI still suffers from the danger of "combinatorial explosion" because of the difficulty in finding a way of programming the computer to select relevant, and reject irrelevant, information according to necessity. This is the reason why there is so much intelligence in the way human intelligence selects only what it considers essential to memorise, notice, and act on. He sees this problem as difficult and central to AI, but not ultimately insuperable.

Johnson-Laird (1988) says "the goal of cognitive science is to explain how the mind works. Part of the power of the discipline resides in the theory of computability". He admits "there may be aspects of mental life that cannot be modelled in this way" and that "there may even be aspects of the mind that lie outside scientific explanation", but argues that the use of a theory of computability, whether or not it is ultimately right, introduces a measure of scientific rigour. He does not make extravagant forecasts of intelligent robots rolling off the production line in the near future, let alone of machines with 'consciousness', but he believes that, with hard work and time, considerable advances can be made in the understanding of the human mind by cognitive science.

An interesting point for linguists of a lot of the discussion involved in all this is that while the protagonists of the debate rage about the ability or otherwise of brains and computers to process syntax and semantics, they are also conscious that the 'other side', if not themselves, is trapped in its own conceptual apparatus. Thus one of Searle's (1987: 223-4) arguments in favour of a Mind = Brain solution is to compare the problem to the scientific statements "lightning is caused by an electrical discharge" or "the colour red is caused by photon emissions with a wavelength of 600 nanometres", which, he argues, are only another way of saying "lightning just is an electrical discharge" or "red just is a photon emission of 600 nanometres". Presumably, instead of saying *mind is caused by brain*, we could say *mind just is brain*. Gregory (1987: 243), on the other hand, accuses Searle of "the unfortunate conceptual inertia which philosophers are prone to". Semantic inertia may be useful for protecting words, he says, but "language must continuously change to keep pace with new discoveries and changing concepts, or it becomes misleading". Are the objections to asserting that a thermostat has 'beliefs' based on an inability to extend such a concept to non-human entities? The problem of conceptualisation will be discussed more fully in the next chapter, so we will not pursue this question further here.

1.6 Physics and the Mind-Brain debate

One of the latest contributions to the Mind-Brain debate is that of Roger Penrose (1989). Like several of the people already cited, and many who have not been, he believes we simply do not know enough to be able to describe consciousness, let alone programme it into a computer. As a mathematician and a physicist, he first takes the reader on a tour of classical and modern physics and mathematics, and then proceeds to use theories from these disciplines, and others, to argue against the possibility of producing human consciousness in artificial intelligence. While agreeing that a lot of the brain's activities are algorithmic, like a Turing machine, he points out that they are usually those which can be classified as "unconscious" and can be described as "automatic", "following rules mindlessly", or "programmed". Aspects of brain activity in which consciousness is involved - "common sense", "judgement of truth", "understanding" and "artistic appraisal" - proceed "in a way that cannot be described by an algorithm" (ibid: 531). He claims that not all aspects of mathematics are algorithmic and that the very judgement of whether an algorithm is true or false is non-algorithmic and dependent on consciousness.

He believes that neither classical nor quantum physics are yet able to offer solutions to the problem of consciousness, and that further progress must be made in physics before

explanation can be attempted. Like Eccles, he refers to the type of experiment done by L and Mountcastle and to "the strange role of time in conscious perception" (ibid: 573) . ' interesting point about these and other experiments is the time factor involved between receiving a stimulus, the brain activity related to it and the subject's consciousness of stimulus. The experiments are varied and complex, but the essential point that seems to emerge from them is that the time measured between stimulus and consciousness is not subjectively experienced. The other point that raises problems is that the combined intervals of time that can be measured between consciousness of receiving, plus the time for conscious processing and the time for consciously reacting would make it impossible for consciousness to enter into activities such as playing ping pong or even ordinary conversation, whatever role the subject's presuppositions and expectations may play in accelerating the process.

He discusses the putative theory of CQG (= correct quantum gravity) and envisages that "once it has actually been found, it may then be possible to elucidate the phenomenon of consciousness", and that if this phenomenon depends upon CQG, "then consciousness will fit only very uncomfortably into our present conventional space-time descriptions" (ibid: 578). His view is ultimately materialist and not the dualist vision of Popper and Eccles, but he simply "cannot believe that [consciousness] is something just conjured up 'accidentally' by a complicated computation. It is the phenomenon whereby the universe's very existence is made known". (ibid: 580).

Perhaps more radical materialists will sense in some of the theories presented an element of wishful thinking of the kind put into words in a popular comic film, *Creator*, in which P O'Toole plays an eccentric scientist. This scientist expresses the feeling that when Science finally gets to the top of the Hill of Knowledge it may well find God has been sitting there waiting for it all the time! Perhaps the sceptics are right, but there are still a lot of people who would prefer to think that maybe they are not.

1.7 The implications of the Mind-Brain debate for emotion

By this stage I can imagine readers may be wondering what all this has to do with the subject of the language of emotion, and they can be forgiven for suspecting that I may be working on some bigger ultimate question for myself. Perhaps I am. However, I was originally drawn to this debate by the fact that so many of these theoreticians come back to perceptions, feelings and emotions as a touchstone by which to judge the validity or otherwise of their theories.

Nowadays we discuss whether or not animals can be said to display elementary consciousness and emotions from the point of view of evolutionary theory, but the debate is not new. According to Clark (1987: 139-49), Spinoza argued that emotions in animals existed but were irrational and different in quality from the emotions of men. Descartes claimed that animals were machines which did not have souls, and were therefore incapable of feeling. If one is going to attribute souls only to Man, it is rather inconvenient to have to acknowledge that animals might have feelings or emotions. Yet it is significant that only those emotions which are socially disapproved of are easily attributed to animals - when Man has these emotions he is exhorted to resist the 'bestial' side of his nature. The presumed inability of animals to feel has been basic to the way we treat them, and Thomas (1983) traces how this type of reasoning has affected the way animals have been used by human beings, whether for purposes of work or sport or food. The big quarrel between researchers using laboratory animals, or film stars wearing mink coats, and animal rights activists is a practical extension of this controversy in an age when Man has become more conscious of his relationship to the animals.

Emotion seems to be inextricably bound up with ideas of Self and Consciousness. Popper (1977: 127) suggests "as a wild conjecture" that "it is out of four biological functions - consciousness emerges: pain, pleasure, expectation and attention" and that "perhaps attention

emerges out of primitive experiences of expectation and pleasure". As we shall see, later when talking of 'basic' emotions, he is not alone in thinking this.

Searle (1987: 230) maintains that one cannot explain the intentionality of mental phenomena in terms of social relationships because "the actual mental states, beliefs, desires, hopes, fears and the rest of it have causally sufficient conditions that are entirely internal to the nervous system". Here and elsewhere he includes *hope*, *fear* and *anger*, which are often classified as emotions, as mental phenomena.

Penrose (1989: 525) quotes as an example of consciousness "a feeling such as puzzlement, despair, or happiness". Consciousness for Penrose is something that allows us to ask things like "What is the meaning of life? Why am I here? What on earth is this Self I feel?" He says that "it is when one sees others behaving in this strange philosophical way that one becomes "*convinced* [his italics] that one is dealing with individuals, other than oneself, and indeed also have minds" (ibid: 529). He maintains that there would be no problem programming a computer to go round saying things like this, and even, presumably programming it to give itself some plausible answers to its questions, but one cannot expect to be conscious of what it is doing, or behave in a way we have not already pre-programmed for it.

Penrose, using the literary convention of a Prologue and an Epilogue, tells the story of a thirteen-year-old boy who has been allowed to attend the initiation of the new 'Ultra' computer and is told by the Chief Designer to ask the computer a question. The question (which one is left to deduce from the context) is *What does it feel like to be a computer?* The supercomputer simply replies that it cannot understand what he is talking about.

Philosophers defy AI to produce feelings and emotions in their robots and computers. What some ask, is the point, or even morality, of doing so, even if it were possible? Johnson-Laird (1988), after spending a whole book explaining the possibilities for robots, ends by talking about feelings and emotions for AI, and concludes that "the only way in which a robot could experience the same feelings as we do would be if it had the same needs and social goals as we are controlled by the same internal codes as we are". But, he asks, "are your subjective experiences the same as mine?" (ibid: 384) However, he still maintains that "feelings and will can be explained from within a computational framework" (ibid: 389-90).

Later, in Oatley and Johnson-Laird (1989: 105) we find that "Emotions function as two-way communications that enable a repertoire of behaviours to be produced with a minimal load on the information-processing system within an organism and on the communicative system between organisms". We also find, as the subject of the article this quotation is taken from, the most complete lexicon of Emotion in English I have found so far. Ortony, Clore and Coler (1988) have also produced an analysis of the lexical field of emotion from the point of view of psychologists seeking to reduce this complex semantic area to something comprehensible to a robot. It seems that AI, challenged by the philosophers and others, has decided to respond by attempting to teach the computer how to understand emotion, or at least the language of emotion.

Many, therefore, now believe emotion is an essential factor in the establishment of human consciousness and individuality. In one of the latest books on the subject, Damasio (1994), the very title of the book, seeks to link "Emotion, Reason and the Human Brain". Denning (1995: 3) in his review commends Damasio's book by saying:

"There are not many factual novelties here for those who have been staying abreast of the literature, but Damasio has woven some familiar if undervalued facts together into a vision of the brain and its parts that really makes sense, biologically, psychologically and philosophically."

Sartre defended the importance of emotion half a century ago. For him, (1939: 62), emotion was not a psycho-physiological disorder that interrupts our otherwise rational existence. For him, "l'émotion n'est pas un accident, c'est un mode d'existence de la conscience, une façon dont elle comprend (au sens heideggerien de <Verstehen>) son <Etre-dans-Monde>". He argues that consciousness cannot exist without emotion and asks "peut-on concevoir des consciences que ne comporteraient pas l'émotion dans leur possibilités, ou faut-il voir en elle une structure indispensable de la conscience?" (ibid: 15). Fifty years later it would appear that this view is becoming acceptable to conventional science.

[1] Sagan (1977) describes this in Chapter VIII 'The Future Evolution of the Brain', in which, after tracing evolution in human intelligence related to major technological innovation down the centuries, he concludes the statement - "The next major structural development in human intelligence is likely to be a partnership between intelligent humans and intelligent machines".

[2] See 'Looking at inner landscapes' in the Economist, 3rd July 1993.

[3] Sekuler and Blake (1985) provide a general introduction to most forms of physical perception. A more detailed account of visual perception can be found in Gordon (1989).

[4] Examples of this are quoted in Popper and Eccles (1977: 400-1), and Sagan (1977: 31-2).

[5] One wonders whether Proust, when recalling scenes of childhood with the aroma of the 'madeleines', was aware of this.

[6] Badcock (1992: 174) defines the *unconscious* as: A term with three related meanings. in psychoanalysis. (1) The descriptive sense: mental contents not registered in consciousness at a given time. (2) the *dynamic* sense: mental representations rendered unconscious by repression and contained there by *defence mechanisms* and *resistance*. (3) the *topographic* sense: mental phenomena which are located in systems which render them descriptively unconscious by dynamic means. [Italics in original].

[7] Jung (1991: 13) "Não se trata de idéias innatas, mas de caminhos virtuais herdados".

[8] In order to demonstrate how it is impossible for a computer, however well programmed, to understand consciousness of what it is processing, Searle compared the position of the interior of the computer to that of his own mind shut up in a room with no contact with the outside world. In this room there are two baskets of Chinese symbols and a rule book in English about how to match the symbols from the two baskets. As he combines the symbols using the rule book he passes them to the outside world, which calls his efforts 'answers'. The outside world hands back more symbols, which it calls 'questions', and perhaps further rules for combining the symbols. Searle argues that, with time, he could follow the rules, or the programme, for combining the symbols to the point where his performance appears to the outside world to be that of a native speaker. However, he argues, all this can be done without his understanding a word of Chinese or having the slightest idea of what the symbols represent. Therefore, although we may programme a computer to the point where it manipulates language in a way that satisfies the outside world, it can never be said to 'understand' what it is doing.

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CHAPTER 2

THE EMOTIONS AS PHENOMENA

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2.1 Defining *emotion*

Until now I have, like the authors I have quoted, presumed that my readers have a general understanding of what is meant by *emotion*. *Emotion* is the word which is currently used to describe the kind of phenomena which have also been discussed variously as *affection*, *appetite*, *desire*, *feeling*, *lust*, *passion*, *sensation*, *sentiment*, and other related words or cognates in English and other languages. An examination of these terms, whether from a synchronic or diachronic perspective, would seem to show that there is some sort of common reality behind all these concepts. However, most societies, cultures and individuals, and the languages they use, or used, have chosen to carve up that reality and focus specific parts of it rather differently. A proper discussion of what philosophers, linguists and, later, psychologists and others - not to mention their interpreters and translators - have meant by all these terms over the centuries warrants a book on its own. The focus of this book is what psychologists now describe as *emotion*, so I shall concentrate on the already complex task of describing what *emotion*, and the Portuguese equivalent, *emoção*, mean, both in general use and specific disciplines today.

Dictionary definitions of *emotion* vary according to the background of the lexicographer. It seems generally agreed that earlier meanings derived originally from the Latin *exmovere*, with the idea of 'move out', and later, in English, from the French *émouvoir*, with the idea of "excite" or "move the feelings of". Current meanings tend, like that already quoted from the S.O.E. (1973), to be classified as belonging to psychology, and the definitions in the better dictionaries will usually reflect the point of view of a certain school of psychology. However, the more modern the dictionary, the more careful the definition. This is true too of *emoção*. The *Novo Dicionário Aurélio* (1986), for example, is well aware of the term's use in psychology, and attributes its etymology to the French *émotion*. However, Cândido de Figueiredo's dictionary (1939) dismisses the more modern meaning as a "gallicismo dispensável"! Thesauri and general lexicons of English seem to consider *emotion* to be a sub-class of feeling and Webster's Dictionary refers one to *feeling* for synonyms for *emotion*.

Feel and *feeling* are the everyday words in English which cover meanings varying from the physical sense of touch, the consciously experienced physical and psychological phenomena associated with the psychologists' *emotion*, and even subconsciously generated intuitions and presentiments. Used by psychologists or philosophers in relation, or opposition, to *emotion*, the scope of reference is usually to the physically felt indicators of emotion. Not all specialists would agree, and psychoanalysts of the Jungian school will describe *feeling*

opposition to *thinking*, and both as one of the four psychological functions of which *intuit* and *sensation* make up the other opposing pair. From this point of view, Hillman (1971: claims that "the feeling function is that psychological process in us that evaluates". How given the breadth of meaning of *feeling*, although this interpretation is perfectly valid, it she perhaps, the influence of the German *fühlen*.

Portuguese usually translates the more central senses of *feel* by *sentir-se* but it has no equivalent in scope to *feeling*, the more psychological interpretations of this word be roughly translatable by *sentimento* and the more physical, or subconscious, by *sensação*. *Sentimento* is more widely used than its English cognate *sentiment*, and is not marked by latter's connotation of superficiality in certain circumstances. *Sensação* is also wider in usage than *sensation*. For example, *Tenho a sensação que estou a ser observado* would be a normal translation for *I have a feeling I am being watched*.

Given that, in more popular usage, *feeling* is often seen as a less pedantic, and possibly violent, synonym for *emotion*, one could suggest that English speakers who are specifically aware of the psychologists' view of *emotion* find it less easy to see the distinction between the physical and psychological aspects of these phenomena than Portuguese speakers.

However, *emotion*, *emoção*, *émotion* and their cognates in other languages, like many of often Latin or Greek based, words that acquire a specific, internationally agreed, technical usage^[1], will tend to vary in meaning in relation to the different specialist schools of thought using them, rather than in relation to synonyms in the individual languages. Therefore, when *emotion* is discussed in its more technical sense here, a similar interpretation can be understood for *emoção*.

Definitions of *emotion* by specialists tell one as much about the world view of the definer as the concept. Strongman (1987: 1-3) describes how Kleinginna and Kleinginna (1980) collected several hundred definitions and categorised them, before coming up with their own all-embracing definition:

"Emotion is a complex set of interactions among subjective and objective factors mediated by neural/hormonal systems, which can (a) give rise to affective experiences such as feelings of arousal, pleasure/ displeasure; (b) generate cognitive processes such as emotionally relevant perceptual effects, appraisals, labelling processes; (c) activate widespread physiological adjustments to the arousing conditions; and (d) lead to behaviour that is often, but not always expressive, goal-directed, and adaptive".

Strongman comments that "this definition suffers because it embraces all possibilities and includes too much." However, unless one is conscious of the width of interpretation that can be given to *emotion*, it is difficult to judge the literature on the subject. *Emotion* tends to be used by contemporary writers when interpreting what writers in the past, or in other languages, have to say about the general phenomenon under discussion, even though, as was stressed in the first paragraph of this section, these writers may have been using other terms and somewhat different criteria on which to base their judgements, both in regards to the more general concepts and those relating to specific emotions. I shall also, therefore, use *emotion* in similar circumstances, and use emotion names in English, for textual convenience, and to avoid constant reference to the many translators' footnotes to be found in translated versions of works quoted.

2.2 Emotion before Psychology

The view that Man has two sides to his nature which are in opposition, the rational or civilized and the irrational or animal-like, underlies much of Western philosophy. Much of what

call *emotion* has traditionally been considered a manifestation of the latter. Plato believed the irrational side of our nature, which English philosophers and translators significantly rendered as *appetite*, was inimical to the formation of the ideal person, who should learn to exercise the power of reason at all times, controlling the appetites of the body. Aristotle, more pragmatically, argued for a more relative position in his *Ethics*; true happiness is seen as the ultimate goal of man, and as such is good, whereas pleasure can be morally negative; anger should be controlled by courage, ignoring it being rashness, and succumbing to it being cowardice; love can be interpreted positively as *philia* (roughly *friendship*), or love between parents and children. Sexual love is given less attention for, according to J.A.K. Thomson and Aristotle (1953: 227), "the ancient Greeks looked on the physical attraction of sex for sex as a biological phenomenon" on a level with hunger or thirst. Pride, in moderation, was positive but vanity negative, and to despise someone for the right reasons was perfectly justifiable. Emotion for Aristotle, therefore, often has a positive contribution to make.

The debate about these and other phenomena, which today some classify as *emotion*, continues down the centuries, attitudes often varying according to the personality and background of the writer expressing himself, as Russell (1946) demonstrates so well. The arguments always revolve around questions of ethics and morality, the right or wrong, or relative goodness or badness, of the appetites, passions or natural instincts of Man. The extent to which these mental or physical phenomena are discussed, as well as the problem of whether they are controllable by free will, and to what extent this control is possible, desirable or necessary. Aristotle's idea, that certain emotions in certain circumstances merited a higher interpretation than mere physical appetite, is also debated down the ages. The Mind/Body problem is argued out in terms of Soul/Body, Mind/Matter, over and over again, with emotion as its *leitmotif*.

The scholastics, like St. Thomas Aquinas, described the appetitive faculties as *passio*, which were physical and usually necessary for survival, and were external to the disembodied spirit or soul. They were seen as an undesirable but inevitable part of human nature, and the aim of the good, rational man should be to control them, or at least the less desirable behaviour resulting from them. The bodily manifestations of the emotions were seen as their *materia*. According to Xavier (1985), neither the *passio* nor the *materia* were seen as connected to the causality of emotion.

Spinoza's theory of emotions is often quoted nowadays in support of some sort of evolutionary view of the emotions. He seems to have believed that the emotions were essentially bound up with the needs and way of life of the species in question, and that those observed in animals must be different from those in human beings. According to Russell's (1946: 557) description, he "seems to have distinguished between *emotion* and *passion* and to have believed that an emotion which is a passion ceases to be a passion as soon as we form a clear and distinct idea of it." This draws attention to the way we interpret the symptoms of our emotions and is often quoted in favour of a cognitive view of emotions.

According to Kenny (1963: 2-3), Descartes, in his *Les Passions de L'Âme* deals with "fear, anger, joy, love, admiration, respect, scorn, pride, humility, bravery, pity, sadness" and defines them as "perceptions, sentiments or emotions of the soul, which are referred particularly to the soul itself, and which are caused, continued and strengthened by some movement of the animal spirits". The proposer of dualism of mind and matter would seem to see these passions as relating to both. In Kenny's (1963: 4) interpretation, Descartes argued that the passions "are received into the soul in the same fashion as the objects of the exterior senses, and are known by it in exactly the same manner", but they are felt in the soul itself. The information that leads to an emotion is therefore perceived like other information. However, it appears that Descartes held, because "on sent les effets comme en l'âme même" (ibid: 5), that the mental perception of an emotion enjoyed a certain infallibility of judgement because it was internal to the individual and not dependent on outside factors. Most emotions were recognised by the soul before ac-

was taken, and, although his physiology allowed for certain reactions, like fainting, to be attributable to some more direct stimulus-response explanation, he maintained that 'the commonest effect of the passions is to incite the soul to will a course of action for which it merely prepare the body' (ibid: 7). Descartes' analysis of the emotions, like his explanation of the pineal gland relating body to soul, may seem to be based on rather naïve physiology, but was instrumental in preparing the ground for modern psychology.

2.3 Psychology and Emotion

Modern psychology dates the scientific study of emotion from the appearance of Darwin's *Expression of the Emotions in Man and Animals* (1872), and James's *What is an Emotion?* (1884). Darwin was in search of further proof of his theory of evolution and therefore stressed overt action as the biologically significant aspect of emotion and emphasized the importance of causative environmental stimulation. James' contribution was to reverse the generally accepted idea, supported by such as Descartes, that the course taken by emotion begins with an object in the environment which is perceived by the senses; that the information about this object is apprehended by the soul, or mind, which then prompts the body into appropriate action. In other words, one sees the lion, feels afraid and runs away. James' (1884) proposal, quoted by Strongman (1987: 5) was that "*the bodily changes follow directly the PERCEPTION of an existing fact, and that our feeling of the same changes as they occur IS the emotion*" [italics and capitals in original], or, that one sees the lion, runs away, and then recognises one is afraid. Although cognitive psychology seems to have come full circle and would now seem to prefer a modernised version of the former point of view to James', the latter's influence was crucial in the way psychological research was conducted for the next sixty or seventy years.

The various theories that developed within psychology about emotion since Darwin and James are already the subject of several books, so, rather than analyse specific theories, I shall outline instead the main issues that have been discussed over the last century. The rise and fall of Behaviourism and the advent of Cognitivism were by no means simple, clean-cut processes, but a certain sequence of events can be traced with the benefit of hindsight.

2.3.1 The Physiology of Emotion

James' affirmation that Emotion was the observable physiological changes an individual undergoes in such a situation allowed the study of this phenomenon to be conducted on a basis that was considered a respectable scientific basis. In the early stages of this research, the two areas of physiological change that were studied most were what were referred to as a) the viscera, internally felt heart or pulse beat, nausea or "butterflies in the stomach", sweating or crying, b) the skeletal muscles, which produced the facial expressions, gestures and other more visibly observable physical indicators of emotion. These physiological changes are generally considered to be hard to control or produce voluntarily, particularly those of the viscera.

Visceral change is the way in which we sense our own emotions, and there are plenty of expressions with which we describe these sensations. *My heart thumped/turned or raced/stood still, I was sickened by his behaviour, I was in a cold sweat*, not to mention various signs of sexual excitement no modern novelist can fail to describe, are expressions of this kind. Psychologists have conducted considerable research into these changes, both by physically monitoring the changes, and by getting people to describe what they feel when under the influence of a particular emotion. This type of research tends to show that there are definite physiological changes associated with emotion generally, which psychologists refer to as 'arousal' but that no specific change can be definitely attributed to any specific emotion. Strongman (1987: 12) says, "A necessary condition for emotion to occur must be an aroused organism, but arousal need not imply emotion. A similar set of physiological changes may be seen in hard physical exercise". Certain chemical substances can produce the phys

symptoms typically associated with particular emotions. Experiments by Schachter^[2] v such substances, however, suggested that, although they may produce the appropriate phys symptoms, experimentees only actually made the connection between the symptoms and emotion when there was some real emotional situation from which such a conclusion could drawn.

However, the type of psychological experiment which is based on asking people to desc what they feel physically when in a state of general or particular emotion was not consider test of what objectively happens to them. The results will reflect the social and cult background which influences them to focus one or another aspect of arousal, and the lingu conventions used for expressing awareness of this arousal will also vary for similar reason. As Davitz (1969: 141) claims, "The language of emotion reflects, somewhat abstractly with less than perfect precision, the referent experiences; but it is also influenced by the na of the language used to report experiences, linguistic habits and variables related to reporting process". His work showed that individuals vary quite widely in the way in wh they report physical emotional experience.

Studies of visceral changes would seem to show that we rightly associate physical arousal v emotion. However, the Behaviourists saw these changes as the cause of the recogni emotion, whereas the Cognitivists believe them to be the effect of certain cognitive process. Cognitivists may argue about the extent to which the changes result from genetic programmed or culturally acquired responses, from the brain's hardware or software, from workings of the unconscious or consciousness, but they will agree that some cognitive proc precedes them.

There is no clean-cut difference between the type of physiological change which is c recognised by the Emoter and that which is externally observable. This is because people t to vary considerably both in their ability to control and dissimulate their own emotions, an their capacity to recognise and interpret emotional signals in others. Some people con their emotions so successfully that only a trained psychologist can detect the signs, others 'l all hang out' in a way that only the most crassly unobservant can fail to notice. However, other focus of interest for psychologists, and others, in the physiological changes induced emotion has been the behavioural consequences, and there seem to be two main lines research in this area, although they have much in common. There are those who h continued Darwin's interest in studying the evolutionary aspect of emotions, and others v concentrate on the way emotional behaviour is related to social interaction.

The way human beings express themselves through what has become known as body langu: has developed in part from Darwin's early attempts to show an evolution of emotic expression in various species. The evolutionary interest has been continued largely ethologists like Lorenz, Tinbergen and Krebs, as part of their interest in animal behaviour, anthropologists like Eibl-Eibesfeldt (1970), who has shown how the physical expressior Love and Hate is very similar among man and the higher primates, and can also be observe other animals. The observations by these scientists show that the strong correlation betw the way humans of all cultures, as well as other species, physically express emotion suggest least a fair measure of innateness of this type of behaviour. This type of research is suppo by findings on children born blind and deaf and who, as McNaughton (1989: 43) expla "smile, laugh, weep, stamp their feet, clench their fists and frown like normal children" . E Eibesfeldt goes further and suggests that "more is innate than is often supposed" quoting support of this the reaction of a ten-year-old girl born blind, but with perfectly good hear who, in response to a compliment, "immediately blushed and turned her face briefly tow: me and then looked down, just as a sighted girl does when she feels bashful"^[3]

The idea of innateness of emotions has been tested in several different ways in order to discover if emotion develops as the result of experience or follows some independent maturation process. The type of testing involved is complicated because so many factors are involved, and it covers everything from perinatal studies, which show that there is truth in folk wisdom that the emotional state of the mother during gestation can influence her child's disposition, to all the complexes that psychoanalysts spend their time unravelling by leading their patients back through their experiences in life to discover what incident or treatment in childhood triggered off that individual's differentiation from the norm. However, the very fact that some sort of general norms in emotional development can be posited, regardless of cultural, social and individual tendencies, shows that there must be some measure of innateness of emotions. McNaughton (1989:104) concludes that "the developmental data show that there are indeed, in the neonate, separate innate systems which form the basis for separate adult emotions. However, they also suggest that the normal form of each adult emotion depends on the appropriate moulding, during development, of a number of innate components".

Those social psychologists who study facial expression and body language usually take the evolutionary aspect for granted or as introductory to their own study. Argyle (1988) considers that "one of the main functions of non-verbal communication in animals and man is to communicate emotions and attitudes." Facial expression has been used to support theories of innate emotion by scientists like Ekman (1982) who believes that there are facial behaviours specific to each emotion and that these relationships are invariant across cultures. McNaughton (1977: cover), in a popular cross-cultural study, shows the extent to which people "signal each other their attitudes, desires and innermost feelings more powerfully through unconscious bodily movements than by word of mouth". Morris et al (1979), however, are careful to point out that signals like nodding, shaking one's head and beckoning are culturally learned. Strongman (1987: 47-48) describes Tomkins' theory of 'affect', which helped to modify the view that human motivation can be attributed simply to those 'drives' evolutionarily necessary for survival, was influenced by the observation of facial expression and body language.

Cross-cultural studies have shown differences, but they tend to be cultural variations in the intensity of expression, and the interpretation given to these expressions, rather than anything fundamental. Ekman (1982: 142) describes how experiments have shown that certain general categories of emotion can be communicated by facial expression and body language between people of such different cultures and languages as Westerners and preliterate New Guinea. However, the appropriateness and acceptability of expressing any specific emotion tend to vary from culture to culture, and tend to be so conditioned by that culture that the overt behaviour is probably controlled by the unconscious. From personal experience, I would point to my inability to weep spontaneously at funerals, due to the cultural pressure to be restrained from doing so by my English background, a fact which meets with a certain incomprehension in a Portuguese context.

Apart from the cultural factors involved, this type of research is complicated, as it involves the problem of obtaining 'spontaneously' generated facial expressions, not easy under laboratory conditions. For example, Ekman (1982: 141) described how Japanese and American subjects behaved in experiments. When watching a film, and not conscious that their behaviour was being filmed, subjects of both cultures showed fairly similar reactions. However, in situations where they were conscious of being observed or were in groups, the public face they presented varied: Japanese culture expects happy smiling faces for the world, whereas Americans are free to show negative responses. Although most of us can feign emotional behaviour, it is difficult in a case like this to say how far the Japanese behaviour is unconsciously or consciously produced, because the cultural influences will have been internalised since childhood.

The study of physically verifiable data on emotion also progressed in relation to the brain

became clear that the brain too could be checked by electroencephalogram, EEG, for electrical signals showing emotional stress, and it soon became obvious that emotions were not simple physical Stimulus-Response (S-R) systems. As the geography of the brain has become better understood, it has been found that electrical stimulation of certain areas of the brain produce the physical symptoms of emotion. Neurochemistry has revealed that certain substances affect relevant parts of the brain to produce depression or euphoria, or to alleviate stress and anxiety, and most of us are aware of the potentially beneficial as well as dangerous results this type of treatment can produce.

The relationship between the brain and the rest of the body is highly complex and by no means fully understood. As McNaughton (1989: 53) says, "there is a huge amount of evidence for involvement of the autonomic nervous system in emotion - none of it particularly clear as to its psychological implications". Hormonal changes, whether produced or controlled naturally or artificially, often accompany emotional phenomena. Although few would now argue that autonomic and hormonal responses are emotions as James did, there seems to be grounds for arguing that, just as the brain processes information using some sort of 'looping' interactive feedback from physiological changes can contribute to the feeling component of emotion, possibly affect the interpretation of the emotion. McNaughton (1989: 56) goes on to show that this seems to be supported by a study by Hohmann (1966), a paraplegic who, on evidence from his own experience and that of fellow sufferers, found that the spinal lesions they suffered had contributed to "significant decreases in experienced emotional feelings associated with sex excitement, anger, fear... compared to those experienced before injury", but that this corresponded to a "significant increase in emotional feeling related to sentimentality" and that "overt emotional behaviour may continue to be displayed", probably for more complex psychological and social reasons.

2.4 Cognition and Emotion

At this point it is necessary to examine what exactly the terms *cognition* and *cognitive* mean in the present academic context. These terms have their roots in the past. The S.O.E.D. (p. 3) for example, gives the definition "the action or faculty of knowing; knowledge, consciousness" but labels it with the symbol meaning "obsolete". However, although modern dictionaries define them as "the mental process of knowing, learning, understanding and representing knowledge", they are careful, like the Collins Cobuild English Language Dictionary (p.263) to emphasize that they are 'technical' words. At a broad level they are used to describe a reaction in psychology against the more mechanistic forms of Behaviourism, a reaction which was both accompanied and encouraged by the more general rejection of the simpler forms of cause-and-effect materialism in other scientific fields. This does not mean, however, that these popular terms are interpreted in the same way by all who employ them to describe their work.

To start off with, the use of these words does not necessarily imply that their users in any way reject materialism or related concepts. For example, at the more mechanistic edge of the spectrum of meaning we find the AI people and certain psychologists referring to themselves as *cognitive scientists*, when they mean that they are trying to make their computers imitate and work in conjunction with, the human brain, by analysing the brain's (mind's?) processes with a view to making them computable.

There still seem to be a number of people in psychology, and related areas, who describe themselves as *cognitivist*, but whose approach is not so far removed from the Behaviourist method of studying emotion as a purely physiological phenomenon was not viable. Much of the research done so far was all right as far as it went - but it did not go far enough.

Although the physiological studies of both arousal and behaviour were important, Schachter's study had shown that emotions need to be examined as cognitive phenomena related to situations that could be cognitively, or even consciously, appreciated by the experimentee as giving meaning to the artificially induced physiological factors associated with the emotion. This led to investigation into understanding how the individual appraises the situation which prompted the emotion. This appraisal was based on the perceptual information received on the occasion, and the information stored in the mental structures, some possibly innate, which might, directly or indirectly, influence that emotion. It was also realized that the behaviour resulting from the emotion was intimately connected with a system of feedback contributing to modify and control it. As it became clear that cognition was involved in emotion, the problem became to discover what was the nature of this cognitive function, or appraisal, as psychologists chose to label it.

When discussing the relationship between cognition and emotion, the terms are used by many mainstream psychologists who favour the notion of analysing the human Self, at either conscious or unconscious level, as somehow processing emotion. They reject the radical Behaviourist thought, which saw emotion as a simple S-R situation in which the Self is nonexistent, irrelevant, or, at best, passive. Instead, they view it as a highly complex process which involves not just the accumulation of sensory information, but also its interpretation and evaluation, which in its turn leads to some form of consequent decision over what emotion is actually felt, and what reaction is ultimately conveyed about the interior state to the outside world through resultant behaviour. Although these processes are called *cognitive*, they often function at a subconscious level. Since the experiments involved in this type of research range from the more brain orientated ones of neurophysiology to the more mind orientated ones on the border between psychology and psychiatry, it is obvious that the individual academic interpretation of the word must be examined in context.

It is one thing to recognise that emotion must involve some kind of cognitive process, but quite another to understand how the relationships between cognition and arousal and behaviour work. Once the idea of *appraisal* began to be discussed, the problem was how to explain it. The notion that some account should be given for cognition in emotion was not exactly new but it had been obscured in an academic world dominated by those who rejected any notion of mind as unscientific. Some pre-cognitive theorists had tried to account for the function of emotion, and theories had been built round affect, or emotion, as motivation. Others, including Sartre, argued that emotion, rather than being a disorganising force, as popularly believed, was in fact the way people coped with unusual happenings in their lives. They felt that much of day-to-day-living is carried on with a minimum of consciousness, but then, when something unusual happens, the emotions galvanize our consciousness into appropriate action. This view of emotion is now supported by many cognitivists.

Acknowledging a role for cognition in emotion probably posed as many problems as it was expected to solve. One such problem was that of the time factor. Since emotional responses, particularly for the stronger emotions, follow the stimulus so rapidly, and do not seem to require conscious reasoning, appraisal must require ultra-quick access to the (unconscious) memory and cognitive processes. This has led to the type of argument about the nature of time discussed earlier and to Penrose's speculations about the nature of time in relation to consciousness, but it has also led to arguments within psychology as to how to approach the problem.

An argument that continues to excite those involved is - which comes first, cognition or emotion? Also, must the two phenomena be necessarily interacting, or are they independent? Can one argue for some sort of autonomy for emotion from cognition in the case of stronger emotions that produce an immediate response, as in the case of fear when the lion suddenly appears in front of one, and a bigger cognitive role for the milder or more long-lasting

emotions, such as pride in one's achievements? To what extent is immediate emotive response due to innate structures or to cultural conditioning of the subconscious? If one classifies these more spontaneous phenomena as emotions, to what extent can one consider more long-lasting ones, like love, in the same category, and where do moods like depression fit in? These are problems that have worried others in the past in other ways, but which are particularly relevant to cognitive psychology. They must also be borne in mind when analysing how we use language to describe our emotions.

2.5 Cognitivism and linguistics

Cognitive and *cognition* are fashionable words, so it is only natural that different schools of thought within linguistics should also describe their work as based on *cognitive* premises. However, I should point out that their interpretation of the terms varies in the same ways as those of their counterparts in psychology. Although psychologists no longer see behaviour as a crude S-R process, there is still a strong emphasis in their work on the role of the physical perception of the outside world, and linguists in this field still try to discuss abstract notions in terms of physically realizable or understandable factors. These people still favour analysing emotion as a physically caused, felt and expressed phenomenon.

Phonologists may well analyse the production and reception of language sounds in terms of physical perception and behaviour. At a fairly abstract level work in both neurology and linguistics seems to show that certain structures or parts of speech are processed in identifiable areas of the brain. Most of this sort of work can be construed of as being in the mechanistic area of the cognitive spectrum. However, once we begin to scratch the surface of meaning, the whole problem of how it fits in with cognition has to be viewed more flexibly.

Components of language can be analysed in terms of meaning independently of a context, and these components can be further analysed either in terms of other more basic components of meaning or as 'mental images', all of which may quite possibly be interpreted in terms of relatively simple information and memory processes in the brain. In an abstract sense, information could probably be formalized in increasing degrees of sophistication for the use of cognitive scientists so that they can work on the artificial intelligence of their robots. The work of linguists like Jackendoff(1985) and Langacker(1987 & 1991) is based on this assumption.

Linguistic theorists like M.A.K. Halliday, however, maintain that meaning exists at linguistic levels in a real-life language situation. This position, with which I sympathise, favours the interpretation of *cognitive processes* as an intricate combination of the sense input from the exterior with the interior processes of interpretation, which, in turn, involve reference to, and feedback from, stored information of an extremely complex kind. This information results from a lifetime of existence in, and communication with, multiple aspects of an outside world. My linguistic interpretation of cognition is, therefore, at the mechanistic side of the spectrum - that which tries to understand how language both reflects and expresses the human brain, or mind's, beliefs about the world at a situational level.

2.6 The implications of Cognitivism for emotion

The development of Cognitivism has meant that Psychology has had to broaden its horizons beyond the strictly empirical and physiologically observable data on which it worked in the early part of this century. As we have seen, understanding of the neural wiring is by no means simple and requires ever more sophisticated experimental methods and equipment. The metaphor of the computer is often used, and there is talk of 'neural networks' and 'parallel distributed processing' for computers and brains. On the other hand, the understanding of the external factors which go to make up individuals is still considered too dangerous and subjective for many psychologists to attempt. Experiments in this area tend to be based on

analysis of groups of individuals, or carried out in the name of social psychology. Yet there are those, like Gardner (1987), who see Cognitive Science as bringing together findings from philosophy, psychology, artificial intelligence, linguistics, anthropology and neuroscience, providing a wider background against which to study the Brain/Mind. More attention is being paid to how to prepare scientific methods using ideas taken from these disciplines, approaches through psychoanalysis and phenomenology, previously condemned as unscientific, are felt to have something to offer. It is no longer so terrible to ask individual use of introspection to describe certain mental phenomena, providing one can devise suitably 'objective' criteria for them to use.

Although cognitive scientists and neurologists give the impression that the understanding of the brain is only a matter of time, one should realise that the time involved is considerable, and that even the most optimistic would probably refer to a full well into the next century, if not the following one. *Star Trek*, for example, which tackles several of the problems discussed here under the guise of science fiction, is still having serious reservations about allowing their human type robot Lieutenant Data to have emotions in the future some centuries from now. Although, at this stage, neurology can help understand problems of people with brain lesions, and make suggestions that illnesses like schizophrenia and epilepsy could be attributed to faulty electrical connections or electrical storms in the brain, it is a long way from being able to do much to help the people concerned definitively. Yet the help for these people is probably more forthcoming than that so many less afflicted people search for to help them cope with living problems. For these, the psychiatrist still has to try and supply the answers.

Psychiatrists would seem to use a combination of treatment aimed at the physics of the brain through electrotherapy, for example, or the chemistry, using drugs, as well as the methods which we understand as being aimed at what is traditionally known as the psyche. Neurology does not have to justify its interest in the physical aspects of the brain, and modern psychology, as a discipline, would seem to be strictly conditioned by the norms of empirical experiments. However, psychiatry, while drawing on the research in both areas, is inevitably eventually forced by the nature of the clinical work entailed to resort to methods which the other two disciplines consider to transgress the borders of pure science.

Psychoanalysis has long since lost its standing as a science, a fact which the ghost of Freud who always looked upon the method he pioneered as strictly scientific, must lament. This is because most of the hypotheses of psychoanalysis are based upon observations made during psychoanalytic treatment, and such observations cannot be scientific as, according to Sigmund Freud (1987: 75) they are "contaminated with the subjective experience and prejudice of the observer however detached he tries to be". Attempts by people such as Wundt in the nineteenth century to establish an understanding of psychological processes by strictly controlled methods of introspection had already been discredited as unscientific. In this century, Behaviourism, which is derived from learning theory and the principles of conditioning through reward and punishment expounded by B.F. Skinner, claimed that it was based on scientific principles rather than on interpersonal interaction, but these claims, as Storr (ibid: 79) observes, are "less strident than they were".

Not everyone is convinced, however, that pure science can hope to solve the problems of the everyday living of the individual. Psychoanalysis continues to deal, with a certain success with helping people understand their lives and interpersonal relationships. It can be considered not as a causal theory, uncovering causes of behaviour, but as a semantic one, or "seeing the task of psychoanalysts as ... a means of making sense of, and understanding, personalities and communications of patients" (ibid: 85). Storr believes that, now that we are beginning to correct the general over-valuation of the exact sciences, more credit can be given to psychoanalysis and the insights it provides. Farrell (1987), too, would sympathise with

point of view, and thinks what he terms the Science-man could learn from psychoanalysis ¹⁵

Emotion is central to much of the psychiatrists' and psychoanalysts' work, as the problems they deal with can often be seen as some form of emotional disfunction, or as the individual's inability to cope with his emotions enough to lead a normal life. The line between normal and abnormal is notoriously hard to draw and often depends on the criteria of the society in which the individual lives. An individual may seek, or need to seek, professional help from a psychiatrist, a psychologist or a psychoanalyst with a view to solving apparently internal problems, but such problems are intimately connected with the way the individual relates to society.

Cultural and social influences contribute to the reasons why we have emotions, and why we interpret them in the way we do. There are pressures from all the sociologically defined categories such as race, class, sex, peer and family groups, which exert pressure on how we behave, and these factors contribute to, or limit, our emotional lives. This can be seen in Davitz (1969) where he compares the way in which groups studied in the United States and Uganda vary in the way they experience emotions and the phenomena to which they attribute these emotions.

The idea that the analysis of Emotion concepts should take the individual's experience as a starting point is what the phenomenologists have been saying all along, and there are those who could be termed phenomenological psychologists. These people have always pursued their search for understanding of human emotion by analysing what individual human beings report on their emotional experiences, rather than the physiological aspects of emotion. For them, human consciousness is the key to the way we understand anything, let alone emotion, but this has meant that mainstream psychologists, used to working with only physically verifiable and observable phenomena, have dismissed phenomenology as unscientific.

As Strongman (1987: 120), whose original behaviourist beliefs in 1978 have given way to a recognition of the importance of cognition, has put it, "phenomenological and existential theories of emotion are limited to human experience and for the most part depend on intuitive, non-quantifiable data. They are dubious and seem to put psychology back on a shaky scientific footing". However, he now concedes that these theories, which he prefers to consider philosophical rather than psychological, "have performed the valuable service of at least attempting to come to terms with the subjective experience of emotion" and that "they are not as far from the possibility of something like conventional empirical tests as was once thought." (ibid: 140) Like other cognitive psychologists, he maintains that the physiological and neurological data already acquired will serve as a sound scientific basis from which mainstream psychology may now proceed to analyse the subjective experience of emotion.

As philosophers such as Heidegger have pointed out, to discuss anything like Emotion without resorting to the concepts conventionally used for this purpose, a process which in itself brings a lot of questions and can complicate communication. However, Wittgenstein (1953) claims that "an inner process stands in need of an outward criterion", and that criterion does not necessarily mean some form of shared experience. The social and cultural situation in which each of us finds ourselves contribute to our individual understanding of emotions and to our emotional behaviour. However, providing this understanding and this behaviour do not depend on the norms, including linguistic norms, of the society and culture in which we find ourselves, and providing we allow for changes when examining less familiar societies and cultures, there is no reason why more individual reports of emotion should not contribute to a deeper understanding of the subject. One way or another, it all comes back to understanding more fully the tool that is used to report any kind of experience - language.

[1] Certain schools of thought in psychology and psychiatry have opted for the term *affect* - translated as *afecto* in Portuguese - but *emotion* would still seem to be the most generally used term.

[2] These experiments, described by Strongman (1987), are the subject of Schact publications in 1959, 1964 and 1970

[3] Eibl-Eibesfeldt (1971). Quoted here from McNaughton (1989 : 43) from the Eng version.

[4] When pursuing the Mind/Brain problem, I asked three psychiatrist friends of mine what they understood they were treating in their patients, a *mind* or a *brain*. What was the electrotherapy, drugs, behaviour therapy and psychoanalysis all aimed at? I should point out that it was not my intention to extend the discussion of emotional behaviour in this thesis to what would be classified clinically as pathological. However, their responses showed that they made a clear distinction between those cases which needed the attention of a neurologist, because of some physical abnormality, and those which involved apparently healthy 'brains' and 'minds', which they considered their responsibility. Naturally, they agreed, the distinction was not always so easy to make, and there is often cooperation between the two specialities.

[5] However, Farrell also draws attention to the abuse certain Arts-men have made of psychoanalysis by basing their analysis of individuals on shaky psychoanalytical premises, or making sweeping generalisations about history and society based on their own interpretation of psychoanalysis. On these occasions "the Science-man is doing the unpopular thing of helping us to face reality - the reality of our still enormous ignorance of ourselves." However, he sees the tension between the Arts-man and Science-man as creating an excitement of interest that is ultimately beneficial to human knowledge.

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CHAPTER 3

CONCEPTUALIZATION AND EMOTION

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3.1 Introduction

In the last chapter the significance of emotion for various theories about human nature was discussed, and it is clear that the conceptualization of emotion raises particularly interesting problems. Emotion would seem to be part of the experience of all human societies and cultures, unlike laser beams, theories about the galaxies, or even more natural things like snow, which many people living in tropical areas are only dimly aware exists. The physical phenomena associated with emotion would even seem to form part of our genetic make-up. One can therefore argue in favour of a certain universality for it at the level of human experience. However, since social, cultural, and individual psychological factors obviously influence the formation of concepts as well as their usage, it is also an area rich in signs of relativity between languages and language users.

English and Portuguese belong to a common Western or European culture, and, diachronically speaking, to the same Indo-European language family. Portuguese is essentially a Romance language, but English has also been heavily influenced by Latin and French over the centuries, despite its strong ties with the Germanic languages. It is likely, therefore, that although a study of culture through language may not indicate any major

differences of beliefs about the world, certain aspects of the lexicon and syntax will vary.

In this chapter, I shall begin by developing the theme of universals v. relativity, and go on to examine general theories of meaning and conceptualization. My objective is to show how these theories affect the way psychologists and others have attempted to systematize the conceptualization of emotion, either by drawing up lexicons of emotion or by discussing the syntax peculiar to this area of language.

3.2 Conceptualization - universals and relativism

If one tries to use the dictionary to clarify the meaning of concept and its derivatives and synonyms, one can get tied up in a vicious circle of definition from which it is difficult to extricate oneself. This is because, since concepts are usually regarded as mental phenomena, one is up against the Mind/Brain problem again. For example, the S.O.E.D. defines concept (p.388) as a philosophical term meaning "The product of the faculty of conception; an idea of a class of objects, a general notion". It further defines conception in this sense, (p.389) as "The action or faculty of conceiving in the mind" and "That which is conceived in the mind".

Until the advent of 19th century materialism, however, it was generally accepted that there was a difference between an apprehended concept or idea and its lexicalisation in any particular language. The principal tension was, and for many still is, between those who believe in some kind of universal set of concepts which refer to objective reality out there in the world, and those who believe that anything anyone means is relative to the particular situation, and only really directly accessible to the individual speaker. In between the extremes of absolute and relative meaning come all the philosophical, anthropological, social and psychological theories about how concepts and words come into existence, change and sometimes disappear with time. To cover them all here is beyond the scope of this book, but I feel it is necessary to outline a few of the theories which directly relate to conceptualization in general as well as to the problems underlying the comparison of two languages, in this case English and Portuguese.

3.2.1 The Platonist and Aristotelian traditions

Plato believed that knowledge was an essential part of the soul, which you possess before you are born, and that learning is the way we recover this natural knowledge. The Dialogues such as that with Euthypro on the subject of Piety (Plato, 1959: 23-6), are meant to show that, although, when we use a concept in relation to particular things, its value is more relative, beyond this there is a general ideal concept which exists independently of the here and now. Certain emotions, such as Love (ibid: 34), are favourite themes for this sort of discussion.

Variations of this theory have been propounded down the ages by idealist philosophers and, although based on different premises, Chomsky's proposals for an innate grammar, which he and his followers believe can be formalised abstractly, is the modern descendent of this line of thought. The attraction of mathematical and scientific ideas is that they have always been felt to belong to the Platonic world of absolute truth, to the extent that they are not even primarily dependent on language for their interpretation. For instance, Penrose (1989: 554) is of the opinion that mathematical concepts, whether one is thinking about known ones or discovering new ones, can be comprehended without resorting to language, and considers that others like chess players, musical composers and visual artists have similar experiences. He describes how "When one "sees" a mathematical truth, one's consciousness breaks through into this world of ideas [accessible via the intellect], and makes contact with it".

The temptation of this way of looking at knowledge is to attempt to attribute absolute values to less scientific concepts, and to transfer these values to their lexical realisation in a particular language. Yet our attitude to knowledge is sufficiently conditioned by this notion of a Platonic world to make the writing and consultation of dictionaries an acceptable way of understanding the meaning of words or concepts .

Down the centuries people have not just argued about the meaning of concepts and whether or not they are innate or not: the more interested have actually conducted experiments to test their theories. Crystal (1971: 46-7) cites several examples of kings who tried to discover what language would be spontaneously spoken by children brought up without linguistic contact with others.[1] Sacks (1989) describes how, in the 18th century, Abbé de L'Epée became fascinated by the sign language used by the deaf in Paris and set out to understand it, partly so he could save their souls, but partly because the philosophical idea of language universals was again in fashion and he believed that this symbolic language, untainted by normal linguistic influence, would be the key to the universal language[2].

'Wild' children have always been a subject of interest for those interested in the mysteries of language, although this interest has varied according to the theories currently being proposed[3]. The relatively recent case of Genie[4] was of considerable interest to those interested in Piaget's and Chomsky's theories. Sacks (1989) also quotes the story of Kaspar Hauser[5] and several cases of congenitally deaf people, all of whose abnormally late processes of language acquisition are of interest to psychologists. One of the more interesting points that emerges from these studies is that although the naming of concrete objects is reasonably easy for these people to acquire, normal sentence structure and abstract concepts are often beyond them. This would suggest that some sort of programme for normal language development is innate and must follow a certain sequence, and that the capacity to abstract must somehow be related to this, but that the process of naming objects of our experience is empirical. Since there seems to be a certain normal evolution of emotional development in children[6], which involves perception and linguistic conceptualization, it would be interesting to study research into the development of affective capacities in these people.

The French thinkers of the 17th and 18th centuries who influenced the experiments of Abbé de L'Epée and the theories behind the Port-Royal grammar were in the Platonic tradition, as were other thinkers down the ages. The various theories put forward are by no means simple to analyse and, since Chomsky himself has been criticised for his faulty understanding of them, by such as Carvalho (1984), I shall not attempt to go beyond the expression 'Platonic tradition' to stand for the idea that there is some extra-linguistic reality which language tries to express.

The Aristotelian tradition is equally complex, but this general view is that language acquisition is essentially empirical. Aristotle questioned the existence of absolute concepts and argued that, whether concrete or abstract, concepts can only be deduced from our experience of them, i.e. there is no absolute quality of 'whiteness', only white houses, flowers or whatever. Knowledge, therefore, must be based on what is observed. This is obviously a gross over-simplification of this type of philosophy, but necessary for the general purpose of comparison with the idea of absolutes.

Wittgenstein opens his *Philosophical Investigations* with a quotation from St. Augustine's *Confessions* in which the latter describes the way how, as children, we learn to name things from the people around us. Xavier (1985: 6-16) shows how St. Augustine seemed to maintain the Platonic idea, implicit in this situation, that one is aware of the nature of the thing named (*res*) before one knows its name (*nomen* or *uerbum*). However, his idea that we learn language empirically, or from our experience of watching others use it, is more in

the Aristotelian tradition.

This point of view was supported by people like Descartes, with his view that our understanding of reality must be based on empirical observation, Locke, with his view of the human being as a *tabula rasa*, and others who believed that the names of things were acquired empirically. This empiricism in the late 18th and 19th centuries also turned the focus of language study away from anything metaphysical, and towards an interest in language as an expression of cultures and societies through history.

3.2.2 Language Relativism since the 18th century

Humboldt (1836), who is usually considered a key figure in the history of language relativism, in fact believed in an essential universal language underlying all known, or at least all Indo-European, languages. His theory was that individual languages usually did not measure up to this ideal norm, although Sanskrit probably came as near as it was possible. He was interested in the formation rather than the origins of language and was convinced that there was a strong connection between language and national character and culture. He claimed that all languages varied in quality because of cultural, social and racial differences and, since to distinguish between thinking and speech was an artificial convention, thought was conditioned by the language one spoke. Therefore, he claimed, certain languages were better equipped for thought than others.

This theory had uncomfortably racist overtones, which later language relativists, like Sapir (1921), have been at pains to avoid by pointing out that difference in culture or mentality is merely that - difference - and does not imply a qualitative judgement on the language or the people who speak it. He insists, " We know of no people that is not possessed of a fully developed language.... The lowliest South African bushman speaks in the forms of a rich symbolic system that is in essence perfectly comparable to the speech of the cultivated Frenchman". Whorf (1956: 84, 81) goes even further to avoid accusations of racism (in favour of European supremacy) by saying that "the eminence of our European tongues and thinking habits proceeds from nothing more "[than prestige based on human economics and history] and that many preliterate ("primitive") communities, far from being subrational, may show the human mind functioning on a higher and more complex plane of rationality than among civilized men" for "We do not know that civilization is synonymous with rationality".

The emphasis on linguistic relativism as a way of helping anthropologists to interpret the cultures they study has been both the result and cause of different approaches to the idea that language and thought are inextricably entwined. Boas (1917 and 1920), particularly in relation to the study of American Indian languages, drew attention to the importance of studying these languages if the cultures of these people were to be understood - although he warns against influence from colonizing languages, as well as the effect of the languages on each other for historical and social reasons. The influence of this way of thinking on anthropology has led to some interesting work on religious, political and kinship structures and the way they function. Recently work has been done by Lutz (1988) on how the Ifaluk islanders construct emotion.

Sociolinguists try to show us how language reflects society. Bernstein (1971-4), Halliday (1979) and others have done much to explain how the language we grow up with either helps or hinders our educational development and our integration in the society we live in. Others, like Lado (1974), Trudgill (1974) and Miller (1983), have shown how far attitudes towards things like race, class and sexual discrimination are reflected in the language we use, often quite unconsciously. This has, more recently, led to the feeling that if language so seriously mirrors the society we live in, perhaps one way the society can be improved is

by making its language 'politically correct'.

The most extreme form of language relativism is that which holds that only the individual can ever hope to fully understand what he/she actually means. Taken to its logical conclusion, this approach will allow one to communicate only with one's Self. For normal purposes though, we assume that language is for interpersonal communication, and for this to occur there must always be some degree of mutually accepted meaning in whatever form of language is used.

The academic discipline of comparing or contrasting languages has taken different forms, according to current linguistic fashion. 'Comparative philology' used to be the title given to the study of the history of languages and it focused on the lexical and syntactic similarities and differences that developed diachronically between languages. Contrastive linguistics as a discipline which contrasted languages, usually synchronically, became popular in the late 60s and 70s, as can be seen in Alatis (Ed. 1968), Fisiak (Ed. 1980) and James (1980), and it tended to be associated with more practical issues like second language teaching, bilingualism and translation. The more theoretical type of work that has developed from this, for example in Comrie (1976) and (1985), and Shopen (Ed. 1985), could perhaps be described as comparative linguistics and its aim could be seen as studying variations between languages within a more general quest for possible language universals.

Language relativism, whether between officially recognised different languages, or between variations of usage among the social groups who use one of these languages, or even between individuals, is something which usually leads to more problems than it solves. It tends, as we have seen, to be associated with negatively connotated things like racism and nationalism, and social differences based on education, class, and sex. Yet, rather like these nasty phenomena, it refuses to go away. Theoretical linguists like to deal with the language of an idealised average native speaker and leave the difference in language habits between social groups to sociolinguists. The sociolinguists, they argue, are more interested in analysing society than language anyway, whereas theoretical linguists are interested in higher things, like language universals and the human brain's or the computer's capacity for language. However, once one goes beyond the more abstract syntactic and semantic concepts, it is impossible to avoid getting involved with the cultures and social groups which use real language. This problem of coordinating theory and practice is one which affects other disciplines, and in particular philosophy, which has often been associated with linguistics in this century.

3.3 The relationship between philosophy and linguistics in the 20th century

The 20th century saw philosophy and linguistics become so involved with each other that at times it is difficult to distinguish between them^[7]. Philosophers have always been aware of the importance of linguistic phenomena, but in this century, as Cooper (1973: 5) observes, "this dim awareness ... has been replaced by very bright awareness - too bright, according to continental critics of Anglo-Saxon philosophy".

Both linguistic philosophy and the philosophy of language, as described by Katz (1985), were the underlying interests of both the Logical Positivists and the Ordinary Language Philosophers. The scientific revolution led to proposals for a scientific analysis of language, and it was Frege, Russell, G.E. Moore, the early Wittgenstein and others in the Vienna Circle of Logical Positivists who set about this task, using the tools of logic and categorisation in order to tame the unruly phenomenon. Much of this research was considered the province of philosophy rather than linguistics, but the mathematical and logical aspect of it could not fail to attract the enthusiasm of those who, encouraged by the prospect of the Turing machine in the 30s, began to think in terms of the computability of

language. There is no doubt that the intellectual discipline required by this type of analysis contributed to greater rigour generally in the study of language.

Cooper (1973: 45) shows how the attitude of the Logical Positivists to meaning centred on what was known as the "verification principle", which proposed that "the meaning of a proposition is the method of its verification". Those sentences which could be empirically verified as true or false were described as 'cognitive', and those that could not, were called 'emotive' because, the argument went, according to Cooper (1973: 54-5), "unless we ascribe emotive meaning to certain utterances, including ethical, they would, by the principle of verification, be meaningless". Emotive meaning is seen as "a tendency of a word, arising through the history of its usage, to produce (result from) affective responses in people". Thus, sentences like Stealing is bad (an ethical utterance), or My love is like a red, red rose (a poetical utterance), are unverifiable and therefore emotive. Another way of defining cognitive and emotive meaning can be shown in the following examples: Harry is an Englishman (cognitive meaning, verifiable from his birth certificate etc.) and Harry is a limey (emotive version of the same sentence - limey = derogatory form for Englishman). The philosophical problems about meaning, ethics, emotion and other factors arising from these distinctions are legion.

This use of cognitive is restrictive when compared with the way the same term is used by AI and psychology today, for it refers to only the most conscious reasoning carried out by the brain, whereas nowadays more is understood about, or attributed to, less directly conscious brain processes, and the scope of cognitive has become stretched to suit the situation. Emotivism is not dependent on the lexicon of emotion under discussion in this thesis, but the idea that one's choice of words produces, and results from, affective factors must always be taken into account in any connection between language and emotion.

However, the approach of the Logical Positivists proved too rigid to provide useful explanations for ordinary language. Apart from verifying whether statements were true or false, cognitive or emotive, there remained the fact that most of everyday language still did not fit into these categories.

Two thinkers who did a lot to revolutionise attitudes in linguistics and philosophy in the 20th century were Saussure and Wittgenstein. Saussure's work led to a new interpretation, if not the creation, of the discipline of linguistics. On the other hand, Wittgenstein provided the theoretical basis for both the Logical Positivists and the 'ordinary language' philosophers. Harris (1990) shows how, despite the fact that they cannot be said to have had any direct influence on each other, Saussure and the later Wittgenstein, nevertheless, have a certain amount in common. They both rejected what Harris terms "nomenclaturism", which views language as "a set of relations between independently given sounds or marks on the one hand and independently given features of the external world on the other", a view of language which isolates "words from the linguistic systems to which they belong and, simultaneously, [isolates] the language-user from the linguistic community" (ibid: 17). Both Saussure and Wittgenstein chose the metaphor of a game of chess to explain the way in which words or signs can be compared to the pieces of chess, the grammar to the rules, and any sentence to the position any of the pieces takes up as a result of these rules - a position whose significance depends not so much on the rules as on the positions of the other pieces and all the moves prior and posterior to that position.

Saussure was interested in showing that language must be considered as a structure of interdependent units whose individual value depends on this structure for interpretation. He also saw language as generative of thought, and Harris (1990: 30) quotes him as saying, "No ideas are established in advance, and nothing is distinct, before the introduction of linguistic structure". Wittgenstein, who, in quoting St. Augustine at the

beginning of *Philosophical Investigations*, is really criticising his own earlier views, put forward in his *Tractatus Logico-Philosophicus*, is interested not only in the autonomy and arbitrariness of language. Although he is less convinced that thought is impossible without language, he maintains that since we need language to express thought, it is impossible to get outside language in order to analyse language, or, consequently, thought. These ideas have had very important repercussions on 20th century thinkers in general.

When the idea that language could be systematized logically fell into disrepute, some philosophers, sometimes known as the 'ordinary-language' philosophers, led by Austin (1963), developed the theory of 'speech-acts'. Austin first made the distinction between 'sayings', which he called 'constatives' (e.g. statements, or descriptions), and 'doings' or 'performatives' (e.g. promises or warnings). Later (1970 and 1971) he went on to define between 'illocutionary acts', which covered statements, descriptions, promises and warnings, etc., as somehow establishing the speaker's attitude, and 'perlocutionary acts', like persuading, convincing, frightening, boring, amusing, or annoying, which aim at affecting the hearer, usually, as the terms suggest, by producing some form of emotion. Others took up and developed the complex problems related to the speaker's intention and language convention in speech acts (Strawson 1964), utterer's meaning, sentence meaning and word meaning (Grice 1968) and 'intentionality' (Searle 1983). As we have already seen, Searle is also heavily involved in the Mind/Brain debate and he is committed to a unified theory of language and mind.

According to Gardner (1987: 70-71), Quine, originally one of the members of the Vienna Circle, has since acknowledged that epistemology cannot take the road proposed by the Logical Positivists, but proposes that something can be salvaged from the wreck. Gardner quotes Quine as saying that "Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science". Accordingly, as Gardner (1987: 71) goes on to say, "we no longer dream of deducing science from sense data: the scientist (whether philosopher or psychologist) now conducts research in which experimental subjects become the preferred route to discovering how any individual makes sense of his experiences". This fits in with the hopes of cognitive psychology.

3.3.1 Linguistics as a reflection of Anglo-Saxon philosophical attitudes to conceptualization in the 20th century

If philosophers, or at least, Anglo-American philosophers in the 20th century, have been heavily involved in linguistics, and their interest has been to see how the study of language can affect philosophical issues, linguists working at the pitface of phonology, morphology, lexicology, syntax, and text are more interested in the mechanisms of language. However, their work is inevitably affected by current theory in other disciplines, and Katz (1985) believes that the philosophy of linguistics should be recognised as "an independent branch of philosophy". Other disciplines, like mathematics, physics, history or law, feel the need to somehow fit their findings into a wider view through philosophy. Linguistics, however, is so involved with philosophy that perhaps a philosophy of linguistics might help both parties to understand their relationship.

Katz (1985) proposes that: "There have been two linguistic turns in twentieth century philosophy. In the first and most celebrated, language became the central concern of philosophers who broke with nineteenth century idealist philosophy. In the second, linguistics became the central concern of philosophers who wished to put their thinking on a scientific basis." His intention is "to stimulate a third linguistic turn, one in which the foundations of linguistics becomes the central concern of philosophers who have tried to think about language from the perspective of the science of language".

Katz believes that the three main philosophical attitudes to linguistics in this century can be described as 'nominalist', 'conceptualist' and 'realist'. The first attitude, nominalism, is that underlying Structuralism, particularly as interpreted by the Bloomfield school of American linguistics. Katz (1985: 19) explains how, influenced by Behaviourism, and turning against the mentalism of earlier centuries, Bloomfield dismissed any use of "the terminology of 'consciousness', 'mind', 'perception', 'ideas'" as "the terminology of mentalism and animism", and regarded language as the physical sounds produced in speech. "It remains for the linguists to show that the speaker has no 'ideas' and that the noise is sufficient". Thus 'nominalism', too, is the physical process by which the individual learns how to name things in a stimulus-response fashion, and is, consequently, so subjective as to be best left alone by any scientifically minded linguist. This attitude could be considered an extreme example within the Aristotelian tradition discussed above.

The usual swing of the intellectual pendulum brought a return to a more Platonist view. Conceptualism developed with Chomsky's proposal that certain language structures, perhaps even certain concepts, were innate. The brain is no longer seen as a simple machine responding automatically to sensory stimulation, and conceptualization is seen as the result of complex psychological processes with a genetic basis. Linguists and psychologists set out together on the conquest of the understanding of how this complex brain functions, how far animals can be said to communicate, how language develops in humans, how syntax and semantics work, whether there are language universals and, as Fodor (1984: 160) says, "all that stuff that got people interested in studying language in the first place".

Katz, with Soames, and Langendoen and Postal, (1985) claim that this attitude to language is restrictive and that, unless language is studied independently of either human physical or psychological constraints, and as it relates to reality, in the true Platonist sense, we are severely limiting the scope of our investigation. Katz proposes that a Platonist grammar would be free of the limitations imposed on conceptualist language study, which turns to the internal cognitive representation perceived by the 'ideal native speaker' as a norm by which to judge all its theories. Soames (1984) reinforces this by arguing that the very theories by which language is analysed by specialists are learnt, and difficult to conceive of as innate. Langendoen and Postal (1984) claim that natural languages are so vast, are such "megacollections", that they render any attempt to identify them with the physical and psychological universe almost impossible. Fodor (1984: 160) may argue that nobody is remotely interested in this sort of Platonism because "the action is all at the other end of town", but, says Katz (1984: 180), on the one hand, he seems to fail to understand exactly what is meant by Platonism, and on the other, his attitude is that of "a philosopher who has hung around psychologists so long he's gone native".

More recently, Katz (1990), seems to have gone even further towards a view of language as an abstract system which can be examined independently of time, place and culture. Others, like Fodor and Lepore (1992: x) argue for "holism about meaning" which, they explain, is "roughly ... the doctrine that only whole languages or whole theories or whole belief systems really have meanings, so that the meanings of smaller units - words, sentences, hypotheses, predictions, discourses, dialogues, texts, thoughts and the like - are merely derivative".

The enthusiasm for more extreme forms of mentalism, suggesting that all meaning is a function of the brain has died down somewhat. Putnam (1988: 114), for example, has modified his view that the computer is an apt model for the mind, and now prefers to approach the problem from the perspective of "internal realism", arguing that "what is (by common sense standards) the same situation can be described in many different ways, depending on how we use the words. The situation does not itself legislate how words

like object, entity, and exist must be used". Therefore, he argues that although each individual brain is both limited by the way it develops and the culture it belongs to, and will respond to the situation according to these limitations, it is also open-ended and able to develop. This leads him to the conclusion that, just as human mathematical capacity can always go beyond whatever it can formalize, so "reason can go beyond whatever reason can formalize" (ibid: 118, his italics).

3.3.2 The contribution of 20th century Continental philosophy and literary theory to language relativism

Continental philosophy in this century has been heavily influenced by thinkers like Husserl, Heidegger, Sartre and Merleau-Ponty, and their theories of phenomenology and existentialism. This view of philosophy has been particularly influential on literary theory and literature, and certain types of psychoanalysis. The individual is taken as a point of departure, although the way these philosophers, and their followers and opponents, interpret individual tends to vary.

According to Magee (1987: 257), Husserl believed that the only way to understand the world is to study the view each individual has of the world, for one can only be sure of what one knows through one's conscious awareness. He saw his theory as the culmination of the Cartesian idealism which believed it could arrive at a knowledge of the world from the basic Cogito. According to him the mind is directed towards the outside world and the resulting awareness is what he called "intentional content". He thus proposed and formulated a method to analyse the world by describing "the way self-contained, conscious subjects are directed towards objects".

Magee (1987) goes on to describe how, although in agreement with him on many things, Heidegger found that Husserl's attribution of everything to a subject/ object relation was not really an adequate description of our relation to things. Heidegger's objection was that many of the things we do every day are done without reference to our consciousness. We can have a bath or drive a car while consciously thinking about something quite different, and we only stop to notice what we are doing if something unusual occurs - the water stops running or an accident happens. He was distinguishing, as Ryle did, between knowing-that and knowing-how. He drew attention to the fact that, since so much of our lives is conducted without any conscious thought on our part, the subject-object relation cannot be taken for granted, for the individual is not separate from the world in this sense, but part of it. Heidegger calls the shared meaning on which our daily behaviour is based our "understanding of being", and his work *Being and Time* attempts to show how conscious self-awareness is involved with whatever it is aware of, and the time dimension in which this occurs. His intense interest in the way language was involved in forming and controlling our self-awareness was in line with other philosophers already mentioned but, because of his method of analysis, many dismissed his work as merely "introspective psychology". However, now that cognitive psychologists working on the theme of mental structures are trying to experiment with certain methods of introspective analysis, perhaps his work will be more appreciated.

Apparently, Heidegger's influence on Sartre's and Merleau-Ponty's views of the individual was considerable. Sartre believed that the individual was, in reality, free to act, but that most of us simply did not want to face up to this fact, and allowed ourselves to be governed to a considerable degree by convention, and what other people thought. Merleau-Ponty showed that the body with which we perceive the world contributes to and limits this freedom, and in this sense, helps to explain Heidegger's view of our being part of the world and not separate from it.

These views, which can only be stated at their crudest here, influenced the French school of literary theory, and others who, although more concerned with psychoanalysis and literature, pursued the idea of the importance of language. Taking the notion of structure of language as an expression of a culture a step further, they worked on theories that showed how the individual being was not an autonomous individual or soul, as is traditional in Judaeo-Christian thought, but a product of all the political, ideological and cultural influences that surround him/her. Language, and the other signs with which we communicate, provide the clues for analysing this individual, and, only by analysing these clues, can one reach any form of understanding of him/her. From this point, it is a short step to the realisation that each and every one of us, as reader, interprets a text, or, as a psychoanalyst, analyses another person, according to our own specific, but culturally acquired, set of ideas and prejudices.

The exaggerated relativism of meaning that is proposed by some literary theorists eventually leads others to point to the argument that there has to be some common ground of meaning, some external reality on which at least author and reader have to agree, before the minimum of communication can be achieved. To propose to deconstruct all the various myths, or concepts, through which our civilisation interprets the world in order to reconstruct a more perfect one is ambitious, to say the least, and in order to proceed with deconstruction, its practitioners must resort to the very language and concepts they are attacking. However, all these theorists continue to use language as their main method of communication, so there must be some modicum of agreement about meaning and concepts for them to proceed to disagree about. Many of the concepts they use in everyday speech without a quibble, and even others that are used in academic argument, are all laden with meaning which some people like to attribute to folk wisdom.

3.4 Folk wisdom and conceptualization

While certain materialists who are interested in the analysis of language lament the mentalistic terminology and abstract concepts with which language in general is riddled, it is not so easy to do without it. A favourite metaphor of Quine's (1960 and 1964: 454), in relation to the jettisoning of abstract concepts, refers to the need to be careful about throwing away the planks of the the boat one is sailing in before one has constructed a new one. When discussing emotion one is constantly coming across these abstract concepts and is left wondering which planks to cling to as the boat sinks beneath one.

The language used to discuss emotion employs several abstract concepts which man has accumulated over the centuries, the meanings of which are highly debatable. It is arguable, however, that these concepts must have some basis in our perception of reality in order to function satisfactorily enough for human beings to communicate. On the other hand, our perception of this reality is, to a large extent, controlled by the language with which we conceptualise and express it. If one examines it, one can show that much of our terminology about our interior thoughts and feelings still has a strong bias towards the type of beliefs about the world which accepts a non-materialist view of mind.

In order to avoid entering into arguments about the evolution of individual words and the concepts whose shifting meaning they try to represent, I shall try an approach the subject from the point of view of what is often described as folk wisdom. By this I mean the knowledge which is generally accepted in everyday situations as common to most people living in a specific culture and speaking the same language. A lot of this knowledge is implicit in everyday language. However, although we may update the lexical items to keep pace with contemporary attitudes, the syntax changes more slowly and maintains older concepts within its semantics longer and more subtly. As we shall see in later chapters, the syntactic behaviour of certain words has often been used as a justification for

beliefs about those words, and about the reality to which they are presumed to refer. Not everyone takes the trouble to distinguish between the word, or syntax, and the reality it is supposedly referring to - let alone the current theory being proposed to interpret that reality - and many do not realize the extent to which they are trapped within their own conceptual apparatus. Before going on to discuss the specific subject of emotion, I should like to draw attention to some of the folk beliefs encoded in the everyday language used to describe Emotion and to the way in which English and Portuguese conceptualize notions of Self and Other.

3.4.1 Folk wisdom on Emotion

It should by now be clear that describing emotion as physical, psychological, psychical or mental, or as "distinct from cognitions and volitions", is by no means straightforward. If one stops to consider that emotion is also popularly considered to be irrational and involuntary, one begins to wonder how one dare theorise about emotion at all. Language, however, still allows us to use these concepts in ways that are understood as having a similar meaning for most people and I shall briefly draw attention here to how the more popular concepts of rationality and free will are used to interpret emotion. I shall also show how there is an interesting connection between passive and passion, which may well be relevant when discussing the syntax of emotion. Finally I shall draw attention to the way ideas of Self and Other are encoded in English and Portuguese.

Emotion as irrational and involuntary

Emotion is generally considered to be irrational and involuntary. It all started with the Greeks who considered Reason, or the ability to consciously formulate knowledge about the world with a view to taking appropriate action, the ultimate proof that man could be a superior being, providing he could free himself from animal appetites and emotions. Since one could only tell the difference between right and wrong if one were rational, Judaeo-Christian thought continued this tradition. According to De Sousa (1990), Descartes claimed that only humans had souls, because they alone could reason, do mathematics and talk, and that animals were merely machines. To him all that animals and men had in common, the ability to live and move around in their environment, and to perceive the world around them for this purpose, was merely mechanical. Emotions, which were expressed by animals as well as man, were signs of irrationality, although he was not too sure where to draw the line between soul and body as far as Emotion, or Passion was concerned.

Until the nineteenth century, the main argument about rationality as the systemisation of knowledge was whether or not this knowledge was a priori or constructed from experience. Then, bottom-up materialist determinism had the effect of emphasising man as being subject to his animal instincts, or drives, a slave to the unconscious, and led the Logical Positivists to attempt to salvage some measure of reason through logic and mathematics. It is this view of reason that has given AI such high hopes, but which those such as Searle and Penrose feel is just not enough. Now, they argue, if this sort of reason can be achieved by machines, then perhaps man's superiority is in his consciousness, feelings and emotions. On the other hand, with the cognitivists often dedicated to showing what a wonderful machine the brain/mind is, with the unconscious and consciousness so complexly intertwined, yet so tantalizingly analysable if only we can work out the way the machine works, and with philosophers like De Sousa discussing the "rationality of emotion", one wonders what future Emotion has as being irrational.

De Sousa (1990) is interested in the philosophical implications of Emotion in cognitive psychology. He claims that man's interest in being superior to the animals is based on a

certain "species-narcissism", and to relegate animals to the level of the unsophisticated automata of Descartes' time safely placed us on a superior plane. However, "now that we have experience of more elaborate automata, we tend to draw the line on almost the opposite principle. Rather than face assimilation to mere machines, most of us prefer to be ranked with the animals" (ibid : 3).

Another plank adjacent to that of Reason in our conceptual boat is that of Free Will, for folk wisdom assumes that if Emotion is irrational, it must be involuntary, as one can only talk about doing something voluntarily if one is rationally aware of one's actions. The control of the stronger emotions is generally considered difficult if not impossible, and this goes back to Aristotle who said (1953: 63), "feeling angry or frightened is something we can't help, but our virtues are in a manner expression of our will". Although exhorted by most moral codes to control his appetites and emotions, man has often used them as excuses for his more "animal-like" behaviour. The law allows the crime passionel in several countries, and lawyers often plead 'brief insanity' for clients who can be shown to have been under 'emotional duress' at the time of the crime. This shows that the Law, at least, still assumes some measure of rationality and free will, whenever the emotions are not involved, however much sociologists and others would prefer to transfer the responsibility of individuals to the society which produced them.

The research which shows emotion as having a genetic basis, which then develops in relation to even our earliest experiences in such a way that much of our emotional behaviour is under the influence of our unconscious, would seem to confirm the popular view that true emotions are independent of any type of free will. However, if one is going to argue for a measure of rationalism, or at least cognitive processes, for emotion, one cannot simply dismiss the role of will in emotion as an open and shut case. Reductionist determinism, which insisted that one's choice of smoked salmon or prawn cocktail as a starter could ultimately be traced to the Big Bang, no longer holds in a world where even the laws of physics include notions like probability and randomness, rather than absolutes. Sartre, whose view of individual freedom has inspired so many in this century, sees emotion as a crucial element in this freedom.

The Passive and the Passions

Passive is defined by the S.O.E.D. (1973 : 1524, definition 2) as "Suffering action from without; that is, the object as dist.[inct] from the subject of action; acted upon by external force; produced by external agency". In the Cobuild Dictionary (1987 : 1049-50), it is used to describe people who do "not respond actively to things that are said or done to them. For example they do not show their feelings, or they do not resist things they do not like". Passiveness would seem to be restricted to a human subject or to human behaviour. Both dictionaries describe its use as a grammatical category which reflects the meaning of "suffering action from without" . It is interesting that this older definition of the S.O.E.D. is also preferred as a general definition for passive, whereas Cobuild, which usually reflects modern usage, prefers the emphasis on behaviour

In earlier times, the Passions were what we now call Emotions, and we still use the term for the more violent emotions. Nowadays passion and passionate would probably appear more frequently in a context like Anna hated them with passion or She burst into passionate sobbing which suggest strong emotion affecting behaviour which is observable to others. However, earlier meanings include "the being passive" and "the suffering from pain" (S.O.E.D. (1973: 1523, def. II a, and I)). The Latin *passio*, from which both passive and passion appear to have evolved seems to have these meanings.

The notion that passion, or emotion, is something that happens to us rather than

something over which we exercise control, therefore, has roots in the distant past. It is not something that was derived from Behaviourist theory, although this theory may have helped to continue the notion that Emotion/ Passion happened to one into this century. Passive, as the grammatical category, maintains this connotation. As we shall see in Chapter 3, the relation between Emotion and this grammatical category is complex.

The Individual in normal language usage

Although one may object to Jung's idea that cultural evolution promotes individuation, there is plenty of anthropological and linguistic evidence to show that more primitive tribal and communal societies tend to play down individuality for social reasons and to even consider it as positively dangerous for the general good. This can be seen in Lutz (1988) which describes everyday sentiments and social behaviour on a Micronesian atoll. However, the view that the concept of the Individual is the product of more advanced societies has been contested by Myers (1986) who proposes that the very essence of Australian Aboriginal society involves a developed sense of Self-hood.

There may even be several good reasons for changing a culture to be less Self-orientated. Some form of social engineering could perhaps be devised to bring this about. As Gardner (1987 : 74) points out, if the Mind/ Brain debate is finally resolved in favour of the monists, society may evolve into the type imagined by Rorty in which "one talks not about ideas or feeling or beliefs but just about the stimulation of various fibers in the brain". No doubt by that time we shall be referring to ourselves by numbers, and perhaps the notion of Self will have become extinct, but there will certainly have to be plenty of linguistic changes to encourage people to think in this way.

In the meantime, however, in English and Portuguese, we are stuck with the *I* or *EU*, and names and pronouns for Others, not to mention a whole intellectual tradition which favours the belief in individuality. The two language do not, however, have identical systems of reference, although the first person pronouns are probably equal in semantic content, when considered out of context. One point which needs to be analysed in more depth than I can afford here is the psychological implications of the fact that the omission of pronouns before verbs in context in Portuguese is more normal than their inclusion. The verb form includes information about which person is referred to, and any further data is clarified by the context. It is fair to say that the use of the pronoun before *quero* (I want) - as in *eu quero* - is emphatic rather than normal usage. This allows Portuguese speakers two semantic levels of expression when referring to themselves and others. A similar phenomenon can be noted in relation to the so-called reflexive or self-referring pronouns.

The -SELF pronouns in English are usually used as reflexive pronouns and refer to actions done to oneself - as in He washed /hurt himself. They can also be used emphatically to draw attention to who performed the action, as in I washed that jersey myself. In this latter case the translation into Portuguese would require the emphatic *próprio* - *Eu próprio lavei a camisola*. The Portuguese -SE pronoun, however, is far more widely used than the English -SELF pronoun, and its functions cover a wider range. It acts both as a reflexive and as a reciprocal pronoun, and, as a reflexive pronoun, appears with a large number of verbs. So frequent is its usage, however, that some experts argue that it is, at times, so lacking in semantic content as to be little more than a syntactic space-filler. This is a point that is of particular importance to emotion and will be followed up later.

3.4.2 The validity of folk wisdom

Part of the fascination of semantic universals, for some people, is that they hope to show that certain patterns of meaning, by reappearing in some form in all languages, must have

some sort of reality or truth. This search is often prompted, consciously or unconsciously, by the type of belief, often exemplified in a Rousseau-like noble savage, that holds that somehow humanity was purer and nearer to truth in the distant past. One can imagine that some might feel that an exhaustive study of how emotions are expressed in several languages should point - through what can be interpreted as a folk 'theory' - to a true version of what emotions, or other psychological phenomena, exist.

However, one must be careful. One can say that a language reflects the way of thinking of the people who use it, and one can extend this notion to show that, because people are brought up with a particular language, their patterns of thought have been conditioned by that language. One can also postulate that if the same semantic pattern appears in the majority of the world's languages, these patterns of meaning must bear some relation to reality as it is perceived by most of humanity. However, this does not prove that any particular universal view of any type of reality is, in fact, true. It is unlikely that anyone would attempt to prove the world is flat or round, or devise theories of gravity or relativity, through the influence of the folk knowledge embedded in language, but one might be tempted to believe that the folk knowledge on emotion that is embedded in language has some kind of psychological reality.

However, just as older folk theories on physics and thermodynamics have had to yield to those of modern science, so folk theories on psychology can also be proven inadequate explanations in the modern world. The idea of a noble savage with true emotions that have been devalued and distorted by subsequent social changes may appeal to some people, but, as Churchland (1986: 302) says, "the image of a homo habilis Newton squatting at the cave mouth and finally sketching out the basics of psychology[8] with jawbone and berry juice, is not very plausible". She also goes on to say (ibid: 311) that "although folk psychology has a profound familiarity and obviousness, and although the categories of folk psychology are observationally applied, it nevertheless remains true that folk psychology is a theoretical framework and hence a framework that can be questioned and assessed". If one examines concepts like rationality and free will, one can actually trace their history back through the philosophy of at least the last two millennia, but, as the arguments for and against them will show, they are theoretical constructs rather than objective reality. Similarly, although one may discuss an emotion like love and claim that some form of it can be found, albeit with varying interpretations, in most languages, in most countries and in most periods of history, this constitutes a proof of its existence in folk psychology but not necessarily of any essential reality. Rather than try and refer back to some implausible original set of meanings, therefore, it is perhaps more sensible to regard language and linguistic concepts as developing dynamically in the same evolutionary context as the humans who use them.

Within these limitations, however, one of the principal aims of later chapters will be to explore in some depth the semantics underlying the syntax found with the lexicalised notions of emotions found in English and Portuguese. To assume that some deep form of universal underlies the similarities of these phenomena in both languages would be too strong a thesis, just as it would be difficult to prove a strong Whorfian hypothesis by underlining the differences between the languages. However, I hope to show that the behaviour of the lexemes, and the syntax related to them, in these two languages, reflects at least the folk wisdom underlying much of our theorisation about these phenomena. Current linguistic theories about the syntax of emotion, for example, are often affected by and, in their turn, are used to justify psychology's theories about the emotions. I also hope to show how earlier linguistic theories favoured Behavioural psychology, and to suggest how these theories take on another perspective when viewed from a more cognitivist standpoint.

3.5 Linguistics and conceptualization

One of the results of Saussure's idea of language being a structure, as in a game of chess, was the application of Structuralism to linguistics. This view, which led to the scientific study of the structure of language through the phoneme, the morpheme and syntactic structure, but largely ignoring meaning, which was treated with the suspicion expressed by Bloomfield described above, dominated American linguistics until the 60s.

3.5.1 Lexical semantics

However, not everybody ruled out the study of meaning and several German and Swiss scholars persevered with what is usually known as semantic or lexical field theory. As Lyons (1977 : 250-1) demonstrates, the notion of lexical fields can be traced back to Herder in the 18th century, and Humboldt in the mid-nineteenth century. Roget used this type of theory on which to base his Thesaurus (1852). A lot of work was done in the 1920s and 30s by Ipsen, Jolles, Porzig and Trier, and later by Weisberger in the 1950s, amongst others. These theories varied in the different emphasis they gave to diachronic change and synchronic variation, and although not all were happy with 'semantic' field, they did not all make the same distinctions Lyons makes between 'lexical' field and 'conceptual' field - the difference between the lexemes used by any particular language and the objects, properties and relations external to language. According to Lyons, some, like Trier, favoured a paradigmatic approach and grouped lexemes according to the sense relations existing between them, while others, like Porzig, preferred to consider lexemes syntagmatically, or in relation to the way they co-occurred. e.g. as in dogs bark.

Componential analysis, which has its roots in the early 18th century in the 'monads' of Leibniz, developed in European linguistics as an extension of the type of analysis proposed by Trubetsky and the Prague functionalists for phonology, and its main proposers were Greimas (1965, 1970), Pottier (1974), Prieto (1964, 1966) and Coseriu and Geckler (1974). In America it developed first from studies of anthropology as a way of analysing phenomena like kinship systems, influenced by the work of Whorf (1956), and later developed with Weinreich (1963) Bendix (1966), Nida (1975) and Lehrer (1975). The general aim was to arrive at a minimal, or at least manageable, set of semantic universals or components which could be used to classify all lexemes in any language.

By the 1960s, in the post-Bloomfieldian era, lexical fields and componential analysis were becoming known as structural semantics. The notion of lexical fields, the different ways in which it is interpreted, and the theory of lexical decomposition which developed from it are helpful when one is drawing up a list of lexemes, like those relating to Emotion discussed in this thesis. It helps one to organise and group the various lexemes and distinguish the points at which they are alike or differ. However, none of these theories provides a satisfactory solution on its own, partly because they tend to be reductionist, and language refuses to fit easily into strict categories, and partly because the very choice of these categories is caught in the language trap of trying to be both language and meta-language.

3.5.2 Semantics and Syntax

When Chomsky came forward with his challenge to Behaviourism and the innateness of language structures, he developed it from a Structuralist syntactic basis. Chomsky's (1957) early hopes that universal syntactic structures might exist raised high hopes for the machine translation experts, for example. Early Generative grammar (Chomsky, early 60s) saw phrase-structure rules as the initial symbol, and the lexicon as a bank of elements with which to supply the slots in these structures. If one could work out universal deep structures for all languages, and formalise the different transformations needed to produce surface structures in individual languages, one could eventually make a bi- or multi-lingual translating machine.

However, it soon became clear that the lexicon was far from being a set of simple concepts and did not always behave as expected. Attempts were then made to discipline the lexicon by decomposing lexemes into semantic universals, so that each word came supplied with information like + or - [ANIMATE] / [MALE] / [YOUNG], drawing on the type of work already discussed as componential analysis. This technique, too, had its limitations. To use a well-worn example, how did one help the machine to recognise, in context, the different meanings of bank ?

In the mid-sixties, the 'standard theory' proposed by such as Katz and Postal (1964) allowed the lexicon to share the initial position with the phrase-structure rules, but by the end of the 60s and the beginning of the 70s, generative semantics, in works such as Lakoff (1971) and McCawley (1968) was claiming meanings as the original generators of semantic-syntactic structure. Then transformations also came under attack as, once one got beyond the more easily understood transformations, like the formation of the passive, questions and negatives, and came up against formulating transformational-generative rules for meaning in the lexicon, so many transformations had to be produced to solve so many problems, that the whole process got out of control and became self-defeating.

This led to various attempts to stipulate rules using the lexicon as the point of departure. Lexemes should come supplied with a set of rules governing their usage. Work on describing how lexemes co-occurred with syntactic structures had been going on quietly for some time, and pedagogically orientated grammars and dictionaries had accumulated quite a lot of information. Now, this material, like Hornby's (1974) structural classification of verbs for the Advanced Learner's Dictionary of Current English, could be used and improved upon by introducing some of the semantic concepts from theories such as those of case grammar.

Valency grammar, a theory which owes much to Tesnière and several German authorities, with its emphasis on the verb as central to grammatical analysis, aimed at showing how the verb combined with various forms of complementation in a way which stressed the semantic values of the verbs themselves, together with those of the elements with which they combined. This theory has been developed for English by Allerton (1982) and for Portuguese by Busse and Vilela (1986) and Vilela (1992).

The vast quantity of information on language that was thus generated by the study of linguistics was synthesised, for English, in works like Quirk et al. (1985), and in the pedagogical dictionaries. Naturally, of course, the same information has also to be suitably codified for computer intelligence as well.

Many still defend the central importance of syntax and a lot of research has been carried out by linguists such as Comrie and Shopen in search of the universal grammar underlying all languages. These studies, like Keenan (1985), take the notion of Passive and see how it is realized in different languages. The result may not be the passive as we know it in English, when the Object of the action becomes the Subject of the passive clause, but, it is claimed, some way of expressing the semantic notion of Passive is probably realizable syntactically in all languages. For the purposes of psycholinguistics, this type of study is very interesting, and some would say that it is in this area that Chomsky has contributed most to expanding knowledge. However, as Gardner (1985: 210) says, Chomsky was "never interested in language as an overall communication system" and "he now questions whether language per se is a system worth trying to study at all".

Others have been more pragmatic, or more hopeful, and have at least worked towards an understanding of language for communication, both for BI and AI, and the emphasis of these apparently different schools of thought tends to depend on which type of intelligence

they are most interested in. Bresnan et al. (1982) work on what they call lexical-functional grammar and understanding "mental representations of grammatical relations", with a view to furthering the interests of psycholinguistics and AI. According to Gardner (1985: 218), Gazdar and his colleagues are working in roughly the same direction, but by applying "semantic interpretations [] directly to the surface structure generated by a grammar".

Theorists like Jackendoff and Langacker are working on what they call 'cognitive' linguistics. Langacker (1987: 5) claims that:

"..cognitive grammar reflects a growing intellectual trend in the analysis of language and mind, away from a mechanistic conception and towards a conception more appropriate for biological systems".

He goes on to say (ibid: 6) that "linguists cannot expect to walk into a psychology shop or an AI emporium and find an adequate model sitting on the shelf", although he says they "can expect to find there a great many useful concepts and insights about language behaviour and cognitive processes in general". He also warns that "many of the tacit assumptions underlying contemporary linguistic research are gratuitous at best, and probably false". He warns against the dangers of looking for absolute language universals, and emphasizes the need to analyze language in its natural state, and to consider all the different levels of language. Having said all this, he then attempts, in Langacker (1991), to look at the notions linguists have formulated over the years from the standpoint of cognitive processes.

Those who study syntax tend to concentrate on sentences, but these too, are no longer considered sufficient unto themselves. Their relationship with each other, and with those who produce and receive them, have become the focus of interest of pragmatics. Linguists like Halliday and Hasan (1976) talked of 'cohesion' and others, like Van Dijk (1977), talked of 'coherence', to describe the 'glue' that produced texts from sentences. Reference, substitution, ellipsis, conjunction, deixis, anaphora, and other concepts were explored to provide an analysis of this glue. The status of sentences as speech acts, as proposed by Austin (1962), and Searle (1969), Grice's (1981) conversational implicature, and factors such as presupposition and all the background knowledge, individual, social and cultural, implicit in normal conversation are being examined.

The realisation at a general academic level that causation is not just 'bottom-up' but functions at several levels has affected linguistics in rather the same way as physics. However, linguists, like scientists, cannot cover every aspect of their discipline and still have to work away at their particular levels. There is one school of linguistics, nonetheless, which has recognised from an early date that language functions at several levels, and it is that known as systemic or functional grammar. It arose out of Firth's work in the 50s, and its principal theorist is M.A.K. Halliday. Although accepting that much can be gained from the syntactic analyses done by other schools of grammar, systemic linguistics has always emphasised the psychological and sociological functions of grammar.

Halliday's view of language is essentially semantic and his work, and that of his followers, examines not only clause structure, but also the general context of any linguistic situation, the focus given to what is expressed by variations in sentence and clause structure, and the rhythm and intonation which cause the actual sequence of words said to vary in meaning. His functional grammar, synthesised in Halliday (1984), assumes that language is a system of semantically based choices. As he points out, systemic linguistics has been used by AI, and there are many who would agree that "because it is based on meaning, it is harder for a functional grammar to get off the ground in computable form; but once it is airborne it has

a considerable range" (ibid : xxix).

Halliday may be responsible for inspiring a lot of interesting linguistic research, but he is careful to say that "it is unlikely that any one account of language will be appropriate for all purposes" (ibid: xxix). Perhaps this is the attitude which attracts me personally to his work. My experience of linguistics is that different schools of thought can usually contribute quite differently, both qualitatively and quantitatively, to the analysis of language. This is particularly true, I have found, if one is studying a lexically circumscribed area like that I propose to examine here.

3.6 The multi-level approach

Although the days when the distinction between semantic and syntactic aspects of language was considered an obvious difference between the meaning and the structure of the language are long since gone, it is still possible to use the terms syntax and semantics, in the sense that syntax describes the linguistic structures which serve to organize the less easily definable concept of meaning, or semantics, in a way which makes communication possible. Also, for the sake of analysis, it is still possible to postulate facts about individual aspects of language without always taking the 'grand plan' into consideration. What is essential is that one should never forget the existence of the grand plan, and that one should be conscious of one's own position in relation to it when discussing the details.

I should like, therefore, to state at this point that my interest is more in semantics, and the semantics of syntax as it combines with certain lexemes, than in syntax for the sake of syntax, or in lexemes in isolation. For this reason, I prefer to see how both semantics and syntax actually do function in normal language contexts, rather than how certain linguists say they can function. One could say that here I am making the Saussurean distinction between *langue* and *parole*, but perhaps the type of distinction made by those who distinguish between proposition, sentence and utterance would be more appropriate. These terms are used fairly widely, particularly by systemic linguists like Bell (1995), and make a distinction between the abstract message which is presumed to be encodable in all different languages, or the proposition; the same message as it is formally realizable in a particular language, or the sentence; and the message in a definite context, or the utterance. According to these distinctions, my interest is primarily in the utterance.

However, Coseriu (1982) also makes a distinction between what I shall translate from the Spanish as 'system', 'norm' and 'speech', which will make my position even clearer. Coseriu (1982) in his first article, *Sistema, Norma e Habla*, makes a distinction between the system which one could interpret as the more abstract form of a language, understandable perhaps as the basic semantic and syntactic structures at the language user's disposal[9]; norm, which is the way these structures have been formalized within the linguistic community [10] and even, by extension, in each individual's capacity for language[11]; and speech which, combining the knowledge implicit in the system and the norm, is the real-life expression of language in what can be called acts of speech. Coseriu, however, while making this distinction, is at pains to demonstrate the way each level is dependent on, and connected to the others.

One could say that the first chapters have discussed the problem of the language of Emotion largely from the point of view of the system, such as it, and the propositions based on it, may exist at the universal level of human language, or at the level of a specific language like English or Portuguese. The following chapters could be seen as a closer examination of this system in the two languages, and how this system leads to the norm and can be encoded in sentences, as it is interpreted by certain schools of linguistics. When discussing the system and norm in this way, I shall frequently make use of sentences of the

simple variety traditionally used by linguists to illustrate points related to the norm.

However, when discussing certain general points that have been prompted by an analysis of the corpora, and with the more specific description of lexical areas, the discussion centres on the examples taken from the corpora, and these examples should be understood to be taken from speech and considered as utterances[12]. By collecting and analysing every example of each lexeme in all the texts used, it was possible to discern quite definite patterns of lexical, syntactic, semantic and pragmatic usage. My objective, when making suggestions about the nature of the language of Emotion, is to work from the level of speech to the norm, and then, rather more tentatively, to the system. In other words, I am interested in how speech can lead to clearer information about norm and system, rather than how system and norm explain aspects of speech.

My approach does not mean that I am in actually hostile to the more norm or system based analyses of language. I recognize the need for such analyses, and I am fully aware that, in order to study linguistic universals over several languages, or some universal system, it is sometimes necessary to stretch the possibilities of syntactic structures a little to show how they fit into the general theory, and, from a psycholinguistic point of view, this is, at times, justifiable.

Since, however, two not too dissimilar languages are under consideration here, I prefer to adopt an approach which emphasises the way the syntax is influenced by the semantic aspects common to both languages, as well as the differences that do appear. By using the quantitative analysis made possible by the corpora, in conjunction with the qualitative analysis based on grammatical theory, I hope to arrive at an informed, but relatively objective view of the problems involved. An analysis like this does not favour sharp distinctions or hard-and-fast rules, but it does allow for a consideration of the gradients of meaning which emerge when normal communicative aspects of language are under observation. This is an approach which is particularly appropriate, if not absolutely essential, if one is studying such a fuzzy area as Emotion.

Another point that emerges from a study of the speech to norm analysis of language is that certain rules of the norm, while still valid when considering speech, do not explain certain more pragmatically orientated linguistic phenomena. For example, the distinction between attributive and predicative adjectives made by the Quirk grammars is very suitable for English, and has its parallel in Portuguese grammars such as Cunha and Cintra (1984) using the terms *adnominal* and *predicativo*. However, such rules do not help explain why only 8,3% of the examples of adjectives describing the emoter's frame of mind lost their copular verb through processes such as ellipsis in the English Corpus (EC), compared with 66,9% of similar examples in the Portuguese Corpus (PC).

If one wishes to choose a theory, or particular metalanguage in which to describe the syntax of a particular lexical area, there are several to choose from. However, it should be recognized that that each theory is merely one attempt to give order to the same basic, and rather disorderly, reality of language. These efforts are not always prompted by the same needs, and it is obvious that those who seek a successful way of programming their computers to use language will be subject to rather different pressures to those whose principal objective is to understand the part language plays in helping and conditioning human beings to understand their environment. Although Mind/Brain monists will point out that the final objective is a synthesis of the two approaches, this point of view is not shared by all those involved, and does not prompt all theories about language.

If my objective were to teach a computer the syntax of Emotion, or if I were principally interested in Coseriu's system, I might choose one of the more mathematically orientated

theories. However, since my interest is in his notion of speech and more semantic considerations, it would make better sense to choose a more overtly semantically based theory which concentrates on the way language functions in real texts, rather than on its nature as a function of the brain. It is for this reason that I prefer to use functional systemic terminology.

[1] The results of these investigations, recorded in Crystal p. 46 -7 appear to have been Phrygian, in the case of Psammetichus - 7th century B.C.; inconclusive, the children died, with Frederick II of Hohenstaufen - 13th century; and Hebrew, with James IV of Scotland - 15th century.

[2] As a result of his first observations he formed schools for the deaf which taught and developed this sign language. This in effect allowed many of the young congenitally deaf to develop their linguistic and conceptual abilities in the normal developmental way by using Sign as a mother tongue, and learning French as a second language later, thereby often producing highly-educated deaf people. In the 19th century teaching the deaf by signs was considered a drawback to integration in normal society and all efforts were concentrated on teaching them, usually with very limited success, to use normal speech. The result, for the totally deaf, was usually that so much effort was dedicated to this more mechanical end that little was left over for more general conceptual development and the children remained intellectually deprived. Piaget's and Chomsky's findings have contributed to a reversal of this situation.

[3] Nowadays the interest of psychologists and linguists is to discover the extent to which one can claim that certain predispositions to acquire language structures are innate. Some claim that these language structures are so highly abstract as to be hardly relevant to the idea of specific "innate" concepts. Others, taking the view that linguistic structure must relate to natural languages and, consequently, meaning, hope to see evidence of natural concepts emerge from the research.

[4] Genie was discovered in 1970 and who had been deprived of human contact between the ages of 20 months and 13 years of age,

[5] Kaspar Hauser was found in 1828, having been imprisoned in solitary confinement between the ages of 3 and 16,

[6] McNaughton (1989 : 104) "It seems reasonable to suppose that a similar combination of genetic foundation and developmentally influenced superstructure could exist for emotional systems. thus the developmental data show that there are indeed, in the neonate, separate innate systems which form the basis for separate adult emotions. However, they also suggest that the normal form of each adult emotion depends on the appropriate moulding, during development, of a number of innate components."

[7] One should be careful to make to make a distinction between linguistic philosophy, the philosophy of language, and the philosophy of linguistics before going on to see at what points their interests converge and diverge in relation to conceptualization. Linguistic philosophy usually refers to the attempts by philosophers to discover WHAT language means, whether one is referring to the ideal language(s) of the logicians or to the real languages, like English, studied by the 'ordinary language' philosophers; the philosophy of language, according to Searle (1973 : 1) refers to the way both linguists and philosophers attempt to "analyse certain general features of language such as meaning, reference, truth, verification, speech acts and logical necessity", or HOW language means; and the

philosophy of linguistics describes how the study of language through linguistics is affected by current trends in more general as well as linguistic philosophy.

[8] I am presuming here that Churchland sees her homo habilis as conceptualising, either symbolically or linguistically, or in some way which evolves into linguistic symbols in some primeval language.

[9] "El sistema es sistema de posibilidades, de coordenados que indican caminos abiertos y caminos cerrados: puede considerarse como conjunto de <<imposiciones>>, pero también, y quizá mejor, com conjunto de libertades, puesto que admite infinitas realizaciones y sólo exige que no se afecten las condiciones funcionales del instrumento lingüístico: más biem que <<imperativo>>, su índole es consultativo". Coseriu (1982 : p. 98).

[10] " La norma es, en efecto, un sistema de realizaciones obligadas, de imposiciones sociales y culturales, y varia según la comunidad. Dentro de la misma comunidad lingüística nacional y dentro del mismo sistema funcional pueden comprobarse varias normas (lenguaje familiar, lenguaje popular, lenguaje literaria, lenguaje elevado, lenguaje vulgar, etcétera), distintas sobre todo por lo que concierne al vocabulário, pero a menudo también en las formas gramaticales y en su pronunciación". ibid. p. 99.

[11] "... si se consideran los actos lingüísticos de un sólo individuo, hay que introducir en el esquema, entre los límites del hablar y los de la norma social, un campo intermedio, correspondiente a la norma individual..." ibid. p. 96.

[12] Although the language in the corpora is restricted to the language production of a few individuals and, as such is subject to the limitations already discussed in the Introduction, these acts of speech are, nevertheless, examples of speech and not of the system or norm.

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CHAPTER 4

THE LEXICAL EXPRESSION OF EMOTION

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4.1 Introduction

When psychologists, the non-linguists who are specialists in emotion, analyse the language of Emotion, they nearly always focus the lexicon. As we shall see, the lexicon of Emotion cannot be defined rigidly, and one has to allow for a certain fuzziness in distinctions between what is, or is not, an Emotion, as well as degrees of classification, for example between basic and peripheral emotions, particularly when the context in which the lexeme occurs is taken into account.

It is easy to see that some will feel that the Platonist tradition and the idea of innate concepts is relevant to the analysis of Emotion. Since emotions are seen as basic to human behaviour, with roots in earlier stages of evolution, it is understandable that they should be candidates for the status of innate concepts. Our expression of our own emotions and our perception of emotions in others is possibly more frequently communicated by behaviour rather than language, and this behaviour is arguably pre-lingual both phylogenetically and ontogenetically. For example, the emotions which cause one to smile when one is happy, or to scream with fear, seem to be universal to the human species and to develop in individuals in a fairly predictable way. The ways they are expressed have recognisable counterparts in animal behaviour. Emotions, therefore, would seem to be fairly primary concepts coming perhaps somewhere between the physically generated Hunger, Thirst, and Sexual attraction, which can be seen as essential for the survival and propagation of even the humblest species, and those concepts so many people would like to consider universal, Goodness, Beauty and Truth.

When one is talking about emotion in one's own language, it is very easy to feel that such concepts must exist universally. Everyone, one feels, must know what it is like to be happy or sad, or have felt love or hate - after all, when watching someone on television, whose language we do not understand, protesting about some injustice, we may need someone to inform us about the injustice, but we can deduce the people's emotions about it from their facial expressions and gestures. Or can we? Maybe we can deduce some general negative notion about the injustice, but we may need to understand what is being said before we can

be clear whether the dominant emotion being expressed is anger, hate or frustration, and it is quite possible that the relevant emotion words in the unknown language may present problems for whoever is translating or interpreting for us. The language relativists will find that the lexicon of Emotion can be shown to vary between different cultures, languages and social groups. As we shall see, psychologists and linguists have in fact found that individuals using the same language vary in their usage of Emotion lexemes more significantly than in other lexical areas.

4.2 The Lexical Categorisation of Emotions

For centuries, attempts to categorise emotion have been made by all those interested in the subject. As we have already seen, Aristotle, Spinoza and Descartes expounded at length on the subject, and others such as Locke and Hume also contributed to the debate. Since James and Darwin, several different classifications have been tried, some reducing the categories to two basic ones such as negative and positive emotion, or pleasure and pain, and others elaborating long lists. Davitz (1969), a psychologist, compiled a 'dictionary' of 50 terms. Wierzbicka (1972), a lexicologist, attempted 36 definitions of basic emotions based on situations, although by (1992: 45) she is proposing a more sophisticated approach. Another, more linguistic, approach is that of those like Lakoff and Johnson (1980), who propose that we can arrive at conclusions about the conceptual framework of experience by looking at the metaphors we use to describe this experience, rather than relying on the more traditionally accepted terms. Johnson-Laird and Oatley (1989), psychologists/AI experts, have made a list of several hundred of the accepted emotion words, which they subdivide into 5 basic emotion modes and 6 semantic categories. Ortony, Clore and Collins (1988), psychologists with an interest in AI and language, propose a fairly complex categorisation based on what they consider to be the cognitive structure of emotions, rather than actual words. The last three groups all describe their approach as cognitive.

4.2.1 Basic emotions

The reason for defining a set of basic emotions is partly due to a need for economy in an area which is prolific in lexemes. Even those who draw up such shortlists sometimes vary in their choice of synonym, preferring perhaps anger to rage. This is bound to happen, not least because some of these choices are governed by influences from other languages. However, the choice is also affected by the theory of emotion on which it is based.

Kenny (1963) describes Descartes' shortlist of Gladness and Sadness, Love and Hatred, and Desire, as being designed on the basis that the other emotions were built out of combinations of these - Pride was a compound of Gladness and Love, and Pity one of Sadness and Love - and he worked out a complex physiological explanation for each emotion. This approach is echoed in that of modern psychologists. James (1884) chose 4 strong emotions, Fear, Grief, Love and Rage, which were selected on the basis that they needed a "distinct bodily expression". Other theorists also formed lists based on physiological change, both those analysable by internal, visceral change and by external expression. Ekman, Friesen and Ellsworth (1972) drew up a list based on a cross-cultural study of facial expression which gave them Anger, Disgust, Fear, Joy, Sadness and Surprise.

Arnold (1960) was one of the first to propose a selection on a more cognitive basis, as she saw the emotions as based on a relation to the action tendencies for which the perception of emotion prepared the body. Fridja (1986) also chooses his list, Desire, Joy, Pride, Surprise, Distress, Anger, Aversion, Contempt, Fear and Shame, on the basis of forms of action readiness. Other cognitivists have attempted classifications based on a view that certain emotions are 'hardwired' into the neurological system. Tomkins (1962; 1963) has taken the

view that affect is based on motivation, Plutchnik (1962 -1982) developed his list based on a psycho-evolutionary viewpoint, and yet others have based their views on the observation of the development of emotions in infants, children and adults. Others, like Izard (1991), have taken several of these factors into consideration to produce lists which they believed to be either hard-wired into the nervous system, or partly so, in a way that is later influenced by developmental and cultural components. Johnson-Laird and Oatley (1989) chose their list of basic emotions, Happiness, Sadness, Fear, Anger and Disgust, using tests of a more linguistic nature, as we shall see, but Ortony, Clore and Collins (1988) prefer to classify emotions according to certain criteria which do not include the notion of a basic emotion.

4.3 Lexicons and the lexicology of Emotion

Lexicons of emotion are to be found in thesauri and general lexicons. Roget's Thesaurus (1962 edition), for example, lists them under Class VI - 'Affections', and sub-divides this general class into general, personal and sympathetic affections. However, it is the psychologists and AI experts who seem to have dedicated most effort to disentangling this complex lexical field. Therefore, let us look at some of the more linguistically orientated attempts at categorising emotion and related lexical areas.

4.3.1 Davitz (1969) : a psychologist's analysis

Davitz (1969) set out to produce a dictionary of emotion by collecting lexemes as they are used in a non-technical, everyday fashion. He first selected about 400 words from Roget's Thesaurus and then asked 40 subjects to give their opinion as to which of these words constituted an emotion. Of the 137 chosen, he then selected the most representative 50, and made a check list of 556 possible descriptive statements of the physiological and psychological feelings that are associated with emotions. 50 subjects were then asked to select the statements which they felt most suitably described each emotion.

After analysing the results, 215 of the descriptions, which had appeared significant enough to appear in the analysis of at least 3 emotions, were classified into 12 clusters which expressed certain physical sensations or reactions associated with Emotion : activation, hypoactivation, hyperactivation, moving toward, moving away, moving against, comfort, discomfort, tension, enhancement, incompetence / dissatisfaction, and inadequacy. The emotion terms were then analysed as to the relative effect of each of these clusters on their definition. Thus, for example, a proportion of the definers classified anger as related to hyperactivation (53%), moving against (46%), tension (19%) and inadequacy (16,8%); depression as related to hypoactivation (48,6%), moving away (38%), discomfort (41,8%), tension (5,4%), incompetence / dissatisfaction (19%) and inadequacy (35,2%); and love as related to activation (29,6%), hyperactivation (12%), moving toward (66%), comfort (32,2%), enhancement (17,6%) and inadequacy (6,7%) (ibid : 116-119)[1].

The results of this experiment were varied. 11 of the 50 terms "did not achieve adequacy ratings indicative of comprehensive and accurate definitions" (ibid : 86), which means that those questioned described the terms in such different terms, that the researcher was unable to produce a significant consensus of opinion on them from his data. This shows up particularly in the cluster analysis where dislike, for example, is seen as related to moving against (14,8%), tension (10,4%) and incompetence/dissatisfaction (5%), hardly a satisfactory result. In the 'dictionary' it is noticeable that agreement over the descriptions used varies considerably, usually as low as 34% but descending to 10%, and reaching a maximum agreement of 84%, although only a small percentage achieve over 50% agreement. These factors may have been due to the differences of opinion among the experimentees, but Davitz felt it more likely to be some inadequacy of the check list. This

is possibly true, because the checklist emphasises physiological feelings, and several of the 11 terms require a certain measure of more conscious cognitive processes - gratitude and resentment, for example.

One must remember that Davitz was working in the early days of cognitive psychology when physiological reactions were still considered the only scientifically reliable ones. He describes how aspects of his theory have been tested on different social groups - a developmental study of the language of emotion in children, individual differences in emotional reports as a function of perceptual-cognitive styles in adults, similarities of emotional descriptions in relation to genetic background (i.e. by studying twins), and a cross-cultural comparison of the language of emotion among adolescents in the United State and Uganda.

The list of 50 emotional states in itself is representative and the very data that emerges could be used as an argument for reducing the number to a more basic set of concepts. For example, cheerfulness, delight, gaiety and happiness, show a fairly regular correlation as regards cluster scores and could be seen as variations on a common theme. Certain terms could be questioned. Passion has been included, although some would see it as a generic term, like emotion, or at least as referring to stronger emotions like fury and love. Interestingly, Davitz's experimentees, who were American, seem to identify it largely with sexual love. Others, like friendliness, impatience and solemnity, appear more frequently in the context of behaviour resulting from emotion than in that of a definite emotion.

The 12 clusters can be seen to form 4 dimensions of emotion: activation which other psychologists and phenomenologists had described previously as 'level of activation', 'emotional energy', or had mentioned as excitement in contrast with quiescence and depression; relatedness, which emphasises the Subject's relation with the outside world, sometimes described as direction by others; hedonic tone, seen by others as the pleasant-unpleasant factor; and competence, which fits more closely, either with the view that emotions evolve in response to an evolution of the organism's needs in the environment, or with that of those, like Sartre, who see emotion as the individual's way of adapting to reality, or trying to change the reality to allow for this adaptation.

At the time, Davitz's work was considered as lacking in empirical data and rather too phenomenological for the taste of psychologists, while lacking the formalisation required by AI. However, in the cognitive climate, twenty years later, more importance seems to have been given to his work. Fridja (1986 : 184) apologises for his negative review of the book when it was published, and goes on to describe it as "an original and valuable study". Strongman, whose textbook *The Psychology of Emotion* has been substantially revised three times as his early Behaviourist stance changed to a more Cognitivist one, is decidedly more positive about Davitz's work in the 1987 edition of his book than he had been in 1978. Davitz himself only hoped that "this report represents a minor beginning in a direction of research that could conceivably have some implications for a broad range of psychological and social problems". As other studies bear out, this is not an easy lexicon to study and, although there is enough similarity between the opinions of the subjects tested on which to build a theory of emotion, the differences of opinion between individuals are wide enough to make these differences of interest.

4.3.2 Fillenbaum and Rapoport (1971) : subjectivity and Emotion

This study forms part of a wider project in *Structures in the Subjective Lexicon* (1971) and the data was collected using criteria from both psychology and linguistics. The psychologists who have influenced this study most are those, like Ekman, who use facial

expression as their point of departure. The linguistic approach owes most to structural semantics, particularly as regards semantic and lexical fields. Using 105 pairs of emotion terms, they asked 60 subjects, divided into 4 groups, to "rank pairs of emotion names with regard to a similarity or dissimilarity criterion, to build a similarity tree using the names....., as well as requiring subjects to rate directly the similarity between every pair of terms". (ibid : 110)

The data thus obtained was examined using graph analysis, cluster analysis, and multidimensional scaling analysis, methods they had applied to other areas of the lexicon. They found that the difference between individuals and between the four control groups were larger for the lexicon of Emotion than in the other semantic areas they had studied. Furthermore, "attempts to interpret individual representations or to classify subjects according to their representations were, by and large, fruitless"(ibid : 122). The three types of analysis yielded rather similar results, so it was possible to argue that there was little wrong with the methods used to produce some sort of order, but the difficulty was to decide what lay behind this order. They suggest that, once people get beyond the "very gross contrasts such as that of Pleasantness-Unpleasantness", discrimination between emotion names becomes rather idiosyncratic (ibid: 123).

The authors agree that their analysis of emotion did not lead to any substantive conclusions. They feel that:

"The reason for idiosyncratic differences in the judgement of emotion terms may reside in the fact that insofar as they name internal experiential states, their referents cannot be externalized; it is therefore very difficult to get precise consensual validation in their use, and there may arise systematic individual differences with regard to their organisations, and with regard to the basis governing discrimination among such terms. Clearly such speculations can only be checked by means of intensive, comparative consideration of individual data.....One might hazard a guess that while such an enterprise would reveal significant inter-individual differences in the organisation of the semantic domain of emotion terms, the bases for such different organisations might still be very difficult to determine". (ibid : 124)

They conclude that their work "might be regarded as constituting fairly impressive evidence against the adequacy of the various sorts of theoretical conceptualizations that have been offered for the realm of emotion or emotion names", but say that the problems posed by individual differences "suggest[s] that what may be required is not a theory for the domain of emotions, but perhaps a set of characterizations whose members may differ systematically in important ways" (ibid : 124).

4.3.3 Lakoff and Johnson (1980) and Lakoff and Kövecses (1987)

These attempts to get people to describe the (usually) physical feelings they experience in emotional situations run parallel to efforts by certain linguists, who propose to analyse the meaning of emotion using semantic components of the type that can be related to the more physically verifiable cognitive processes. This approach owes much to Lakoff and Johnson (1980), and is demonstrated more specifically in relation to Anger in Lakoff and Kövecses (1987). This type of linguistic investigation is similar to that carried out by Davitz, the difference being that whereas Davitz was trying to see how people linked the description of certain physical and psychological feelings to certain Emotion concepts for reasons linked to psychology, the linguists are using similar materials to prove something about language.

According to this type of theory, as Barbara Lewandowska (personal communication)

explains, one may take a notion such as 'down', which has prepositional and directional qualities which can actually be described in non-linguistic terms with a diagram, and show how depressed, and other emotion types of what others might describe as Distress can be described in terms of 'down-ness'. It would seem that there is an association in several languages of these emotions with the literal notion of down-ness which has probably developed from the body language with which we physically express these emotions - we look down, the corners of our mouths turn down, our bodies seem to move earth-wards, and there is a general impression of almost physical pressure from above which we produce in metaphors like he was weighed down by his problems. Conversely, positive emotions are associated with up-ness because our expressions lift, we stand erect, and we look up on these occasions.

Alternatively, it will take an expression like boiling with anger and, rather than simply describe the boiling as a metaphor for anger, it will show how the abstract anger can only be explained by associating the physical sensation of heat and agitation we feel as our blood pressure rises in these circumstances with the more easily observable phenomenon we observe when our kettle prepares water to make tea. I have also seen work of this type in a paper by Fernando (1989). For example, it analyses the way we describe our emotions, listing expressions such as be in a cold sweat and tremble under Fear and see red and blow one's top under Anger (p.11). The author also makes observations such as "the opinion implicit in Jack is evil may simply be another of saying I dislike Jack" (p.2), an analysis which is based on more pragmatic and situational criteria than the type of analysis I propose to make here.

This type of cognitive approach tends to use those metaphors which refer to physically identifiable phenomena in the belief that, by so doing, it will facilitate the eventual codification of abstract concepts. If one believes that the type of input that the brain receives through physical perception stands a chance of being codified in a way artificial intelligence can understand in the not-too-distant future, perhaps this approach will eventually go beyond the more mechanical computer database and help the 'neural network' type of computer understand how human beings function, presumably at a vicarious level. Artificial intelligence will only ever experience this type of physical perception when biological science manages to come up with the type of physically human robot + artificial brain imagined in the final chapter of Asimov's "I, Robot".

In the meantime, even if this meaning is deduced from original texts, or appropriate tests on individual speakers describing their personal experiences of the emotions and consequent understanding of the words, the tendency is necessarily reductionist because it favours analysis of the physical perception input which precedes appraisal. As a linguistic theory it follows the trend of certain psychologists to continue to assess psychological phenomena from observable physical symptoms. These psychologists often call themselves 'cognitivists', because they no longer rely on mechanical stimulus-response experiments and allow for the more complex intervention of the subject's own interpretation of events, but they still use a lot of pre-suppositions they have inherited from their Behaviourist predecessors.

It should also be noted, as Lutz (1987: 292) points out, that to describe emotion concepts in terms of "physical and / or private mental states" may be fairly typical of American English, but is not the norm in other cultures. She describes, for example, how the Ifaluk islanders prefer to describe the social or cultural situation that leads to the identification of the emotion, and rarely refer to their own personal reactions. This obviously points to one of the underlying themes of her research - that American English reflects the Self-orientated culture it is spoken in, whereas Ifaluk is spoken by a closely -knit communal society,

A less mechanistic cognitivist, even if s/he is a speaker of American English, would try to account not only for the more immediate physical perceptual input, but also for all the other information stored in the brain which influences the appraisal of this input, including the linguistic codification assigned to such input by previous experiences, both personal and vicarious. It is possible that, with the help of such codification, the brain perceives the input not so much as a series of components based on physical perception, but rather as a type of more holistically viewed experience, or 'scenario'. This is the type of analysis which some of the other writers discussed in this chapter prefer.

4.3.4 Wierzbicka (1972 to 1992) : on how to define Emotion

Wierzbicka's (1972) approach is that of a lexicologist writing about Semantic Primitives and how they may or may not provide help in defining terms. The chapter in this book devoted to the emotions starts with the quotation from Wittgenstein's *Philosophical Investigations* - "How is one to define a feeling? It is something special and indefinable". She herself goes on to say that "an emotion is something that is felt and not conceived verbally" and that "thoughts have a structure which can be rendered in words, but feelings, like sensations, do not" (ibid : 59). The best we can do is to try and describe what we feel, and depend on other people's experience of similar things to help them understand us. She quotes in support of this several examples from Tolstoy's "Anna Karenina" when he compares what X felt to something else, using phrases such as felt + as / rather as / like.

She suggests that this is a useful technique with the more complex emotions, but goes on to question whether Emotion words such as joy, sadness, anger and fear can be considered as semantically simple, just because they are more common. After all, if they were that simple, they would not even be related to each other, as they obviously are. If they are not simple, or primitives, it is therefore possible to define them, although perhaps only by reference to the situations associated with them[2].

She suggests that even the commonest emotion words are really "petrified, disguised abbreviations of descriptive formulae", and goes on to make 36 definitions of some of the more common emotional states. She uses the expression "X feels", and the reference is more frequently to the adjective than the noun form of the emotion lexeme. This facilitates the connection feeling <--> emotion, but causes a certain irregularity in her examples. For example, she uses envious, but not envy, and compassion, but not compassionate, and it has

She compares synonyms like want and desire, and fear and anxiety, in order to establish that the first of each pair is somehow more basic than the other. She also draws comparisons based on the symmetrical relations between examples like satisfied and dissatisfied, and shows that a similar situation exists with joyful and upset. These comparisons are not always so straightforward, though. Pity can be related in this way to envy, contempt and admiration, depending on the component involved. She argues, too, for components like [GOOD] and [BAD] and [INTRAPERSONAL] to explain the relations between other lexemes.

This is a short essay written rather to arouse interest in a certain lexical field than as a detailed study designed to solve any fundamental problem. I quote from it rather because of the influence it had on the debate rather than as a reflection on her latest ideas. In Wierzbicka (1992) her approach is more sophisticated, and she has become involved in the discussion at the level of psychology and the theories put forward by the next two theorists to be considered. Here she acknowledges that the search for semantic primitives must be more rigorous than was possible in 1972. Since then, she claims, work has been done to provide a "Natural Semantic Metalanguage" which "has been tested in hundreds of

definitions, both of English words and of words from many other languages of the world. It has also been tested in the study of grammar and cross-cultural pragmatics. She believes that "what is needed is a body of definitions large enough to be able to reveal the systematic organization of this cognitive domain and to demonstrate conclusively that the proposed method of definition really works". Rather than work out these definitions in terms of individual lexemes, beyond the bare minimum needed, she argues in favour of "certain prototypical scripts or scenarios, formulated in terms of thoughts, wants and feelings"[3]. When analysing the controversies in the more recent literature on the emotions she suggests (1992:17) that:

"...one of the more important ones is that between supporters of a "labelling" and a "constructivist" approach. The crucial question in this debate is this; Do emotion terms provide labels for independently existing emotions or do they contribute to the construction of the emotions themselves (by imposing an interpretation on the emotional experience and by creating certain assumptions, norms and expectations, which may guide behaviour and shape personal relationships)?"

This is a particularly interesting point, especially if we think of the individual differences of usage suggested by the research of Davitz and Fillenbaum and Rapoport. Wierzbicka herself, while defending the idea of some form of universal semantic primitives, also believes that some kind of "social construction of emotions" ... is largely right, and that different languages provide concepts which in their turn "provide certain 'scripts' which native speakers can use as a basis for interpretation of feelings and upon which they can model their emotions and their relations to others." Being a bilingual, or multilingual, herself though, she feels she cannot insist enough that although people make proposals about Emotion in their own language, these proposals are only valid insofar as they show awareness of the limitations posed by any language and allow for the fact that other languages see the same apparent reality through a different prism. She also points to the fact that "most authors writing about emotion concepts are content to mention just a few examples, in an ad hoc fashion" although she cites the next two groups of theorists as "two notable recent exceptions" and she admits a need for the type of analysis they make. Even so, she has a criticism to make of their definitions which, by her standards, are decidedly sloppy. Being psychologists, they cannot be expected to be aware of the full intricacies of linguistic, and particularly semantic, theory, any more than a linguist can be fully informed on the finer points of psychology. Probably all involved would agree that each can benefit from the other's help.

These are all points on which I am in full agreement with her, and, if my purpose were to set up universal hypotheses for semantic primitives of Emotion, I might turn to her for advice, despite my scepticism about the possibility of creating a Natural Semantic Metalanguage with which to do this. Although I see the attractions of it theoretically, I cannot believe that even the most objective attempts at such a metalanguage can go very far without being enmeshed in its own reflexivity. However, my interests are related rather to analysing what I find in the context of normal language use and at levels other than that of the lexeme.

4.3.5 Johnson-Laird and Oatley (1989) : a Cognitive lexicon which assumes basic emotions

Towards the end of the 80s, the interest in the language of emotion intensified, as does the psychologists' interest in language generally, thanks in large part to the direction being taken by Cognitive Science. Johnson-Laird and Oatley belong to one group of investigators into the language of emotion, and Ortony, Clore, Collins and others to

another, and their work, and that of others, are the subject of several publications. They have a certain amount in common, and their differences tend to serve the cause of even more careful investigation, rather than destructive criticism .

Using language that shows their AI interests, Johnson-Laird and Oatley propose that "the human cognitive system is modular and asynchronous", and that:

"emotions are based on one of two specific kinds of communication in such systems. One kind of communication is propositional. Propositional signals are symbolic: i.e. they have internal structure that play a part in denotation within the system..... The other kind of communication is non-propositional. It is simpler, cruder, and evolutionarily older. Non-propositional signals have no internal symbolic structure or significance to the system. They do not denote anythingWe will call these 'emotion modes'" (1987 : 31 -2)

They postulate five emotion modes, or basic emotions, that correspond to Happiness, Sadness, Anxiety (or Fear), Anger and Disgust. They believe that these modes serve as a basis from which more complex emotions are elaborated. Since it their belief that emotions play an important role in human communication and planning, they believe that "the cognitive system adopts an emotion mode at a significant juncture of a plan" and that "the function of these modes is to organise a transition to a new phase of planned activity directed to the priorities of the mode with associated goals and certain stored plans for dealing with what has happened" (ibid : 35) The way the system works is partly due to evolutionary factors, but also dependent on how the individual, as he/she develops according to both innate and environmental factors, forms a model of Self and Other, so that, with adult emotion, a social plan is a typical part of the way we experience emotion. Complex emotions "are founded on a basic non-propositional emotion mode, but have propositional evaluation which is social and includes reference to the model of self" (ibid : 46).

In Johnson-Laird and Oatley (1989), the focus is on the more linguistic criteria they used to compile the lexicon. They collected their 590 words from various sources and, while recognising that most emotion lexemes have several forms, they seem to choose the form which, to them, is most related to emotion, only referring to another form if it tends to have a different connotation. In an attempt to establish some formulae for semantic primitives, they suggest that the respective concept can be chosen on the basis that the emotion involved can be experienced without the experiencer knowing its cause :I feel x but I don't know why. Their system of establishing semantic relations between the basic emotions and their synonyms, and distinguishing between different emotions, is to use linguistic tests like those used by Bendix (1966). They also suggest that the temporal duration of emotions should be taken into account to allow for a distinction between emotions, moods and personality types. They distinguish between 'mood' and 'emotion', the former being of longer duration and in which the Object is less easily definable, if at all, than in the case of an emotion, which they consider to be typically short-lived. They believe that "the vocabulary of basic emotions should provide descriptions of moods and personalities".

Having decided on the five Basic emotions, they classify the more complex emotions into the five further categories:

1. Emotional relations, e.g. love and hate, which "are typically about someone or something", although they maintain that "one can experience an emotion towards someone without knowing why they engender the feeling";

2. Caused emotions, e.g. gladness and horror, which are emotions that have causes known to the individual experiencing them; Causatives, e.g. irritate and reassure, which are related to caused emotions because in discourse they commonly rely on these causative verbs;
3. Emotional goals, e.g. desire and avarice in which these emotions "function as motives that lead to characteristic behaviours designed to achieve goals";
4. Complex emotions, as described above, e.g. embarrassment and pity.

There is also a zero category for Generic emotions, such as emotion and feeling.

Ortony and Clore (1989), while agreeing over certain general principles, criticise both the idea of basic emotions, which they reject in their own analysis. and the criteria used to distinguish them from other emotions. They do not like the I feel x but I don't know why formula, partly because the hypothesis is weakened if one substitutes feel by be, and partly because they believe that some of the examples given are questionable. Oatley and Johnson-Laird (1990), counter with the argument that Ortony et al.'s theory of emotions as valenced reactions "appears to embrace too much besides emotion", and that perhaps both parties are guilty of allowing their own intuitions govern their notions of what is and is not acceptable. However, they concede that perhaps the inclusion of a sixth emotion mode, Desire, as a pair for Disgust, and as the mode that would designate the otherwise isolated lexical category of Emotional goals, would improve their analysis, although the disadvantage of doing this is that "Desire is normally experienced in relation to an object, thereby implying propositional content", and undermining the I feel x but I don't know why theory.

4.3.6 Ortony, Clore and Collins (1988) : a Cognitive analysis of the emotions as valenced reactions

Ortony et al. started their research in about 1981, shortly after Donald Norman (1981) identified the topic of emotion as one of the twelve major challenges to cognitive science. Encouraged by the fact that cognitive psychology had shown that emotion entailed appraisal through cognitive processes, they prepared the research that is the subject of their work, *The Cognitive Structure of the Emotions*. The two goals they hope to achieve are, first, "to bring some semblance of order to what remains a very confused and confusing field of study", and second, to try to "lay the foundation for a computationally tractable model of emotion". (Ortony et al. (1988 : 2))

Unlike theories considered so far, they claim their theory:

...is not about emotion words. Indeed, our characterizations of emotions are intentionally cast in terms that are as independent of emotion words as possible, partly because we believe that the structure of the emotion lexicon is not isomorphic with the structure of emotions themselves, and partly because a theory about emotions has to be a theory about the kinds of things to which emotion words refer, not about the words themselves". (ibid : 1-2)

This approach assumes some sort of Platonic reality for the emotions, while recognizing the language 'trap'. This, they claim, makes their account, "in principle, capable of accommodating the fact that there are significant individual and cultural differences in the experience of emotions". In this respect they have learnt from reading Wierzbicka and others. As a result they are careful to define the limits of the theory and not to claim that they are offering a total view of the subject.

While recognising the importance of behaviour and physiology to theories of emotion, they propose to pay minimal attention to these aspects in order to concentrate on the cognitive aspects which, they believe, precede the behavioural and physiological aspects. Cognition, in their view, may or may not imply consciousness of the cognitive processes, for, as Freud believed, the beliefs or cognitions on which emotions are based can be unconscious,, but the emotions themselves cannot be unconscious". (ibid : 176) It is also true that some emotions, like Disgust, require less cognitive processing than others, like Shame. Certain languages will have a greater capacity for expressing certain emotional areas than others, but this does not mean that the other areas, which may be minimised or even ignored in a particular language, should not be taken into account. For this reason, they propose to establish emotion 'types', and then use 'tokens' from, in their case, English to exemplify these types.

Their attitude to 'self reports' of emotion is similar to that of Descartes - "that if a person.... is experiencing fear, that person cannot be mistaken about the fact that he or she is experiencing fear". Except in conditions that can be considered abnormal, there is a general consensus or opinion about how we express ourselves and, therefore, "in the scientific study of emotions it is not unreasonable to appeal to our intuitions about what emotional states are typically produced by situations of certain kinds". (ibid : 9) James may be revolving in his grave but, as they point out, there is nothing he can do to them now!

The theory they propose is based on two central questions: "What is the cognitive structure of the emotional system as a whole?" and "What is the cognitive structure of individual emotions?" and their "working characterization views emotions as valenced reactions to events, agents, or objects, with their particular nature being determined by the way in which the eliciting situation is construed" (ibid :12 - 13. - their italics). [The diagram of their emotional types can be seen here](#)

The main division is into three valenced reactions to:

1. consequences of events, which can be seen to focus on both Self and Other, with an appraisal system which evaluates the 'desirability' of 'goals', subdividable into Active-pursuit, Interest and Replenishment goals.
2. actions of agents, which can refer to actions of the Self or Other, and are evaluated by the 'praiseworthiness' of 'standards.'
3. aspects of objects, which can be seen as a Self > Other relation, are evaluated by the 'appealingness' of 'objects'.

A further dimension they give to their analysis is that of the variables affecting 'intensity' of emotion. These variables may be few, Joy and Distress being only affected by "the degree to which the event is (un)desirable", or several, as in the case of Happy-for[4], for example.

This theory is decidedly more complex than the others hitherto considered. Averill(1989), reviewing the book, describes it as "a tightly reasoned, succinctly written, and intellectually demanding work" as well as being ambitious. He also says that a "good book always points beyond itself" and takes the opportunity to open a discussion as to whether the categories of Ortony et al. can be regarded as 'natural kinds', which, like mathematical entities, have some sort of 'essence', and are traditionally conceived as in the class which remains invariable over place and time, or 'logical individuals', which have no 'essence', need not be all-or-none, and are localised in place and time. If one talks of 'basic

emotions', he suggests, one is referring to some sort of 'natural kinds', whereas if one believes that emotions can evolve over place and time, one is referring to 'logical individuals'. Ortony et al.'s categories, he claims, are somewhat ambiguous on this count, although if the ambiguities were removed, it is probable that the taxonomy presented would be of natural kinds. However, he feels they "leave open the possibility that the features that define a category may change across cultures and over time, which is more a characteristic of logical individuals". Perhaps he has a point, but although I agree that the taxonomy is probably one of natural kinds, I suspect, as a multi-lingual, - and I am sure Wierzbicka would agree with me - that he may be showing a monolingual bias against the possibility that natural kinds may just be sufficiently basic to allow for subsequent varied interpretations across cultures and time. After all, Ortony et al. go out of their way in the first pages to stress this point.

4.3.7 An appraisal of the different approaches

These attempts at classifying the lexicon show how elusive the subject can be. However, several psychologists, including Fridja, who have doubted the advisability of even trying to worry about the lexicon, seem to be more open to the subject now than they were a decade or two back. As we have seen, Davitz is appreciated better now than he was then. The more linguistically orientated authors referred to, like Fillenbaum and Rapoport (1971) and Wierzbicka (1972) are perhaps the most discouraged, and discouraging, although Wierzbicka (1992) is more optimistic about the power of the Natural Semantic Metalanguage she discusses. Those analysing metaphors rather than traditional language concepts may find that this approach is suitable for some languages, but may encounter cultural difficulties in applying it to others. However, the two groups engaged in the battle of introducing their robots to the problem of emotion have, perhaps, given hope to those who believe an analysis of the emotions not only can, but should, be attempted.

Oatley and Johnson-Laird (1990) are primarily interested in emotion words in English, and have gone to a good deal of trouble to draw up an impressive lexicon. Their analysis is attractive, and rather more accessible than Ortony et al.'s, but it has its weaknesses. They claim that "the folk theory of emotions embodied in English converges with scientific theory in identifying categories of analysis". Well, which came first, the chicken or the egg? Does language, or the English language in particular, reflect scientific theory, or is 'scientific theory' constructed from the 'intuition' built out of language? After all, one of the weaknesses they recognise in their own theory and that of their rivals', is that what any of them find intuitively acceptable, may not be so acceptable either to their rivals or to the reader. Their emphasis is on the words used to describe emotion situations, although the tests they use with feel + emotion word in a sentence to justify the inclusion of particular lexemes in their lexicon is a rudimentary attempt to project the word into an Emotion context.

Ortony et al.'s view, which makes a distinction between the emotion situation and the emotion word, and sees the emotions as valenced reactions that can be defined according to 22 functional types, has a lot to offer a bilingual analysis as it is not limited by the English words assigned to these types. This proposal to analyse situations rather than words would seem to owe a certain amount to the influence of Wierzbicka whom they appear to have consulted. Conversely, although her approach owes much more to linguistics, she seems well aware of the attitudes of psychologists to emotion. Her aim - to find a way of analysing semantic universals which, although phrased in one language, probably English, is sufficiently rigorous, yet flexible, to allow for the analysis of word/concepts in any language - runs parallel to their attempts to isolate situations which, whether or not they are lexically realized in any particular language, can be seen to represent all possible varieties of emotion.

It is significant, however, that, instead of suggesting that either the concepts or the situations can be reduced to simple components related to physically experienced and expressed factors, both Wierzbicka and Ortony et al. prefer to analyse emotion situations in terms of 'scenarios'. This is an approach which owes much more to the type of cognitive psychology which holds that emotions are the result of complex cognitive processes which take into account not just the immediate sensorial input from the outside world, but also the way in which this input is both analysed and modified by the information stored in the brain.

These theories have been put forward by people with a background of linguistics, psychology and AI and, in their different ways, their aims are to do with both providing cognitive psychology with food for thought, and contributing to the formalisation of language for AI. Linguistically, however, some of their hypotheses leave a lot to be desired. Although they have gone beyond previous attempts, like Davitz's, to classify everything based on the noun form, and admitted different types of verbs and adjectives, I would suggest that, unless they are prepared to consider the syntax, which, ignoring the semantic content of syntax, they have presumably left to their more syntactically orientated colleagues, as well as the context in which these lexico-semantic structures occur, their views will continue to be limited.

4.4 The differences between emotion and Emotion words

Whether one is talking about emotion or the lexemes used to describe or categorize it, it is easy to forget that by the time anyone actually describes an emotion in a normal everyday context, the emotion situation has gone well beyond any appraisal, arousal or behaviour stage. If the Speaker is the Emoter, the speech act will be a conscious evaluation and description of the event, and if the Speaker is referring to emotions in others, it will be an evaluation of the behaviour of the Emoter, or even a report of what the Emoter has actually evaluated in relation to his/herself. The Speaker, therefore, has opted for a description which social and cultural factors have taught him/her to associate with whatever it is that has been felt, or observed in others.

When trying to communicate feelings, people often struggle with words, perhaps conveying more of what they feel through body language than articulate speech. In certain cultural situations, there is an effort to control rather than show emotion. The English have always been considered cold by Mediterranean people because of their restraint in emotional circumstances, although, as an expatriate, I have noticed that the English have become more physically demonstrative since the 60s - perhaps as part of the Love you hippy phenomenon. However, there is still a certain amount of truth in the observation that the Englishman's idea of showing sympathy at a funeral is a touch on the elbow, and I'm awfully sorry, old chap. Living in a bilingual situation, I have also found that Portuguese has a wider variety of suitable things to say, or formal phrases, in situations like funerals than English. A colleague, who has spent some years in Turkey, tells me that Turkish is even richer in such formulae than Portuguese.

The description of an emotion may not actually use an emotion word. As we have seen, Wierzbicka's definitions and the examples she chooses from Tolstoy avoid the use of the emotion word itself. Davitz's descriptions of the physiological and psychological feelings associated with emotions also deliberately avoid the use of emotion words, as does the approach which tries to describe these abstract words in terms of the physical metaphors that we use to explain them. As Davitz's study showed, however, these descriptions were highly subjective and there was often considerable lack of agreement on how best to phrase them. Although it is certainly of interest, and probably quite amusing, to collect the metaphors with which people describe their experience, I would suggest that this method

might produce a highly subjective set of examples which reflected not just the imaginative capacities, or otherwise, of the subjects who produced them, but also the intervention of the researcher's notions of what was, and what was not, acceptable within his/her corpus of examples.

Some may see the use of Emotion words as restrictive, in that they impose the socially structured interpretation of each word on what is seen as an essentially fluid and confused area of individual human experience. However, here one could answer this with Lutz's (1987 : 307) claim that "the role of the emotion word is central to the storage and structuring of ethnotheoretical knowledge in this domain" and that "Emotion concepts have embedded in themselves crucial cultural propositions and in turn are nested in larger networks of knowledge about persons, roles and goals". The first approach may be all very well for those looking for the Holy Grail of semantic universals applicable to all languages, but the latter may be of more relevance to the understanding of the relationship between real languages and the cultures which use them.

Emotion words in context may well reflect an honest evaluation of the emotion situation, but they will also reflect what the Speaker wants the Hearer to know about it. A parent will say to a small child Mummy's not angry, darling, but why did you paint pictures all over her new wallpaper? Besides, there are quite a few phrases using emotion lexemes which we use, regardless of our real attitudes to the situation, for example when one politely says I'd love to to come your party next week, when one is secretly thinking What a bore! I'm afraid often has little to do with fear, expressing polite regret as in I'm afraid the train is five minutes late. Although it is hardly in our interests to teach our robots insincerity, many computers are already programmed to answer one with user-friendly social formulae. My computer greets me regularly with Bemvindo a Macintosh (Portuguese for Welcome to Macintosh), although I do not need Searle to tell me that it is not aware of what it is saying!

One argument in favour of using literary texts to find examples of emotion lexemes in context is because it is in the interests of the author to provide descriptions of emotions and emotional behaviour that are convincing. The examples in these texts often take the form of direct conversation, and they contain many of the social phrases as well as insincere uses of the emotional lexicon, but that in itself is a point in favour of this argument. At least in these situations language is being used with the primary objective of communicating some sort of reality to the reader, and not obeying the intuitions of academics trying to make their examples fit their theory.

When an emotional situation is being described seriously, there appear to be three main ways in which emotion words, at least in English and Portuguese, function in these descriptions:

- 1 a) to describe the Subject, or Senser's, emotional state or processes, as in I love you, He is angry with you, or I feel depressed;
- 1 b) to describe the behaviour associated with the emotional processes or state, as in He looked terrified, She sounded upset or They waited anxiously;
2. to describe the qualities or behaviour of the Object of the emotion, or Phenomenon, as in He annoys me, She is irritating or the kitten is adorable.

The difference between 1 a) and b) is that the former assumes the existence of the emotion, whereas the latter is more tentative and merely describes the behaviour that might indicate it. Therefore, although emotion words do not describe the physiological sensations or the

physically observable behaviour directly, they may be added to identify the emotion if it is not identifiable from the context, as in she trembled with fear or he screamed in terror. [5]

Wierzbicka, in both (1972) and (1992), does not confine herself to analysing one part of speech, choosing, a noun, adjective or verb form, according to which seems most appropriate. Johnson-Laird and Oatley have also chosen different forms of the lexemes, apparently on the same basis, but often with little regard to actual usage. For example, *aggrieve* and *daunt* are cited as causatives, when it is highly unusual to find anything but the *aggrieved* or *daunted* forms. This sometime upsets the focus of their examples.

4.5 Lexical categories of Emotion to be examined

My proposal to limit myself to an already extensive list of emotion words - 401 for English and 323 for Portuguese - is made with a view to attempting to understand how folk wisdom, or the "ethnotheoretical knowledge" described by Lutz is stored not only in the lexemes but in the type of syntax and pragmatic context associated with them. For this I believe it is more economical in the long run to use the 'scenario' approach of Wierzbicka and Ortony et al.

In order to do this I have tried to collect a large enough quantity of examples, using the techniques described in the Introduction - over 25, 000 - to allow some sort of idea of the value of the different lexical, syntactic and semantic patterns that emerge, and when a more pragmatic interpretation is required, I have always tried to bear in mind the particular psychological scenario behind each example. Thus, my analysis of the examples not only recorded the salient syntactic features found to be immediately associated with them. It also included a description of the nature of the perceived cause of the emotion, or PHENOMENON, which might be implicit in the lexeme, but was often only retrievable from the context.

Since every individual emotion situation can be conceived of as unique, any attempt at analysing such a field as the lexicon of Emotion must suffer from some form of reductionism. Although I am prepared to agree that words do have a certain culturally accepted meaning, I prefer to arrive at suggestions about that meaning by means of seeing how it is activated when it actually appears in a sentence in context, than by examining it in isolation. Also, after all the space I have dedicated to the Mind / Brain problem, and to the idea of cognitive processes as being not just those based on immediate physical perception but also on all the complex social, cultural and, arguably, genetic, information stored in the brain at a conscious, sub-conscious or unconscious level, it is unlikely that I would now try to explain the language of emotion in terms of componential lexicology.

Rather than adopt any one theory described above in its entirety, I propose to adapt Ortony et al.'s (1988) classification of emotion groups, and add to it when necessary. It is true that their Emotion types could be reduced to fit into one or another set of basic emotions, but I feel the distinctions they make to establish emotion situations rather than just words, or metaphors, are interesting, whatever the reservations I share with Wierzbicka about the actual phrasing of their definitions.

It is not my intention to define the various lexemes to be analysed - other people have already spent a lot of time doing that, and, for the time being, I shall accept their conclusions. In later chapters, each group will be examined in detail, both from a lexical point of view and in relation to the syntax and type of context in which they appear. Any remarks on the differences and similarities between English and Portuguese lexemes are based on observation of the corpora, and on unmarked usage, rather than examples which, for some reason or another, appear unusual.

4.5.1 An adaptation of the Emotion types proposed by Ortony et al.

Ortony et al.'s proposal of a somewhat complex set of Emotion types on the basis of the possibility of their existence in any language, rather than their actual existence in English, the language of the researchers, means that some involve very few lexemes, and some none at all. It also means that certain lexemes, in different syntactic structures or different contexts, may belong to different types. One should also remember that although the language may not lexicalise these types, they can usually be expressed at the level of the text.

The definitions of the scenarios Ortony et al. use are couched in language which is intended to be as neutral as possible and which, as they themselves admit, can sound a little incongruous, as when terror comes under the description of [BEING DISPLEASED ABOUT AN UNDESIRABLE EVENT]. However, they have not faced the problem of language sufficiently, for they seem to fail to realise how difficult it is to disconnect one's ideas from the language in which they are presented. I should like to draw attention to the fact that, as a linguist, I have to examine emotion words in context, rather than emotional situations. I would also suggest that if these emotion words have a particular meaning for their speakers, the psychologists trying to ignore part of this meaning do so at their peril. Also, if there is little or no lexical proof of the existence of groups like Happy for, one should not forget that if a language does not lexicalise something, it is because the culture which uses that language does not feel the need to do so.

Ortony et al assume that an emotion is some sort of relationship between the SENSER and some sort of reality, or PHENOMENON, which is cognitively assessed, although the consciousness of this appraisal varies in degree. They distinguish between these PHENOMENA as EVENTS, which are "simply people's construals about things that happen, considered independently of any beliefs they may have about actual or possible causes", OBJECTS which "are objects viewed qua objects", and AGENTS which can be people, but also "non-human animate beings, inanimate objects or abstractions, such as institutions, and even situations, provided they are construed as causally efficacious in the particular context" (ibid : 18). Their term EVENT is a little confusing at first sight in a linguistic analysis. It must be taken as elastic enough to cover not just 'happenings', but also behaviour, more stative facts about the Other's world and concrete objects.

For example, they classify Fear as an EVENT-based emotion. The psychologist can both refer back to consciously perceived events that led to this fear, for example the sight of the snakes in Mary was afraid of the snakes, or, with a bit of help from the psychoanalysts, to events which affected the subconscious, and forward to the hypothetical event (of the snakes hurting Mary), all of which will cause the SENSER to feel Fear. The linguist cannot get round the problem that easily, and has to explain She was afraid of the snakes in which snakes would be classified as OBJECTS. The most important difference between the linguistic analysis I have made and their more psychological one, arises over their distinction between EVENTS, OBJECTS and AGENTS, and my attribution of these causes of the emotion to the 11 types of PHENOMENON which will be discussed in Chapter 5.

Since Ortony et al. are cognitive scientists combining an interest in psychology with one in AI, it is natural that their analysis should show the influence of logic on the way they create their framework. This means that they end up with the tree-type diagram, based on the notion of emotions as 'valenced reactions' rather than a less-structured list of lexical fields. Like most attempts by logic to explain natural languages, theirs also is likely to run into difficulties, but the mental discipline such an analysis imposes can be beneficial, and I frequently found it useful as I battled with the somewhat less than logical behaviour of the

traditionally anti-rational field of Emotion.

One of the principal problems that emerged by trying to impose this cognitive psychological framework on two different languages was that actual lexical usage does not always fit easily into the type provided. Pity and pena, for example, had to be broken down into those examples which favoured a Sorry For, or compassionate, interpretation, and those which were describing some form of Remorse. The examples for hope overflowed completely from its Emotion type into a more strictly intellectual area, and the word usually used in Portuguese to translate it, *esperar*, got tangled up with the notion of waiting for.

Apart from the problem of fitting lexical usage into one type or another, there were the added problems that some, although largely inside one group, had connotations which involved them with another. Joy and Distress, on the other hand, produced such a variety of lexemes that one is tempted to make subdivisions of the group. Some lexemes were only on the margin of Emotion, like peace, but were included for their association, in some lexical uses, with a particular group, in this case Joy. However, I do not see these as reasons for abandoning the attempt to use Ortony et al.'s framework, because in the final analysis, it did help a lot to distinguish between different lexical uses, and the system of variables they propose also helped to clarify certain points.

Ortony et al. begin by discussing the Fortunes of Self, or Well-being emotions, Joy and Distress. Next they postulate 4 groups of Emotion related to the Fortunes of Others, Happy for, Pity, Gloating and Resentment. Judging from the corpora, however, neither English nor Portuguese speakers frequently feel emotions for others, and at the level of the lexicon these types are small or non-existent. Happy For is not specifically lexicalised in English or Portuguese, and the English gloat has no corresponding lexeme in Portuguese. For these reasons the data on these areas is extremely limited. The Pity and Resentment types, however, contain a few lexemes which fit quite neatly into the classification suggested.

The next set of groups are described as the Fortunes of Self emotions and are considered to be "prospect-based". Hope and Fear which, according to Ortony et al., relate to the prospects of desirable and undesirable events, are the two generally recognized emotions which appear in this group, and they are seen as occurring prior to the other four. The other emotions result from the confirmation or disconfirmation of the circumstances surrounding the Hope or Fear emotions, and are classified under Satisfaction and Fears-confirmed, and Relief and Disappointment. Of these 4 areas only Fears-confirmed provided no lexical item on which to collect data, although no doubt non-lexically marked examples could have been found. However, given the methodology used, it was impossible to collect such contextual examples satisfactorily, and so this section is not given any specific attention.

The next 8 emotion types are partly related to the Event-based Well-being emotions, but are also influenced by the Attribution Emotions, and by the "degree in which the actual agent is in a cognitive unit with the self". I departed slightly from Ortony et al.'s listing here and combined Pride with Gratification, and Self-reproach with Remorse, largely because it was difficult to separate a rather sparsely represented area into separate groups when these groups shared most of the lexemes. The analysis of the resulting groups will, however, take the distinctions made by Ortony et al. into consideration. Appreciation is a large group and it is balanced by a group Ortony et al. labelled Reproach. The group for Gratitude was small but distinct enough to warrant individual attention, and Anger was one of the bigger groups overall.

The valenced reaction to aspects of OBJECTS naturally divides into the Liking and

Disliking groups. Love and hate describe what are many lay people's notion of true emotions, but not all psychologists have felt the same. The way in which they are reactions to OBJECTS brings them closer to a consciously cognitive explanation, and there would seem to be a certain gradient of meaning linking Liking to Appreciation in one direction and Desire in the other. This point becomes clearer when the syntax is considered.

4.5.2 Other classes of Emotion

However, other lexical groups were formed that are not acceptable to Ortony et al., but are considered as emotions, or as very close to the field, by other theorists. One of these groups would seem to refer to more general aspects, and can be classified as the Generic lexemes, such as feeling, emotion, sentiment and passion. This group can be considered as a sort of metalanguage of emotion and as such should be considered separately from the directly referring lexemes. Each language groups is heavily dominated by one lexeme - feel for English and sentir-se for Portuguese - and the various problems this causes make it necessary to use different criteria for analysis than those used for the other groups.

Ortony et al.'s Emotion types will not suit everyone and two more categories will be examined here for this reason - Surprise and Desire. They prefer to discount the surprise / shock type of lexeme as not an emotion per se, but rather as a variable affecting the intensity of the emotion which follows it, something that is essentially cognitive in origin. Whereas Shock usually accompanies Fear or Grief, Surprise might be equally followed by Joy or Sadness.

Although the argument is sound within their theory, it could also be pointed out that, whatever the subsequent emotion, Surprise and Shock can be observed in terms of arousal and behavioural factors, and also analysed as being the result of rapid cognitive appraisal. Surprise is a favourite emotion of those who categorise Emotion according to its physical expression, particularly those, like Ekman, who emphasise the importance of facial expression. Besides, one cannot ignore the physical reaction associated with Surprise and its synonyms. Shock is even a medically accepted term for a physical state caused by emotional disturbance. Therefore, this lexical area cannot be ignored here. The syntactic data was not dissimilar to that found for the other Emotion groups selected by Ortony et al.

Ortony et al. (1988) talk about 'desirability' as a variable affecting events to which other emotions are related, but ignore Desire itself as an emotion. Within their theory of appraisal, which is fundamental to any cognitive theory of Emotion, they look upon the process of wanting or not wanting something to happen as some kind of evaluative or cognitive process which precedes emotion. If several types of information are being processed simultaneously in the brain, as many believe, one could, perhaps, argue that desirability is only the type of variable they describe. Oatley and Johnson-Laird, however, who excluded Desire in their first analysis, were considering including it to balance Disgust in their second.

It is true that Desire is not found in many more recent lists of emotion although, as Fridja (1986) points out, Spinoza considered it one of the three primary emotions. Fridja himself, however, classifies it as an emotion, albeit a somewhat cognitive one, and sees it as a "tonic reaction" with "action tendencies [that] aim at achieving satisfaction states". He further believes that "desire itself is an emotion proper", and presumably he is referring here to the lexeme desire, as in his desire for peace, rather than the lexical group of words classified under Desire. This is an example of the many occasions on which psychologists and other non-linguists produce confusion by being less than careful about their language. However, if one requires some kind of physiological or psychological tension as a criteria for defining emotion, Desire must be at least a candidate for consideration. It need not be

sexual desire. Whatever the arguments in favour of the cognitiveness of the child's I want computer games for Christmas, or many people's I wish I were a rich man, one can hardly ignore the gut reaction that is often associated with them. However, since the number of examples collected for this area was considerable - about 3,700 - and the syntactic data would have distorted results on the other groups unacceptably, this group has been considered separately from the others.

Another area which I considered at the beginning was Courage, which is included in lists such as Arnold's, but its status as an emotion is very doubtful. It is related to Fear in that it describes an absence or control of Fear. However, the SENSER is not so much experiencing an emotion here, as cognitively summing up all the social and cultural traditions that he/she has internalised in order to deal with Fear. Whether what the SENSER then does can be called Courage will be decided not by the SENSER but by an external observer. For these reasons this group of lexemes was not included in this study.

4.5.3 General comments on methodology

The lexemes selected for each group were similar to those which appeared in the appropriate semantic grouping in the thesauri or dictionaries of synonyms consulted. The preliminary study in the Birmingham Corpus included an even wider variety than appears here but not all of them appeared in the EC. The selection of words for Portuguese were fewer in number. I recognize that this may be partly due to my lack of knowledge of the lesser known Portuguese words in this area, but the individual dictionaries formed from the different texts[6] were examined with care for new words, and few were forthcoming. However, since this is a subjective area of language and one which is used frequently in everyday life, it is only natural that English, with its tendency to absorb words from both the Romance and Germanic languages in these circumstances, should offer a wider variety of words[7]. It is therefore possible that Portuguese has a narrower range of words from which to choose, although, as we shall see, Portuguese shows a wider use of its more restricted choice than English, which tends to favour a small number of lexemes in practice.

Another difference between the languages is the tendency of Portuguese to favour stronger or more expressive lexemes, both qualitatively, i.e. offering a wider choice of lexemes in the more expressive range of the lexical group, and quantitatively, in the number of examples found. This is particularly true of groups like Joy and Distress, and possibly demonstrates a tendency of the Latin temperament to prefer stronger emotional language, similar to the tendency to favour stronger lexemes in relation to effects of Light, as shown in Maia (1988). The choice of these stronger words, both in an original text and in a translation, will vary considerably according to the situation and the taste of the writer, and this is one of the areas where the choice of word in translation is very delicate if one is to avoid over-statement, or a pompous or comic effect through inappropriateness.

The lexical nature of the groups under consideration will be examined in later chapters with a view to:

- a) examining the significance of Ortony et al.'s classification;
- b) comparing the selection of lexemes each language offers;
- c) establishing the similarities and differences between the synonyms in the same language.

This analysis will refer generically to the type of syntax and context which helps to

differentiate shades of meaning between lexemes, and even between uses of the same lexeme.

Since no lexical area is hermetically sealed off from any other, decisions as to which lexemes were analysed in which group were based not so much on lexical considerations as on the nature of the PHENOMENON and the general situation which occurred most frequently in the examples. The divisions are by no means watertight and the inclusion or exclusion of certain minor items is sometimes, I realize, debatable.

Each lexical group will also be described in relation to the other groups considered and to other semantic fields when necessary, as the semantics of the different lexemes usually allows for elements from other emotions to be implied by them. My study of these areas in the much larger Birmingham Corpus (BC), it was possible to observe the 'company kept' by the different lexemes[8]. There were four main ways in which emotion lexemes seemed to appear with others, usually linked by and:

- a) with synonyms, for example anger and indignation;
- b) with antonyms, either other emotions, for example love and hate, or other notions, for example business and pleasure;
- c) with words indicating emotions which are often associated together, for example love and happiness or fear and rage;
- d) with words indicating factors that might contribute to the emotion, for example, health and happiness and pleasure and profit..

The data I managed to collect on this type of material was only really relevant with the more well-represented lexemes, but it frequently helped in their allocation to certain groups and in distinguishing between ones in the same group.

I hope these considerations will help explain my choices at a lexical level and serve as an introduction to the more syntactic and semantic analysis which is the subject of the following chapters.

[1] The percentages quoted after each cluster refer to the % of those questioned who associated the emotion with the cluster. For example, in describing anger, 53% of those questioned associated it with hyperactivation, but only 16,8% with inadequacy.

[2] In (1972), an example of the type of definition she suggests is:

X feels sad = X feels as one does when one thinks that what one has desired to happen has not happened and will not happen.

[3] Her definition of sad, for example shows more careful preparation than the one given in 1972:

Sad (e.g. X feels sad)

X feels something

sometimes a person thinks something like this:

something bad happened

I would want: this didn't happen [i.e. I wish it hadn't happened]

because of this, I would want to do something

I can't do anything

because of this, this person feels something bad

X feels like this

[4] Happy-for is governed by the variables:

- 1) the degree to which the desirable event for the other is desirable for oneself;
- 2) the degree to which the event is presumed to be desirable for the other person;
- 3) the degree to which the other person deserved the event; and
- 4) the degree to which the other person is liked.

[5] Examples of this kind were tagged in the corpora for BEHAVIOUR. These examples are always SFoc, as the PFoc lexemes, by definition, will describe the emotion-provoking behaviour or qualities of the Phenomenon, in any case.

[6] The software at my disposal, STABLEX by Professor André Camlong of the University of Toulouse, allowed me to list every word used in a text and the number of times it appeared.

[7] For example, felicity, although rarely used, can be found as a cognate for the Portuguese felicidade, but Portuguese has to use this word and others like alegre to translate the English glad, glee, happy and merry, all of Old or Middle English origin, according to the S.O.E.D.

[8] I am grateful to M.A.K. Halliday for the personal suggestion that I should study this aspect of the various lexemes when consulting the BC. The idea was no doubt related to his theory of 'lexical cohesion', and, although I only had time to observe those words which occurred in the concordance immediately before and after the lexeme being studied, the results were often illuminating.

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CHAPTER 5

SEMANTIC ASPECTS OF EMOTION

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5.1 Introduction

The aim of this chapter will be to discuss the semantic aspects of the Emotion lexemes. It is difficult to find one school of linguistics which deals satisfactorily with all the relevant aspects, so I shall be somewhat eclectic in my choice of theorists. I feel that much of the problem resides in the fact that the linguists involved are often conditioned by the tenets of Behaviourist psychology, and I hope to show the change in emphasis that occurs when one approaches the subject from the viewpoint of the type of Cognitivist who sees the mental processes as including both physical perception and complex brain / mental processes. This chapter will analyse the idea of Emotion as the relation existing between the SENSER, or individual who feels emotion, and the PHENOMENON, or whatever produces emotion in the SENSER, and the way linguists have tried to account for this using deep case theory. It will also look at theories that have been advanced for the semantic classification of verbs, and to account for the syntactic behaviour of the verbs of Emotion.

5.2 The Semantics of the SENSER and the PHENOMENON of Emotion

In the psychological theories of Emotion discussed up till now, the focus was on the SENSER and the emotion. The arguments centred on how the SENSER experienced the emotion - was it mental or physical? did mental recognition of the emotional state precede or follow the physical manifestations? were emotions innate or acquired? - were some of the questions asked. In fact, so much has been written about Emotion from the point of view of what happens to the SENSER, that the PHENOMENON tends to take a very secondary position of interest. The term PHENOMENON has been chosen because to use any of the following terms - *cause, reason, stimulus, target* - amongst others, is to opt for one or another explanation of Emotion. Later, when examining the PHENOMENON in more detail, further classification of types of PHENOMENA will be necessary.

The SENSER of an emotion is necessarily a human individual, or group of individuals, although one may make such SENSERS out of animals, machines, or the characters of myths or science-fiction through a process of anthropomorphism. The PHENOMENON, on the other hand, can be virtually anything, and can be concrete or abstract, or even a figment of the SENSER's imagination. In fact, the PHENOMENON is essentially the SENSER's perception of some event, action, person, or thing. The same apparently

objective reality may well produce violently opposing emotions in different people - politicians' actions produce delight in their supporters and dismay in their opponents.

Fridja (1986) probably speaks for most psychologists nowadays when he says that "Emotions are rarely, if ever, elicited by an isolated stimulus". Even then he claims to be using 'stimulus' as a convention to describe this phenomenon, and chooses the term 'antecedent' in more specific situations. He further defines between 'situational' and 'dispositional' antecedents, the former being immediately related to the specific emotion causing situation, and the latter being the various innate, cultural and other factors which dispose the person to 'emote'. Most emotional situations can, quite probably, be explained in terms of both the SENSER and this more multi-faceted kind of PHENOMENON.

A problem that has exercised people's imaginations is the so-called 'objectless emotion'. According to Kenny (1964), Descartes was worried about this, and Wittgenstein (1958 : 22), Freud (1953: 12) and others have discussed apparently non-directed emotions like angst. Although most people assume that an emotion relates the individual to something in the outside world, it seems to be possible to say things like *I am happy / depressed / afraid but I don't know why*. However, this does not mean, on further examination of the problem, that one cannot come up with a reason why. The very fact that the speaker says *but I don't know why* implies that he/she believes that there should be a reason, but that this reason is not immediately identifiable. With the help of someone like a psychoanalyst, the SENSER may be able to examine the emotion's antecedents for an explanation, and eventually point to a wide variety of insignificant and apparently unconnected stimuli which combined to produce the emotion.

Alternatively, there may be some biochemical disfunction or perhaps drug-taking which has induced the symptoms and feelings of euphoria or distress which the SENSER identifies as an emotion. Fridja also refers to the possibility that "emotions could occur for reasons of emotional metabolism or internal regulatory processes". Strong emotions rarely last long and often seem to trigger off the opposite frame of mind as a form of control. Most of us have experienced a feeling of deflation once the effects of euphoria have worn off, or a feeling of calm when our fury at something is spent.

Another explanation for the objectless emotion is to call it a mood. After all, the type of emotion being considered is usually one of the milder ones and more amenable to being analysed as the result of a series of diffuse stimuli over a longer period of time. However, it is difficult to imagine a context in which one could say *I am angry / delighted / terrified but I don't know why*, because these emotions would seem to require an immediate and identifiable object. In contexts where verbs like love and hate are used the linguistic structure requires a grammatical object in any case, and obliges identification of the psychological PHENOMENON. However, one might explain situations like *I love her, but I don't know why* using similar arguments to those put forward for the objectless emotion, because the syntactic verb+object structure can be seen as only specifying an independent sub-category of *love* at a deeper semantic level.

Emotion, therefore, essentially needs a SENSER and some kind of PHENOMENON. The relationship between the two is mediated by the emotion, but the emotion is interior to the SENSER. The nature of the PHENOMENON is also dependent on the SENSER. The Behaviourist view, that an emotion was the physical response to a particular stimulus, contributed to the interpretation of the PHENOMENON as the stimulus or cause of the emotion, and obscured the fact, defensible even within this way of thinking, that the PHENOMENON was not an independent reality, but was the SENSER's perception of some object or situation. This point becomes easier to grasp when one explores the role of appraisal in emotion put forward by the Cognitivists.

Some would say that the function of the PHENOMENON is to define the emotion. Thus, if John loves, that love will be understood only when we understand whether the PHENOMENON is his love for his mother, his girl-friend, his dog, or a cup of coffee. In many cases the PHENOMENON will need further definition. If one says John is angry with his wife, we may need the information that she has burnt a hole in his favourite shirt to better understand the emotion caused. Even then, the intensity of John's feeling can only be estimated if we know his normal attitude to his wife, as well as any attenuating circumstances, like his having had a bad day at work or his inability to afford a new one. Ortony et al. (1988: Chapters 3 and 4) have constructed a framework of variables with which to describe the various factors which may influence the intensity of emotions.

The question - Does one love because one is loving or because something is lovable? - was a problem Socrates and Euthypro discussed well over two millenia ago (Plato, 1954: 32), and it appears that nobody has really come up with a satisfactory answer since, for the debate continues. Most people would agree with Searle that emotion is internal to the SENSER and that one may love, hate, fear or be angry without anyone else necessarily being aware of the fact. However, one of the functions of emotion is to govern our relations with others, and for that reason it is more normal that the emotion should be expressed and observed. An individual's capacity to experience emotion is governed by innate, cultural and environmental factors, and some people are more predisposed to be loving for example, than others. For similar reasons, the individual also varies in his/her ability to appraise, control, show or dissimulate emotion. If one is loving, therefore, one may be temperamentally predisposed to love, or one may be actually feeling love for someone, or one may be demonstrating this love in one's behaviour, or even simulating love that does not in fact exist.

Whether an PHENOMENON is lovable or not is an appraisal made of the PHENOMENON by the SENSER, although it is arguable that one could objectively describe someone who one does not personally love as lovable. The PHENOMENON may or may not deliberately influence the SENSER's evaluation. John may be attracted to Mary without her even being aware of his existence - as, for example, when a cinema goer finds a film star attractive - but it is just possible that Mary, in order to make herself lovable to John, may follow all the traditional advice on how to achieve this effect. However, we are unlikely to describe this exercise in attracting John as *being lovable*, as the appraisal of whether Mary is lovable or not remains up to John[1].

Love, however, is one of the easier verbs to analyse, at least in English, because it is a verb in which the emoting SENSER is the Subject and the PHENOMENON is the Object, and what I shall refer to as a SENSER focusing, or SFoc, verb. Besides, the lexemes *lovable* and *loving* conveniently exist to allow analysis. One could analyse John's fear of spiders or war using similar criteria, and even work out examples to show the lesser or greater conscious appraisal involved, but *fearing* only exists as a present participle, not as an adjective, **fearable* does not exist, and *fearful* is full of ambiguities as a central adjective related to *fear*, not to mention its frequent role as an intensifier, as described by Quirk et al. (1985: 7.87 - 90).

Many of the verbs with emotive connotations are PHENOMENON focusing, or PFoc, ones in which the SENSER is the grammatical Object and the PHENOMENON the grammatical Subject, as in the case of *frighten* or *annoy*, and this adds to the problems we are considering. The SENSER is now in an apparently Objective or passive relation to the verb's Subject. The examples *John kicked Mary* and *John frightened Mary* would suggest two similar events, and that in both cases John is the Agentive Subject and that he deliberately produces some sort of physiological effect on Mary so that, as the passive Object, she consequently suffers from either severe bruising and pain after the kick, or

from the trembling, sweating and general gut reaction associated with being frightened. She might, poor thing, be subjected to both indignities and one could say, *John frightened Mary by kicking her*. However, one cannot say, **John kicked Mary by frightening her*. This is because, whereas deliberately kicking someone is sufficient unto itself as an action, deliberately frightening someone requires performing some action which induces the frightened emotion in that person. Besides this, Mary's perception of the pain from the kick comes directly from the part of her anatomy affected. However, the physical symptoms associated with fear that she experiences can be explained either in James' terms, in which they constitute the emotion, or in Cognitive terms, according to which they are connected to her appraisal of the implications of John's kicking her - i.e. that he is aggressively inclined towards her and will probably proceed to hurt her further. Mary's being kicked depends on John's action, even if it is accidental, but her being frightened depends on her resulting arousal and appraisal of his action.

This becomes clearer if one considers that if John had intended to frighten her by kicking her, without realising she was a masochist, the fact that *John thrilled Mary by kicking her* is dependent on Mary's feeling this emotion despite John's intentions. It is also possible to say *John frightened Mary* without John's being minimally aware of the fact, in which case Mary's being frightened is entirely dependent on her. It is clear that *kick* and *frighten* cannot simply be classified together as, for example, agentive verbs. The examples in the corpora were tagged DELIBERATE when PFoc examples of any kind occurred explicitly in a situation when the PHENOMENON was deliberately trying to cause an emotion, but this only produced about 30 examples in both corpora - or about 0,12% of all the examples. Linguists trying to classify the type of verbs discussed above have found that the semantic analysis elaborated by deep case theory can help to explain the situation.

5.2.1 Deep Case Theory and Emotion

The notion of case is present at a surface level in many languages, and traditionally it was considered to be present in the form of suffixation or inflection of the noun form concerned. According to Crystal (1987: 92), Finnish forms fifteen cases in this way - although it therefore dispenses with prepositions - and Latin boasted six cases, but most European languages have dropped the suffix type case system in favour of prepositional phrases over the last few centuries. This is the situation for English, although pronouns still have accusative forms, and there is what is known as the ' 's genitive'. In Portuguese, pronouns have accusative and dative forms.

Case, with its connections with prescriptive linguistics and the tendency to try and force all languages to fit into categories originally devised for Greek and Latin, was an unpopular notion among linguists bent on describing languages such as English earlier this century. The deep case theory discussed nowadays does not often use the terms accusative, genitive and dative, perhaps due to a wish to avoid confusion between the surface structure grammatical category found in inflecting languages, and what is now considered a deeper level semantic role. It was as the notion of deep structure developed, that it soon became clear that "there was a case for case", as Fillmore (1968) explains. In this paper Fillmore brings together notions of case discussed by other linguists such as Tesnière (1959), Whorf (1965), Chomsky (1965), Benveniste (1966), Lakoff (1966), Halliday (1967), Bach (1968), and Lyons (1968).

The deep case structure underlying verbs expressing Emotion is complex and controversial. This is not surprising if we think of the philosophical issues and psychological theory already discussed. It was soon recognised that certain verbs, those that Lakoff (1968) classified as 'stative', rejected agentive roles. Discussion centred round examples like *I liked his attitude* and *His attitude pleased me*. Fillmore (1968: 30) asserts that *like* and

please are synonymous, with the frame feature +[___O + D], and differ only in their subject selection features. He also pointed out that *like*, "has in its history the subject selection possessed by *please*", a point that has been thought significant and has been discussed by others, including Allen (1986). It should not be forgotten, however, as Halliday (Kress (ed.) 1976: 164) pointed out, that both *like* and *please* have their own corresponding passive forms.

Modern case theory recognises that verbs can be divided into certain semantic categories, the most usual of which are active verbs as in *John kicked Mary*, in which *John* has an AGENTIVE (e.g. Quirk et al. 1984) or ACTOR (e.g. Halliday 1985) role and *Mary* is variously considered as having an OBJECTIVE (e.g. Fillmore 1968), AFFECTED (e.g. Quirk et al. 1984), PATIENT (e.g. Chafe 1970), or GOAL (Halliday 1985) role.

There seems to be fairly general agreement that one cannot talk of AGENTIVE or ACTOR roles in association with verbs like *like*, *please*, *fear* and *frighten*, but there seems to be more difference of opinion on how one does classify the semantic roles involved as can be seen from Figure 5.1

Figure 5.1

	S with <i>like/fear</i>	O with <i>like/fear</i>
	O with <i>please/frighten</i>	S with <i>please/frighten</i>
Fillmore (1968)	DATIVE	OBJECTIVE
Fillmore(1971)	EXPERIENCER	OBJECT
Halliday (1969)	PROCESSOR	PHENOMENON
(1985)	SENDER	PHENOMENON
Chafe (1971)	EXPERIENCER	PATIENT
Anderson (1971)	LOCATIVE/PATIENT	PATIENT
Quirk et al.(1972/1984)	RECIPIENT	AFFECTED
Cook (1979)	EXPERIENCER	OBJECT
Andrews (1985)	EXPERIENCER	CAUSER
Vilela(Helbig)(1986)	PORTADOR DO PROCESSO PSÍQUICO (Carrier of Psychic Process)	ESTÍMULO (Stimulus)

It is interesting how these terms reflect or reject current psychological theory on emotion. DATIVE, RECIPIENT and LOCATIVE, CARRIER (PORTADOR) or PATIENT emphasise the idea that emotions are something that happen to one, and reflect both the traditional attitude to emotion and Behaviourist theory.

Fillmore (1971) and Chafe (1971), with their proposal of EXPERIENCER, provide an interpretation which, although still recognising a somewhat passive role, suggests a measure of active recognition of whatever is felt. This term seems to have been quite generally accepted, perhaps because its slight ambiguity does not compromise the user to too strong a position on the problem.

Halliday, however, with his proposal of PROCESSOR in 1969, comes nearer the current psychological view of emotions. He refines this further in 1985 with his proposal of SENSER for the person who feels, or senses, and combines this with the notion of the verb concerned being a process verb, which is again nearer the Cognitive view of emotion. Sense can be used to imply both mental process and physical sensation.

Similarly OBJECT, PATIENT and AFFECTED roles are less satisfactory than PHENOMENON, CAUSE, or STIMULUS as explanations for the roles of S with *please* or O with *like*. It is all very well to argue a non-participatory role for picture in *He liked the picture* or *the picture pleased him*, but it is less satisfactory in cases like *John frightened Mary*, or threats in *they feared his threats*, *they were frightened by his threats* or *His threats frightened them*. If one insists on the OBJECT role for whatever causes the emotion, one must make the type of analysis made by Cook (1979: 141) in the following examples with their case frames:

(5.1) The play interested Harry. +[___O, E] E(EXPERIENCER) = OBJECT

(5.2) Harry is interested (in x). +[___E (Os)] O-deletable

He would attribute the following case frame to the example already discussed:

(5.3) John frightened Mary. +[___A,E, *O] E = object

and *frightened* with this frame:

(5.4) Mary is frightened (by x) +[___E (Os)] O-deletable

and he explains that in the third example "the AGENT role is added to a psych movement verb, and is co-referential with the OBJECT stimulus," (ibid: 140).

Halliday (1969 and 1985) is very careful in his choice of PHENOMENON as it allows him to include things both animate and inanimate which may cause emotion either intentionally or accidentally. He probably avoided CAUSE as too vague a term, or because it could lead to confusion with Causatives, and STIMULUS may have smelt too strongly of Behaviourist laboratory experiments.

Helbig, with his elaborate set of deep cases chose the terms CARRIER and STIMULUS, but perhaps he was still influenced by a more Behaviourist view of the world. Quirk et al. (1984) have opted for the same RECIPIENT and AFFECTED roles that they put forward in 1972, and EXPERIENCER and OBJECT appear frequently in linguistic literature nowadays. However, I feel that Halliday's SENSER and PHENOMENON are perhaps the most suitable terms for a more cognitivist approach.

5.2.2 The analysis of SENSER and PHENOMENON in the corpora

The data in the corpora confirm the notion that the SENSER must be either human or human-like. A distinction that could be made is that between the SENSER as identical to the Speaker, and the SENSER as observed or questioned by the Speaker. If one were to

base one's data on a purely oral corpus, it would be interesting to see the relative quantity and quality of examples describing emotion which took this distinction into account. However, one would have to decide the ratio in which psychoanalysts' introspective monologues or the psychoanalysts' reports on the same monologues should be included in the corpus.

In a corpus taken from written texts, it would be even more difficult to make an analysis with more general implications properly. With novels written in the first person, as is the case with *Great Expectations*, one might attempt a more linguistic/stylistic examination of an individual writer's focus on the emotions, by assuming the Speaker to be identical with the character in the first person, and his/her views of others to reflect a reasonable interpretation of their emotions. Alternatively, one might try an analysis in which the main character's view, for example, that of Alice in *Alice in Wonderland*, and his/her observation of the emotions of others, are adopted as the Speaker's. These techniques, however, are not so easy to apply as might appear. They do not allow for material reported by others, for direct conversation in the text, or for various forms of author's licence^[2].

Of more interest to my aims here is an analysis of the types of PHENOMENON that appear in context. As has already been pointed out, once anyone attempts to express anything about an emotion in language, a certain level of conscious appraisal is implicit in the situation. One factor which can indicate the degree of conscious appraisal involved, is the nature of the PHENOMENON to which the emotion is attributed. The way in which different lexemes, and groups of lexemes, require or reject different types of PHENOMENON can therefore be seen as an indicator of the consciously recognized nature of the emotion in question.

The PHENOMENON can be analysed by examining the syntax of the sentence. Some lexemes may imply certain types of PHENOMENON - for example, *sympathy* and *compassion* imply a feeling for another human being for some negative aspect of their lives -, and others may favour an idea of difficulty in attributing the emotion to a specific PHENOMENON - as with *uneasiness* which is usually the result of several ill-defined phenomena. Others require syntactic complementation which restricts the type of PHENOMENON available - for example, the verb *pity* does not allow (THAT) clause complementation, whereas *fear* does, and different forms of the same lexical item allow for more or less clarification of the situation.

If one takes the psychologist's viewpoint, a thorough analysis of the whole situation, or text, will eventually reveal the nature of the PHENOMENON. This will be obtained by an evaluation of the linguistically communicated information by the receiver within the limits of his/her knowledge of the world. However, the linguist must attempt to keep within the conventions of the language as much as possible, if he/she is to analyse anything in linguistic terms, and it is within these conventions that it is possible to classify the PHENOMENON as being:

1. Unknown, or unspecified in the immediate context.
2. Self, or permanent quality of SENSER
3. State or situation of SENSER
4. Emotion, perception or cognitive processes of SENSER
5. Action by SENSER

6. The Other
7. State or situation of the Other
8. Emotion, perception or cognitive processes of the Other
9. Action by the Other
10. A non-human object, concrete or abstract.
11. A complex proposition about the world

There are also a few lexemes which have been classified as nominals, the nature of which will be discussed in Chapter 8.

The classification of examples as type 1 means that the PHENOMENON is:

- a. unknown (for example: with a question like *Why is she unhappy?*" or when the lack of knowledge is explicit in the context, as in *I am depressed but I don't know why.*);
- b. not retrievable through lexical, syntactic, semantic, and pragmatic procedures;
- c. attributable to several PHENOMENA within the wider context, or to what Fridja would call a "constellation of stimuli".

Since the existence of a PHENOMENON is, however, presumed at some level, Type 1 will, in effect, absorb all those examples which are not explicable within the restraints of linguistic theory, and it accounts for 18%(E) and 21(P) of all the examples.

Type 2 is very limited, (0,9%(E) and 1%(P), but I felt it was necessary to account for those examples that refer directly to the Self, as in *He was very satisfied with himself*, or to qualities perceived explicitly as permanent, such as in *He has a happy disposition* or *Ele é feliz por natureza*. Although these examples represent different references to the Self, to further subdivide this already tiny group seemed unnecessary.

The third type, with 6,2%(E) and 5,1%(P), accounts for those examples in which the emotion can be attributed to the Senser's perception of his/her personal physical, psychological or situational state. More obvious examples of this type would be *He is happy because he is rich*, and *He hates being in prison*. However, it also includes examples which imply non-active, or stative, and RECIPIENT roles for the SENSER, as in *He is happy lying in bed* or *he loves receiving presents*.. Many of these examples include verbs described by Quirk et al. (1984 : 428 - 32) as verbs of stance as well as verbs of possessing and receiving.

Type 4 was chosen because I felt it was necessary to draw attention to the more perception based cognitive approach, and to distinguish between the more stative aspects of the situations accounted for by the previous group, and those introduced by verbs of perception or some kind of intellectual or mental process. This decision was encouraged by the fact that there was a fair number of examples such as *I was sad to hear of his death* or *I love to see the sunrise* , 4,9%(E) and 3,9%(P). This is a somewhat fuzzy area to work with as it calls into question the status of *see* as a perceptual verb or as a more active verb like *watch*. This is further complicated by the fact that Portuguese does not always make the almost obligatory distinction in English between *see* and *watch*, or *hear* and *listen*,^[3] with the verbs *ver* and *ouvir*. The solution was to include all these examples in this group. It is

ENGLISH													
ANGER	188	9	30	10	15	67	11	6	389	46	3	3	777
APPRECIATION	51	5	15	27	32	166	15	17	183	172	11		694
DISAPPOINTMENT	23		7	4	12	4	7	3	33	18	17		128
DISLIKE	8	4	19	16	21	145	5	6	69	116		7	416
DISTRESS	540	1	169	145	71	132	50	23	336	329	18	7	1821
FEAR	418	24	94	44	83	117	60	26	200	196	36	5	1303
GRATITUDE			5		1	65	1		2	5	1	2	82
HOPE	125	4	9	15	48	5	20	18	44	49	77	10	424
JOY	269	7	98	80	166	28	24	16	139	186	19	8	1040
LIKING	17	6	26	59	198	729	19	12	59	245	8	18	1396
PRIDE			82	5	20	12			10	6	1	5	141
RELIEF	12		11	19	33	17	4	3	79	40	19		237
REPROACH	3		1	1	3	123	4	3	47	15	1		201
RESENTMENT	28		3		1	55		1	34	8			130
SATISFACTION	17	3	4	6	17	2			12	23	6		90
SELF-REPROACH	2		18	32	253	11	4	5	27	19	29		400
SORRY FOR	3	3				139	23		11	10			189
Totals	1704	66	591	463	974	1817	247	139	1674	1483	246	65	9469
%s	18	0,7	6,2	4,9	10,3	19,2	2,6	1,5	17,7	15,7	2,6	0,7	
PORTUGUESE													
ANGER	294	13	37	46	77	108	20	5	540	174	4	3	1321
APPRECIATION	42	19	22	36	44	366	13	24	174	510	11	1	1262
DISAPPOINTMENT	36		2			8	1	1	11	12			71
DISLIKE	13		3	5	16	144	3	3	35	122		2	346
DISTRESS	650	21	167	135	73	141	57	12	338	604	18	11	2227
FEAR	549	19	49	30	66	116	23	7	206	269	56	2	1392
GRATITUDE			1	6	2	32			36	5	1		83
HOPE	109		12	10	20	8	1	1	14	87	39	3	304
JOY	458	16	77	58	161	63	14	4	112	208	9	3	1183
LIKING	49	5	24	60	126	1047	6	2	75	350	19	42	1805
PRIDE	19	3	128	4	17	14			9	29		1	224
RELIEF	57	3	12	19	12	37	4	2	79	41	11		277
REPROACH	1	1				88	1	1	21	31			144
RESENTMENT	86	1	18	11	2	81	8	2	47	36		1	293
SATISFACTION	28	8	14	14	16	20			17	17	2		136
SELF-REPROACH	39	1	22	11	187	19	7	2	26	47	28	7	396
SORRY FOR	6	3	1	6	3	81	28	3	19	9			159
Totals	2436	113	589	451	822	2373	186	69	1759	2551	198	76	11623
%s	21	1	5,1	3,9	7,1	20,4	1,6	0,6	15,1	22	1,7	0,6	

why the PC has 3% more examples of type 1. The striking point, however, if one examines Table 5.1 closely, is how similar the statistics for both languages are for this area. Whether this is attributable to similar linguistic or cultural factors, or to some deeper more universal situation is very debatable. Only a thorough examination of several languages from different cultures could help to indicate a solution.

5.3 The Semantics of the Verbs of Emotion

As Vilela (1992) demonstrates so succinctly, various attempts have been made by theorists of different schools to classify verbs, and each has been made from roughly one of four different points of view, which he classifies as basically syntactic, basically semantic, semantic + syntactic, and basically pragmatic.

The basically syntactic theories usually define between copular, intransitive, and various

types of transitive verbs and accumulate information on individual verbs. The more sophisticated approaches specify the forms of complementation to be found with different verbs in considerable detail, as, for example, in the classifications by Gross (1975), which have influenced analyses made by Portuguese scholars like Malaca Casteleiro (1981) and Macedo de Oliveira (1979). Ranchod (1990) is also influenced by Gross, but her analysis of pronominal structures with the Portuguese verb *estar* is influenced by the theory which attempts to analyse verbs by comparing them to the paraphrases using 'dummy' verbs to which they correspond.

Valency grammar started from a sound syntactic base, but applied notions of semantics with a view to producing a theory which was both fruitful in syntactic rules, and yet economically organised according to semantic criteria. This type of classification of the verbs was applied in grammars of which Busse and Vilela (1986) is an example for Portuguese, and Allerton (1982) for English.

Vilela classifies as pragmatic the approach by those who, like Austin and Searle, are interested in the implications of the meaning of certain verbs for speech-act theory, are concerned with notions such as truth and the propositional value of language, and classify verbs according to certain pragmatic functions, such as asserting, evaluating, or reflecting the speaker's attitude. This is a development of the type of division of language into 'cognitive' and 'emotive' types proposed by the Vienna Circle.

Although I believe that it is impossible to separate syntax and semantics in any radical way, I shall obviously be using several notions of the more syntactically based type of classification in the following chapter. Here I shall be examining the way certain linguists have classified verbs from a more semantic point of view, often taking the syntactic behaviour of the verbs they classify as a basis on which to build their semantic classification. Halliday has always encouraged this process of analysis, and his contribution particularly significant.

5.3.1 Semantic classifications of verbs and their relevance to Emotion

One contemporary thinker who contributed to the semantic classifications of verbs proposed over the last twenty years is Vendler (1967: 110-112). He drew attention to the fact that the verbs like *know* or *believe*, which are usually classified as states, become processes when used with the progressive aspect. Vendler's point of view was philosophical rather than linguistic, but, as it became clear that semantic content depended on the coordination of lexeme meaning with syntax, linguists worked from this to produce categories for English. A distinction was made between 'stative' verbs, like those described by Vendler, and 'dynamic' verbs, which referred to most verbs which, by definition, implied some idea of action. The main arguments for defining stative verbs in this way were that they typically reject the progressive aspect and the imperative in modern English.

Comrie (1976: 48) describes the stative/dynamic division as "reasonably clear intuitively", although some may prefer to make a state/action or an event/process distinction. In relation to the stativeness of perception he also writes (ibid: 35) that "different psychological theories differ as to just how active a process perception is [and] different languages are free to choose, essentially as an arbitrary choice, whether such verbs are classified as stative or not". The same comment, in a slightly more restricted form, could be extended to Emotion.

Dowty (1979: 66-7), within the field of generative semantics, classifies the stative verbs which are relevant to Emotion as:

I. STATES

C. Transitive and Two-Place phrasal adjectives

2. *proud, jealous* and *fond of*

D. Transitive verbs

1. Animate subjects : (including) *love, hate, dislike*
5. Physical perception verbs : (including) *feel*
6. Cognitive verbs with propositional objects: (including) *regret*
7. Psych-Movement Verbs *dismay, worry, please, surprise, astonish*
8. Non-extensional Objects : *need, want, desire, fear*

E. Two-place phrasal verbs

2. Psych-movement: *be pleased/astonished/dismayed* at NP: *like* NP.

These distinctions have affected analyses of the syntactic categories related to emotion. For example, the term psych-movement is used by Chomskyan theorists and fellow travellers, and much discussion has centred round the complementary relationship between the D1 and D7 verbs and the D7 and E2 verbs. Dowty's aim was to classify verbs by examining their behaviour with aspect, and it is clear that the stative verbs do not like to co-occur with progressive or habitual action.

Other attempts at the semantic analysis of verbs have been made by linguists over the last 20 years, and Quirk et al.'s (1985: 201) categorisation is well-known. They define between stative and dynamic types, the stative verbs being subdivided into quality, state and stance verbs, and the dynamic verbs being classified in terms of durative/ punctual, conclusive/non-conclusive and agentive/non-agentive. According to this theory, verbs are characteristically dynamic and adjectives usually stative. Thus, stative quality types are largely copula + adjective/noun structures, such as *be irritating*, and *be a bore*, or describe attributes as in *have two legs*. Stative State types are sub-divided into:

- a. Intellectual states - e.g. *know, believe* or *suppose*;
- b. States of emotion or attitude - e.g. *like, pity* or *want*;
- c. States of perception - e.g. *see, hear* or *feel*
- d. States of bodily sensation - e.g. *hurt, tickle* or *feel cold*.

Verbs of Emotion typically belong to the stative state category b), although when John deliberately irritates Mary, *irritate* would be considered as an accomplishment, or dynamic verb which is conclusive and durative.

One point of interest which emerges from the categories described for emotion in all these theories is that they appear alongside those for intellectual states, perception and bodily sensation. It is significant that the syntax and semantics of these lexical areas seem to have

a certain amount in common, and that they seem to be interconnected in a network of gradients of meaning and usage.

However, Halliday (1985: 101) does not draw the clear distinction between lexeme and syntax made so far, but prefers to discuss the problem we are analysing here as the "clause as representation" or in its "ideational function". He suggests that "our most powerful conception of reality is that it consists of 'goings-on': of doing, happening, feeling, being" and that "these goings-on are sorted out in the semantic system of the language and expressed through the grammar of the clause". He goes on to describe his idea of transitivity which "specifies the different types of process that are recognized in the language and the structures by which they are expressed".

Halliday, however, is very careful to avoid the stative/dynamic dichotomy and he prefers to describe the function of the verb phrase in the context of the clause as being related to different types of process. Although, in Halliday (1985), he does not develop the theme of "material process" to any great extent, his treatment of "mental processes : processes of sensing" (ibid: 106-112), which he sub-categorises as perception, affection and cognition, outlines most of the problems inherent to the lexical field of Emotion. He also draws attention to "behavioural processes" (ibid: 128-9) or "processes of physiological and psychological behaviour" which are grammatically "intermediate between material and mental processes". Verbs like *look* and *think*, as in *Don't look!* and *I'm thinking*, come towards the 'mental' end and are processes of consciousness that are being represented as forms of behaviour".

As we shall see in the next section, he associates these processes with specific participants, which others might refer to as deep cases. He also draws attention to the human nature of the SENSER with mental processes, and the wide variety of possible PHENOMENA. His attitude to the progressive aspect is that, although not impossible with these verbs, it is definitely a marked and unusual form. One further point that he makes is that the pro-verb *do* is not usually used with mental process verbs.

By avoiding the term of stative, with its static and passive connotations, and by categorising affection (or emotion) within a broad class of mental processes, Halliday's approach is more in line with current cognitive psychological theory than those of other theorists. Also, by avoiding strict definitions into fixed classes, and explicitly recognizing some form of continuous gradient between physiological and psychological processes, he allows for a more subtle semantic analysis of all these lexical areas than that afforded by the syntactically biased approaches offered by more didactically orientated theorists such as Quirk and his team. Without forgetting the wider semantic view, let us now turn to the information to be obtained from the syntax associated with the verbs and adjectives of Emotion.

5.3.2 The SENSER / PHENOMENON focusing distinction, and the classification of verbs of Emotion

The division of the lexicon of Emotion into SENSER and PHENOMENON focusing lexemes is clearly semantically based. Naturally, the theory of semantic roles of the participants can be coordinated with theories on the syntactic behaviour of the verbs. Others have described the two verb types, which appear to exist in most languages, although they vary as to their relative importance. As Talmy (in Shopen (1965: III: 99) points out, using the terms EXPERIENCER and STIMULUS:

"While possibly all languages have some verbs of each valence type, they differ as to which type predominates. In this respect, English seems to favor

lexicalising the Stimulus as subject. By contrast with English, Atsugewi roots appear to have Experiencer subjects almost exclusively".

He also points out that English used to favour STIMULUS type verbs even more and, as others have also demonstrated, like functioned earlier with a STIMULUS subject. The S.O.E.D. quotes an example as late as Wordsworth:

(5.5) "Where it liked her best, she sought her shelter".

TABLE 5.2

**Lexical groups compare for proportion of S / P focusing syntax,
and the proportion of examples which describe behaviour**

	Eng.	Eng.		Port.	Port.		Eng.	Port.	
	s focus	p focus		s focus	p focus	E>P	beh	beh	E>P
ANGER	86,2	13,8		68	32	-18,2	31,2	22	-9,2
APPRECIATION	66,7	33,3		54,8	45,2	-11,9	10,7	3,9	-6,8
DISAPPOINTMENT	70,3	29,7		87,3	12,7	17	7,8	12,7	4,9
DISLIKE	83,4	16,6		70,8	29,2	-12,6	4,1	5,5	1,4
DISTRESS	61,1	38,9		64,2	35,8	3,1	15,5	15	-0,5
FEAR	84,4	15,6		78,7	21,3	-5,7	17,7	14,8	-2,9
GRATITUDE	95	5		77,1	22,9	-17,9	8,5	21,7	13,2
HOPE	94,3	5,7		93,4	6,6	-0,9	11,3	3,6	-7,7
JOY	76,7	23,3		80,8	19,2	4,1	13,9	17,5	3,6
LIKING	95,2	4,8		86,9	13,1	-8,3	2,3	7,4	5,1
PRIDE	98,6	1,4		91,1	8,9	-7,5	22,7	13,8	-8,9
RELIEF	42,6	57,4		51,6	48,4	9	5,9	4,3	-1,6
REPROACH	87,1	12,9		88,2	11,8	1,1	37,8	40,3	2,5
RESENTMENT	93,1	6,9		88,7	11,3	-4,4	35,4	18,4	-17
SATISFACTION	67,8	32,2		69,1	30,9	1,3	17,8	14	-3,8
SELF-REPROACH	92,7	7,3		77,3	22,7	15,2	4	3,8	-0,2
SORRY FOR	86,8	13,2		77,4	22,6	-9,4	8,5	15,7	7,2
average group total	81,3	18,7		76,8	23,2	2,7	15	13,8	1,2

Both English and Portuguese have a limited number of SENSER focusing verbs, although there is wider variety of PHENOMENON focusing verbs. Despite the restricted variety of SFoc verbs, however, they are more important quantitatively, and, as Table 4.2 shows, only 5%(E) and 9,5%(P) of the examples were of PFoc verbs whereas SFoc verbs accounted for 19,2%(E) and 14,1%(P). This is particularly true for the EC where the difference is of 14,2%(E) as against one of 4,6%(P). It is also significant that different emotion groups vary considerably as to the percentage of SFoc or PFoc verbs they include. The Hope group in the corpora, for example, has only a few rather doubtful examples of *excite* to show as PFoc here, and the examples for the Desire group are also minimal. Other groups, like Anger, Gratitude and Joy have few or no examples of SFoc verbs.

However, if we add to these percentages those for the PFoc adjectives, the percentages change again. Many of the PFoc adjectives in English, for example, are formed by adding -ING to the infinitive form, as in *alarming*, *depressing*, *irritating* and *disgusting*. In Portuguese, one also finds adjectives derived from PFoc verbs ending in *-ante/ -ente*, as in *alarmante*, *deprimente* and *irritante*. These adjectives emphasis the SENSER's evaluation of the emotion-provoking quality of the PHENOMENON, rather than the latter's active involvement in the emotion. In the EC these adjectives outnumbered the PFoc verbs by 2 to 1, 10%(E) as against 5%(E), but the PC showed that the PFoc verbs and adjectives

together carried almost equal importance, 9,5%(P) and 9,9%(P) respectively.

However, the combined percentages of PFoc verbs and adjectives still only account for a relatively small proportion of the overall lexical/semantic scheme of the different groups, 15%(E) and 19,4%(P) and a fair number of the adjectives included here are not even related to PFoc verbs. Why, then, has so much attention been given to the PFoc verbs? It is because some of lexical groups show high proportions of SFoc past participles that are derived from these verbs, as in *alarmed*, *satisfied*, *annoyed* and *alarmado*, *satisfeito* and *zangado*, 8,8%(E) and 11%(P), not to mention related nouns like *alarm*, *satisfaction* and *annoyance*, or *alarme* and *satisfação*.

Although the difference between SFoc and PFoc verbs and their related adjectives, participles and nouns is much the same in English and Portuguese, the two languages differ in the way they use certain structures within these patterns. The possibilities of phrase-making with two lexemes, with similar meanings in both languages, show that, although there is only one small difference in the first set of phrases, the second shows more:

• adore	>	adorar
• be adorable	>	estar/ser adorável
• be adored	>	ser adorado
• with adoration	>	com adoração
• in adoration	>	?
• alarm	>	alarmar
• be alarming	>	ser alarmante
• be alarmed	>	estar alarmado
• feel alarmed	>	sentir-se alarmado
• look alarmed	>	parecer alarmado
• sound alarmed	>	parecer alarmado
• become alarmed	>	?tornar-se alarmado
• ?end up alarmed	>	ficar alarmado
• ?	>	andar alarmado
• ?	>	alarmar-se
• with alarm	>	com alarme
• in alarm	>	?

Neither of these lexemes allows *ter* + noun, or *estar com* + noun constructions in Portuguese, but they should also be considered. Before moving on to an analysis of the

problems of how these constructions influence the data on the corpora, it is necessary to consider the SFoc / PFoc distinction in relation to lexemes which do not have such a distinction built in to the morphology of the lexical form.

A fair number of these lexemes can be described as adjective/noun pairs with no related verbs. Perhaps one of the best examples of these are *happy/happiness*, and *feliz/felicidade*. Common sense analysis will suggest that *happiness* and *felicidade* are emotions and that those people who experience them are *happy* or *feliz*. There is a tendency for these adjectives to appear frequently in sentences like *he is happy* or *ele é/está feliz* which allows for their classification as SFoc adjectives.

However, one sometimes finds that these adjectival forms appear qualifying something, usually an event or a mental process, which made him/her happy, or as qualifying the behaviour of someone presumed to be happy. We therefore find *a happy day*, *um dia feliz*, *a happy memory*, *uma lembrança feliz*, and *a happy smile*, *um sorriso feliz*. In the cases which describe something which made the SENSER *happy*, an PFoc classification has to be applied, although it is recognized that the adjective is not describing any essential quality of the PHENOMENON described, because the same event, objectively analysed, may have happy consequences only for the SENSER. What was *a happy day* for the winner of a race would be viewed quite differently by the losers. This demonstrates quite clearly how emotion-provoking qualities are projected by the SENSER on to the PHENOMENON.

In these days, when it is recognized that any analysis of an event or behaviour is dependent upon the observer's (Speaker's) subjective interpretation of the event or behaviour, I suppose one must accept that the Speaker's evaluation *John gave me a happy smile* does not necessarily imply that John was happy. However, common sense and good faith will normally allow one to interpret a happy smile as meaning that the person who smiles is happy. On this basis, these examples have been classified as SFoc, but have also been marked in the corpora for BEHAVIOUR. Other examples marked for BEHAVIOUR are the SFoc adverbs and examples in which SFoc nouns appear in adverbial phrases describing behaviour, as in *an expression of happiness*, and the average percentage of behaviour examples in the different groups is 15%(E) and 13,8%(P), as can be seen in Table 4.3. However, percentages vary considerably, from between 2,3 to 40,3% in the different groups, for reasons which will be analysed in due course.

On certain occasions it is difficult to classify nouns as SFoc or PFoc. In the example:

(5.6) His habit of practising the violin after midnight is an irritation to his neighbours.

an PFoc interpretation of *irritation* is normal, and in:

(5.7) His neighbour's irritation at his habit of practising the violin after midnight led them to complain to the police.

irritation is SFoc, but in the example:

(5.8) His habit of practising the violin after midnight is a source of irritation to his neighbours

TABLE 5.3

Syntactic groups as proportions of examples in corpora

ENGLISH

PORTUGUESE

	No. of eggs	%	No. of eggs	%
		total		total
S-adj-att	513	5,4	473	4,1
S-adj-pr	1240	13,1	671	5,8
S-pp-att	126	1,3	341	2,9
S-pp-pr	704	7,4	939	8,1
Sbeh-adv	520	5,5	248	2,1
S-noun	2522	26,6	4135	35,6
S-verb	1808	19,1	1492	12,8
S-verb-se	12	0,1	157	1,4
Nominals	72	0,8	76	0,7
S-focus total	7517	79,4	8532	73,4
P-adj-att	657	6,9	824	7,1
P-adj-pr	290	3,1	327	2,8
P-pp-att	13	0,1	74	0,6
P-pp-pr	41	0,4	76	0,7
P-adv	93	1	46	0,4
P-noun	378	4	630	5,4
P-verb	454	4,8	778	6,7
P-verb-se	26	0,3	336	2,9
P-focus total	1952	20,6	3091	26,6
TOTAL	9469		11623	

the position is not quite so easy. Although source takes the immediate PFoc analysis, *irritation* is still related to the neighbours, or SENSERS, by the preposition *to*, with its causative implication, and this prevents a clear SFoc analysis. On these occasions decisions were taken on an ad hoc basis with reference to the context. I cannot claim to have solved every problem satisfactorily, but since only a tiny minority of nouns are affected, any misjudgements will hardly upset the general balance of the statistics in the corpora.

[1] One cannot compare *being lovable* to its apparent Portuguese cognate *ser amável* because *amável* corresponds more to the idea of consciously *being pleasant* or *agreeable*, and is therefore used more in the context of behaviour.

[2] I carried out this type of analysis on texts early in my research, and concluded that one could use it to analyse individual tendencies to express or describe emotion. However, any results would be of more psychological, or literary, than linguistic interest.

[3] In English, *see* and *hear*, and other verbs of perception like *taste*, typically refer to what is seen as involuntary perceptual process. *Watch* and *listen* describe the voluntary use of the perceptual processes. This distinction is not always made with *ver* and *ouvir*, as can be seen in the examples *Está a ver o jogo na televisão* (*He is watching the game on television*) or *Está a ouvir as notícias* (*He is listening to the news*). This type of example is common, although the verbs *olhar* and *escutar* exist to translate the deliberate use of perception expressed by *watch* and *listen to*.

CHAPTER 6

SENTENCE PATTERNS AND THE VERB PHRASE OF EMOTION

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6.1 Introduction

In this chapter I shall look at how the Emotion lexemes behave as verb phrases in the sentence patterns which are recognized in the two languages, and look into the syntactic gradients between these patterns and the implications this has for the semantics of the verbs of Emotion. It is also important to see which syntactic structures coincide with the semantic notions SENSER and PHENOMENON.

Most theories of syntax agree that there are certain basic sentence structures underlying even the most complex of texts and that the verb phrase plays a key function in determining these structures. The metalanguage used to describe these structures varies occasionally, but I prefer to use the terminology usual in functional-systemic grammar. However, I shall also use the metalanguage of Quirk et al (1985) to describe certain facets of the problem.

6.2 Basic Sentence patterns

Accordingly, it is understood here that all well-formed sentences in English can be described in terms of S, P, Od, Oi, Oprep, Cs, Co, Cp, and Adj, Disj and Conj, although the last two are essential elements^[1]. These elements can be described as Verb, Noun, Adjective, Adverbial phrases which, in their turn, allow for a certain complexity and tend to form set patterns. The elements can be combined in a limited variety of ways, and English grammarians usually accept the following combinations as basic sentence patterns: SP, SPOiOd, SPOdOprep, SPOprep, SPOdCo, SPOdCp, SPOdA, SPCs, SPA, and SPCp. This list is longer than some, but that is only because other theories see some patterns as variations on others. In this chapter I shall look at those patterns and sub-patterns which are relevant to the Emotion lexicon, and draw comparisons with Portuguese, and with theories on Portuguese grammar, as and when necessary.

The elements that occur in these sentence patterns are considered to be obligatory insofar as each pattern is concerned, although adverbial phrases are usually considered syntactically optional. However, I believe that it is possible and, at times, necessary to argue for an obligatory < - > optional gradient to allow for the semantics underlying apparently similar syntactic structures.

The SENSER will normally be a person, or personified thing, and this means that it normally appears syntactically as a simple noun phrase. On the other hand, PHENOMENON, given its varied nature, will appear in all manner of syntactic forms. Although a syntactic description of the way Emotion verbs fit into the basic sentence patterns is not intended to favour the SENSER as Subject, or the PHENOMENON as Object, this is what tends to happen naturally. This can be explained in part because the simpler noun phrase occurs more easily as the Theme of the sentence, as described by Halliday (1984) and Quirk et al. (1985). It is also partly because the psychological centrality of the SENSER, makes it more normal, and unmarked choice as Theme.

6.3 Prepositions and their complementation

A perennial problem in the linguistic analysis of English, and other languages, is that posed by the prepositions and their complementation. These structures proliferate in those languages which dispense with inflections, or case marking, to define the type of relationship which students of Latin, we learnt to call dative, genitive and ablative.

The more reductionist type of sentence structure analysis prefers to classify verbs followed by prepositions as complex verb forms - as in *She looked after her son* (meaning *She cared for her son*), giving an SPOd analysis, and *She looked at her son* would be given an SPA analysis. However, it seems that the creation of the notion of the prepositional Object has been chosen as a way of avoiding argument when the greater or lesser idiomaticness of a phrasal prepositional verb causes problems.

The SPOO structure has also caused problems. Sentences like *John gave Mary the book* have always been interpreted as SPOiOd structures, and the analysis SPOdOi was extended to the sentence *John gave a book to Mary*. However, examples like *John got Mary a book*, which could give *John got a book for Mary* caused some doubts, and some people now prefer to consider *to/for Mary* as prepositional Objects.

Phrasal and, more frequently, prepositional verbs were found in the corpora and, although phrasal-prepositional verbs are rare, one of them, *look forward to*, fits into the Hope group, another, *look down on*, belongs to the same group as *despise*. The examples were tagged as verb + preposition + complementation, and 150 examples were found for the EC. The corpus appears to provide the oddly large number of 436, but the vast majority, 364, are accounted for by *gostar de*.

Portuguese linguists may fail to understand why English linguists worry so much about prepositions, and this whole affair of the phrasal and prepositional verbs. In the first place, although many verbs in Portuguese do attract certain prepositions, the situation is by no means as complex as in English. Many phrasal or prepositional verbs in English require Portuguese translations which either do not require a preposition, or resort to alternative structures like + noun, *estar com* + noun, or, in some cases, a -SE type verb. As to the type of question used to analyse the differences between these varieties of verbs in English, Portuguese has an alternative to separating the prepositions from the verb to form a question. Whereas in English speakers would now consider a question like *To whom are you talking?* to be acceptable only in formal English, and will prefer the more informal *Who are you talking to?* Portuguese has only the more formally structured equivalent, *A quem (é que) estás a falar?*

As far as adjectives are concerned, Quirk et al.(1985: 16.68) are careful to point out that although certain adjectives seem to "form a lexical unit with a following preposition", as with *fond of* and *afraid of*, one should not forget that other adjectives can function with prepositional complementation, as with *angry*, or combine with more than one preposition in *angry about*, *angry at* and *angry with*. The functions of adjectives as attributive or predicative will be discussed, as will the SPCs structures in sentences such as *James is fond of / angry with Jemima*, in which *Jemima* is syntactically classified as a prepositional complement.

6.4 SP Sentences

The semantics of both SFoc and PFoc verbs, in which a SENSER and a PHENOMENON must exist, would seem to indicate that these verbs are essentially transitive. For example:

(6.1) "Whoever loved, that loved not at first sight?" (Shakespeare, *As You Like It*.)

may seem syntactically intransitive but a native speaker will understand that a PHENOMENON is implied. Emotion lexemes, like *sulk*, *gloat*, and *panic*, that act intransitively, include the notion of the SENSER's behaviour as in:

(6.2) "Suppose he panicked and tried to make a bolt for it?" HF

Even with these examples, though, it is not difficult to point to a PHENOMENON which is either psychologically recoverable, or actually in the context.

These examples were classified on the basis of their actual appearance, or surface structure in the text. However, if, for example, the sentence *He despaired* appears in isolation after a lengthy explanation of why he might despair, yet with no specific linguistic structure to act as a reference for an Object, one has to allow this as an example of intransitivity. Despite this apparent syntactic independence, however, intransitive verbs rarely function without some form of 'optional' adverbial, or pragmatic back-up in the surrounding text.

My original hunch that this sort of structure was rare in English was borne out by the data from the EC which registers 106 examples, or 5,8%(E) of the SFoc verbs. Of these examples, 10 were of *worry*, most of them negative imperatives, *Don't worry!*, 10 of *suffer*, and 22 of rather marginal examples of the more intellectual-type verbs *approve*, *object* and *disapprove*. Of the remaining 44, most, like *rage*, *mourn* and *fret* behaved like *panic*, and most can appear with prepositional complementation which shows that this type of complementation is near to that of intransitive verbs in the intransitive < -- > transitive gradient. There were also 10 examples (2%(E)), of the PFoc verbs. They involved verbs like *hurt* and *please* and were usually used intransitively because the SENSER was understood as undefined or potentially several. The examples left once the examples quoted have been discounted are truly marked examples.

The PC proved to be richer in these structures, with 168 examples, or 9,4%(P) of the S verbs, and 37 examples, or 3,2%(P) of the PFoc verbs. *Sofrer* accounted for 38 examples *calmar* and *sossegar* for another 38, over half of which were imperatives which might translated by *Calm down!* or *Don't worry!* *Amar* yielded the surprisingly high score of 24 points to an aspect of this verb which is different from *love*. As with the EC, several of other examples imply the behaviour resulting from the emotion, as with *exultar*, *triumfar pasmar*.

Despite the fact that many of the PC examples can be explained, or explained away, v similar arguments to those used for English, there is no doubt that a fair proportion of examples are very close to others which take a final -SE, and most of the verbs that func like this can use both structures. The simple and -SE structures considered together consti a numerically important group which will be analysed in the section on the -SE pronoun.

6.5 SPCs sentences

Before proceeding to look at the SPCs structures in both languages, it is necessary to exan the different copulas that can function in these sentences.

6.5.1 Copulas

According to Quirk et al. (1985 : 16.21):

"a verb is said to have COPULAR complementation when it is followed by a sub complement or a predication adjunct and when this element cannot be dropped with changing the meaning of the verb".

They subdivide copular verbs into current and resultative types, the former referring to a sta situation, and the latter to the process leading to that situation. Downing and Locke (1993: 9) make a similar distinction between 'verbs of being' and 'verbs of becoming'. However, le begin by looking at the most typical copula in English, *be*, and its equivalents in Portuguese

In English, the most important copula is *be*, but it has other functions and can probably considered the most versatile verb in the language. Syntactically it acts as a cop functioning in the present and imperfect (in the classical, and Portuguese *Imperfeito*, sen has present and past participles, and is used to form the progressive aspect and the passive can also be used occasionally as a lexical verb, meaning, roughly, *exist*. Semantically it h long history. *Be* and *being*, and other members of the family in other languages, have been subject of much philosophical discussion since the Greeks. More recently, Russell (1903) discussed the implications of *be* for logic, others have explored its origins and function Indo-European languages, and its salient position in these languages has been compared to non-existence, or only fragmented existence, in other languages, like Chinese and Arabic research geared to both linguistic relativism and universalism.

Kahn (1973) and (1986) has taken a particular interest in the function of *be* as a copula, w he claims is the most important use of *be*, although his claim is ostensibly made for the Gr *einai* and Indo-European *ES- rather than the English *be*. This does not mean that he ign its existential uses, as in *There is...* sentences, or its veridical uses, to defend or refute mat of truth. Where others have seen the different uses of *be* as proof of its weakness, K (1986: 4) suggests that:

"the absence of a separate verb 'to exist' [in Greek] and the expression of existence truth (plus reality) by a verb whose primary function is predicative will have provi an unusually favorable and fruitful starting-point for philosophical reflection on

concept of truth and the nature of reality as an object of knowledge".

Although he himself is no defender of strong linguistic relativism, he would agree with those who see the notion of *being*, peculiar to Indo-European languages, as fundamental to much Western philosophy.

It is not my purpose to enter into the more philosophical discussion of *be*, but one point Kahn's that did attract my attention in his discussion of the copular *be* is the distinction he makes between its syntactic and semantic functions. His argument is against those who, based on their theories on languages which dispense with the copula, as in:

(6.3) John (is) a man.

Some might claim that the introduction of *be*, historically, was basically a syntactic device to fill what was felt to be a space, and that, as such, *be* is empty of meaning. He counter-argues this view with the following examples like:

(6.4) Margaret IS clever, I tell you!

(6.5) The cat IS on the mat after all.

where the emphatic use of *be* underlines its veridical, or truth based semantics. Like I said therefore, I shall assume a certain assertion of truth to be implicit in copula constructions with *be*, particularly when comparing *be* with other copula-type verbs which have more specific semantics.

English monolinguals who are not philosophers must be forgiven for feeling that, if they say something *is* the way (all possible information on the subject suggests) that thing *is*, it *is* *be* so. The Portuguese monolinguals have at least an option between the more permanent and more temporary or transitory *estar*, to form a gradient for their beliefs. This point is of particular relevance to the semantics and syntax of Emotion.

The differences between *ser* and *estar*, particularly in relation to their use as copulas, have been discussed in considerable detail for both Portuguese - Casteleiro (1981), Carvaz (1986), Ranchod (1990), and Spanish - Ruiz (1977), Luján (1980), Vaño-Cerdá (1982), Ballesteros (1988), but I can give no more than the general rules here. The existential veridical functions of *be*, described above, are usually attributed to the Portuguese *ser*. As an auxiliary, *ser* is used to form the type of passive described by Quirk et al. (1985: 3.75 central). However, whereas *be* combines with the -ING form of the verb to provide the progressive aspect, with its durative and Imperfect semantics, *estar* combines with either the infinitive in Portuguese, or the -NDO form in Brazilian, for roughly the same effect. The progressive aspect typically refers to a temporary and transitory situation, hence the use of *estar*.

As a copula, *ser* is nearly always used when the Complement is a noun, so sentences like:

(6.6) John is a man / a rich man / a criminal.

will translate as:

(6.6) *O João é um homem / um homem rico / um criminoso.*

although examples in which the Complement is a profession will typically drop the article as in:

(6.7) John is a doctor / pilot / lawyer.

(6.7) *O João é médico /piloto / advogado.*

When the Complement is an adjective, both *ser* and *estar* can be used, depending on semantics of the adjective. If a quality adjective like *alto*, *azul* or *feito de pedra* - *tall*, *blue* or *made of stone* - is being used, *ser* will be chosen. Even if the quality is transitory in reality and only relevant to a very limited world view, providing it is seen as a quality, as with *lir irritante* and *aterrorizante* - *beautiful*, *irritating* and *terrifying* - *ser* is the appropriate copula. However, when the adjective refers to a non-inherent state rather than a perceived inherent quality, *estar* will act as copula. As Casteleiro (1981 :208) puts it:

"...os adjetivos seleccionam SER, quando a qualidade ou característica por ela expressa fosse encarada como inerente (intrínseca ou permanente) ao SN sujeito. Pelo contrário, os adjetivos seleccionariam ESTAR, quando a qualidade ou característica por eles veiculada fosse considerada como accidental / extrínseca ou ocasional".

For example, *lindo* or *beautiful*, if viewed as temporary as in:

(6.8) Tu estás linda hoje. Onde arranjaste este vestido?

(6.8) *You're looking beautiful today. Where did you get that dress.*

will be used with *estar*. Naturally, once linguists begin to talk of states it is not long before they come up against Emotion. One can say that the PFoc adjectives, which usually describe emotion-producing quality attributed to the PHENOMENON by the SENSER, will generally co-occur with *ser*, as in *Ele é muito irritante* and *Ela é admirável*, but that SFoc adjectives and particularly past participles, will tend to appear with *estar*, as in, *A Ana está muito triste.*, or *Ele está muito zangado/aliviado.*

However, it is not easy to make a rule about these adjectives. With those cases of adjectives that can describe both the state of the SENSER and the quality of the PHENOMENON, like *triste* and *feliz* - *sad* and *happy*, it is probably true to say that when the adjective functions in a PFoc way, it will take *ser*, as in:

(6.9) E é triste que te custe tanto a perceber o que manda o senso. M

However, the corpus suggests that, as SFoc adjectives, *triste* and *feliz* can take either *ser* or *estar*, as in:

(6.10) E Carlos, beijando-lhe devagar os olhos, o cabelo, dizia-lhe quanto era feliz quanto a sentia agora mais sua entre estes velhos muros de quinta, que a separavam do resto do mundo... M

(6.11) Ela reconhece: parecia outro homem. Tinha precisão no dizer e era feliz naquele momento. BA

(6.12) Disseram todos: grande golo! Os meus joelhos roçaram no saibro, e ficaram sem sangue mas eu estava feliz: grande golo! SU

It is difficult to attribute the choice just to the length of time in question, but perhaps *ser* refers to something that is felt perhaps more deeply.

This is an area where the grammatical rules do not describe the actual patterns of usage of the verbs in context. The English native speakers' intuition that *be* has some truth-assertive function is understandable when one sees that *be* is to be found with 82,9% of the PFoc examples, 79,1% of the SFoc ones. The remainder are distributed between other copulas, 7,1% for PFoc examples and 12,6% for SFoc ones, and zero copulas, or where the copula has disappeared through the process of ellipsis, 10% for PFoc examples and 8,3% for SFoc ones.

In the PC the situation is very different, as can be seen in Tables 6.1(a) and 6.1(b) As might be expected of adjectives describing qualities, 53% of the PFoc examples use the copula *ser*, only 1,6% use *estar*. However, 35,1% of the PFoc examples have no copula. With the S examples, 6,1% of the examples use *ser*, and 8% *estar*. This is not a significant difference particularly if one notices that, among the other copulas, *ficar* stands out as occurring at 7,4%, almost as many as *estar*. But the most interesting point is that 66,9%(P) of the S examples use no copula at all.

TABLE 6.1 (a)

ENGLISH - The Copulas and Copula-type verbs

Copula	s-a	sbeh-a	s-pp	sbeh-p	total	%		p-a	p-pp	total	%
zero copula	62	9	82	14	167	8,3		30	5	35	10
BE	937	22	600	25	1584	79,1		252	39	291	82,9
Copula-type											
APPEAR			2	3	5			1		1	
BECOME	12		11	1	24	1,2		3		3	
CALL	1							1		1	
COME	1			1	2						
DEPART			1		1						
DIE	1				1						
FEEL	52		29		81	4,1					
FIND			1		1			6		6	
GET	8		9		17						
GO	1		3		4						
GROW	3		2	1	6						
LIE	2				2						
LOOK	9	18	4	14	45	2,2		6		6	
REMAIN			7		7			1		1	
REST			1		1						
RETIRE				1	1						
RING								1		1	
SEEM	4	10	13	9	36	1,8		4		4	
SIT	1	2	2	1	6						
SOUND	1		1	4	6			2		2	
STAND				2	2						
TURN	3				3						
Total copula type	99	30	86	37	252	12,6		25	0	25	7,1
TOTAL	1098	61	768	76	2003			307	44	351	

There are various reasons that could be suggested for this lack of copulas, and perhaps one of the more important ones is the general difference in behaviour between English and Portuguese adjectives that will be discussed below. It is also possible that a spoken corpus would produce fewer examples of this kind, and that some may be examples of ellipsis prompted by stylistic notions of linguistic economy in written Portuguese. However, it is unlikely that such a large percentage can be attributed entirely to these factors.

I confess that I had hoped that the corpus would give me more substantial evidence for a hunch that *ficar* competes with *estar* as a copula with Emotion lexemes in these situations, it does not help to be reminded that, with the zero copula examples, some sort of copula exists at a deeper level where ellipsis has not taken place. However, I should like to challenge a Portuguese native speaker to go through all the examples and decide where *estar* or *ficar* would be more suitable in the expanded version. My attempts at this sort of exercise have indicated that few of the examples would accept clear-cut decisions, and most of them would

need to refer to the situational context to obtain a satisfactory result. In any case, Portuguese speakers (or writers?) obviously do

TABLE 6.1 (b)

PORTUGUESE - The Copulas and Copula-type verbs

Copula	s-a	sbeh-a	s-pp	s-beh-pp				p-a	p-pp	total	%
zero copula	322	91	550	144	1107	66,9		115	20	135	35,1
SER	68	7	25	1	101	6,1		156	48	204	53
ESTAR	69	1	63		133	8,1		6		6	1,6
Copula-type											
ABALAR		1	1		2						
ACHAR			1		1			6		6	
AFIGURAR								1		1	
AGUENTAR		1			1						
ANDAR	8	2	8	1	19	1,2			1	1	
APARECER				1	1						
APRESENTAR	1				1						
BRINCAR	1				1						
CAIR			2		2						
CAMINHAR			1		1						
CHEGAR	1			1	2						
CHORAR			1		1						
CONHECER	1				1						
CONTINUAR	1		2		3						
CORRER		1			1						
DESCER			1	1	2						
ERGUER-SE		1			1			1		1	
ESTACAR				1	1						
EXCLAMAR		2			2						
FICAR	25	2	95		122	7,4		2	1	3	
FICAR-SE	1	1	1		3						
FUGIR			5		5						
IR	6	1	2	1	10	0,6			1	1	
IRRADIAR								1		1	
MANTER	1				1						
METER	1				1						
MORRER	1				1						
MURMURAR			1		1						
OLHAR			3	2	5						
OUVIR			1		1						
PARAR				1	1						
PARECER	5	8	14	12	39	2,4		19	1	20	
PARTIR	1				1						
PASSAR	1				1						
PERMANECER	1		1		2				1	1	
PREFERIR									1	1	
QUEDAR	1		1		2						
RETIRAR-SE	1				1						
SABER	1				1						
SAIR	1		2		3						
SENTIR		7	2	1	10	0,6					
SENTIR-SE	7		25		32	1,9			1	1	
SEPARAR-SE			1		1						
SORRIR	1	1	1		3						
TER-SE			2		2				1	1	
TORNAR	1				1						
VER								1		1	

VIR	2		9	2	13	0,9		1		1	
VIVER	3				3						
VOLTAR	2		2		4						
Total copula-type	76	28	185	24	313	18,9		32	8	40	10,4
TOTAL	535	127	823	169	1654			309	76	385	

not feel the necessity to *be (ser or estar) feliz or triste*, that the English speaker does. I am inclined to believe, with Kahn, that these verbs are not mere space-fillers, but have some kind of meaning, however small, I find this significant. The fact that the SFoc examples of this type are almost twice as numerous as the PFoc ones encourages me in this belief. However there are several other factors that have to be considered before the situation can be clarified further. Let us start by looking at some other verbs which are considered to function as copulas.

If such an apparently primary copula as *be* can be seen to diversify into two copulas in Portuguese, it is hardly surprising that the secondary copulas should also show different behaviour. I shall select the more relevant items from Quirk et al. (1985: 16.21) 's list as a starting point, add a few self-explanatory examples within the limits proposed, and suggest suitable translations, before going on to look at other copula type verbs in Portuguese.

Current copulas

(i)

- be (friendly) > ser (simpático)
- be (happy) > ser /estar (feliz)
- be (angry) > estar (zangado)

(ii)

- appear (happy) > parecer (feliz)
- feel (annoyed) > sentir-se (irritado)
- look (anxious) > parecer (ansioso)
- seem (very restless) > parecer (muito agitado)
- sound (surprised) > parecer (surpreendido)

(iii)

- remain (uncertain) > ficar /permanecer(na dúvida)
- keep (silent) > ficar / manter-se (calado)
- stay (motionless) > ficar (quieto)

Resulting copulas

(iv)

- become (green) > ficar (verde)
- become (aggressive) > tornar-se (aggressivo)
- end up (happy) > ficar (feliz)
- get (annoyed) > ficar (zangado)
- grow (tired/ old) > cansar-se / envelhecer
- prove (rather useful) > ?*resultar (bastante útil)
- turn out (fortunate) > acabar (bem)

Parecer would seem to have to cover the differentiated copulas in English which normally refer to what the Speaker deduces from external clues - facial expression, tone of voice, general behaviour - about someone else's internal feelings, a point which is relevant to Emotion. There is no resultative copula in Portuguese quite like *become* or *get*, which focus on the process + the end result. All the resultative copulas in English, however, seem to include a certain notion of process, and do not just focus on the end result, or state. Emotive states in English will therefore use *be* to describe the end result, while Portuguese prefers *ficar*. *Ficar* is not easy to compare to any one verb in English, as it has a fairly wide range of meaning. Although one can make *ficar* refer to the *becoming* process by using it with the progressive aspect, as in:

- (6.13) Estou a ficar velho. A.
 (6.13) I must be getting old. A. Tr.

ficar essentially refers to the result, not the process. The process emerges semantically from the progressive aspect here. With a place adjunct, *ficar*, as a lexical verb, has the meaning of *stay*, as in:

- (6.14) Quando vou a Londres, fico em casa de uma amiga.
 (6.14) When I go to London, I stay at a friend's house.

and this stativeness allows it to translate *remain*, *keep* and *stay* as copulas, but prevents it from referring to the process leading to these situations.

The only copula which approaches *become* or *get*, in the sense of referring to the process + result is *tornar-se*. However, it seems to be restricted to more marked or abnormal situations, as in:

- (6.15) Torna-se agressivo quando bebe demais.
 (6.15) He becomes aggressive when he drinks too much.
 (6.16) Tornou-se mais velho, devido à doença.
 (6.16) He has aged a lot because of illness.

and it is, at best, unusual, to use it with the notion of natural aging, for example. *Become* does not fit easily with Emotion adjectives, unless the emphasis is on the result, and even then the possibilities are limited, as in:

- (6.17) Jack became angry when I reminded him that he owed me money.

but not in:

(6.18) *Mary became happy when she heard the news.

Tornar-se is even less acceptable, but *ficar* perfectly acceptable, as it refers essentially to end result, as in:

(6.19) a) *O João tornou-se furioso quando lhe lembrei que me devia dinheiro.

(6.19) b) O João ficou furioso quando lhe lembrei que me devia dinheiro.

(6.20) a) *A Maria tornou-se feliz quando soube as notícias.

(6.20) b) A Maria ficou feliz quando soube as notícias.

Both *parecer* and *ficar* occur quite frequently with Emotion words, as can be seen in Table (b).

There are other verbs in Portuguese which can be used as copulas, but one must be careful because this is not their only function, and, apart from being used as lexical verbs, they are considered to be auxiliaries by some authorities. Examples given in Mateus et al. (1983: 1) are *andar* and *continuar*, which seem to convey a meaning of *be* + duration/continuity as in

(6.21) O João anda / continua adoentado.

(6.21) John has been / is still ill.

but they can only occur in relation to the temporary situations, not permanent qualities of individuals. They are occasionally associated with states of Emotion because of their temporariness, and are interesting in that they allow a dimension of duration of Emotion which is easy to achieve in English. The example, *Andam zangados desde a semana passada*, is best translated by *They haven't been on speaking terms since last week* than *They have been angry since last week*. *Continuar* is probably more easily translatable by adverbs like *still*, as *Continuam zangados*, which is probably best translated as *They are still angry with each other*.

Casteleiro (1981: 136) mentions further 'para-' or 'pseudo-copulativas' like *ir*, *vir*, *partir*, *vol*, *entrar*, *sair*, *cair*, *viver* and *morrer* (translatable as *go*, *come*, *leave*, *return*, *enter*, *go out*, *live* and *die*). Their behaviour does not seem to be well-documented but, like others noted by Quirk et al., most seem to be severely restricted as to the adjectives they can co-occur with. This can be seen in the following examples:

- *ir* feliz > go away happy
- *cair* morto > fall down / drop dead
- *morrer* feliz > die happy

As can be seen from Table 6.1 (b), I have included rather more verbs as sub- or *poter* copulas, particularly for the PC. The total percentage of examples using these copulas in EC amounts to 7,1%(E) for PFoc examples and 12,6%(E) for SFoc ones. In the PC, the PFoc examples amount to 10,4%(P) and the SFoc ones to 18,9%(P). As should be expected, the copulas cited above claim the large majority of these examples. The few that remain are interesting, although I am not presenting a strong claim for their status as copulas, particularly those with -SE complementation.

The adjective and past participle data for the EC contain several references to verbs + Ob complementation which are not considered SPCs structures, but rather SPOdCo ones of the *made her happy* variety, and the same can be found for the PC with verbs like *faz*. However, there are also several verbs with -SE that can hardly be considered SPCs structures. The explicit -SE in *Considerou-se feliz* can actually translate as *He considered himself happy*.

and *Tornou-se feliz* as *he made himself happy*. Just because English usually avoids the -SE pronoun here does not mean that the use of the -SE one in Portuguese may be explained as unnecessary. *Sentir-se* is included in this list because it seems to translate *feel* but marked ?? because I have doubts whether this classification is valid. For years I have corrected my Portuguese students' sentences **I feel myself happy* to *I feel happy*. Yet they insist they feel a need to refer to themselves in a way that transcends mere grammar, and I believe that there is a strong case here for considering these examples with *sentir-se* SPOC ones with the -SE or SELF acting as Od.

There are still one or two -SE verbs, like *erguer-se* and *separar-se* in the list and a certain number of verbs of movement often used intransitively, like *ir* and *vir*, and others of state like *parar*, *quedar* and certain senses of *ficar*. Similar notions can be found with the examples *depart*, and *lie* and *sit*. These examples were all recorded because they are followed by adjectives or participles. I am careful to say 'followed' and not 'complemented'. The type of example to be found is:

(6.22) Os seus olhos contentavam-se em adejar sobre a cabeça dos dois pequerruchos, que vinham para a sua beira traquinar. Acocorados no tapete, brincavam felizes e descuidadosos com as coisas mais inverosímeis. AQ

I am sure many linguists will immediately say that there are two underlying propositions here: *os pequerruchos brincavam* (intransitive use of *brincar* - *the children were playing*) and *estavam felizes* (or SPCs structure - *they were happy*). I would agree, and I would further point out that this sentence can only be translated either as *the children were playing happily* or *the children were happy playing*, which, if analysed, only serve to corroborate this. The Portuguese one need not even add any words to make this meaning clear. One could add a comma, or read the sentence with a certain intonation, to give *Acocorados no tapete, brincavam, felizes e descuidadosos com as coisas mais inverosímeis*. Many similar examples were excluded precisely because the comma existed. The fact remains that the examples recorded did not use this comma, and it is perfectly possible to read most of them with the same intonation as one would use with *estavam felizes*, which nobody would argue about. If one considers that such examples are acceptable, this allows one to argue that they be considered some sort of gradient between intransitive, or SP, and the SPCs structure proper.

6.5.2 SFoc Adjectives + Complementation

Many SPCs structures in English are simple, like:

(6.23) John is happy. > *O João está feliz.*
 (6.24) Mary is depressed. > *A Maria está deprimida.*

particularly when these emotions can be understood as moods. However, many SPCs structures are not so simple, and the adjective or past participle functioning at Cs often requires complementation of its own. This type of complementation, as Quirk et al. (1985 : 2.52) claim, "may be either obligatory or optional on the syntactic level" and "also overlaps with other functions such as adverbials and modifiers". However, it should be made clear that the complementation of the adjective is dependent on the adjective and not on the copula which introduces it. Thus, despite the fact that *fond of* requires complementation, one may still make an SPCs analysis of:

(6.25) James (S) is (P) fond of Jemima (Cs)

In the case of the adjectives and past participles of Emotion, although it may be perfectly justifiable to claim that this complementation is not obligatory syntactically, as in:

(6.26) John (S) was (P) happy (to see his friends) (Cs).

it is difficult to dismiss it as purely optional from a semantic point of view. On other occasions the overlapping described by Quirk et al. is apparent because one can paraphrase what appears syntactically to be adjective complementation with an adverbial phrase, as in:

- (6.27) a) They (S) are (P) healthy (Cs).
b) They (S) are (P) in good health (Cp).

The fact that it is possible to coordinate adjectival and adverbial phrases of this kind, as in:

- c) They are happy and in good health.

show the closeness of this relationship.

Another explanation can be given if one accepts the notion that copula + adjective structure can be classified as verbs; in these situations one can compare the adjectival complementation to the object of a transitive verb, as in:

(6.28) John is fond of Mary.

(6.29) John loves Mary.

Adjectival complementation may take the form of a prepositional phrase, as in:

(6.30) Mary is angry with John.

(6.31) He was very worried about her reaction.

a THAT clause, as in:

(6.32) Mary is sad (that) she forgot my birthday.

a WH- nominal clause, as in:

(6.33) I am afraid of / frightened of what he will say.

a TO-infinitive clause, as in:

(6.34) I am sorry / annoyed to hear it.

and an -ING clause, as in:

(6.35) He is afraid of getting his feet wet.

This form of complementation is common in the EC - 52,6% of the SFoc predicative adjectives and 44,4% of the past participles take complementation - and, in the examples contemplated SFoc adjectives and SFoc past participles seem to function interchangeably.

Similar structures, if not direct translations, can be found for Portuguese, although they are frequent - 18,7% of the SFoc predicative adjectives and 25% of the SFoc past participles. One can find complementation by a prepositional phrase, as in:

(6.36) A Maria está feliz com o novo emprego.

a QUE (THAT type) clause, as in:

(6.37) A Maria está ansiosa que ele venha.

and a preposition + an infinitive type clause, as in:

(6.38) Estou triste por saber que ele morreu.

Casteleiro (1981) discusses the syntax of the adjective from a transformational point of view. He rarely deals with adjectives grouped according to lexical meaning, but one lexical area he does discuss, is described as 'adjectivos emotivos', by which he means the PFoc adjective: Emotion. Casteleiro does not include SFoc past participles in his analysis, for reasons that will be discussed in relation to the passive, but he classifies the SFoc adjectives as using *estar*.

Although English adjectives seem to include prepositions in their lexical unit when complemented by a noun phrase, a WH- nominal clause or an -ING clause, the preposition is absent when the adjective is complemented by a (THAT) clause. For example

(6.39) a) Mary is afraid of John.

but:

b) Mary is afraid that John will kick her.

Portuguese usage is different in this respect. First of all, there seems to be no real Portuguese equivalent of the non-finite -ING clause, at least in the sense we are using them here, most structures being translatable with non-finite infinitive clauses or by expanded versions in finite clauses. Also, although the equivalent of WH- nominal clauses exists in Portuguese, it seems impossible to use this construction with adjectives, with or without prepositions, in the lexical field under consideration. The construction seems to have been absorbed by the *ter* + noun construction, as in:

(6.40) Tenho medo do que ele vai dizer.

Adjectives + prepositions are used before noun phrases and infinitive clauses, but, unlike in English, the prepositions also seem to be necessary with some QUE/(THAT type) clauses.

The biggest group of SFoc Emotion adjectives, to be found in Casteleiro (1981: Table 3: 450-501), which contemplates the adjectives given with *de* + non-finite infinitive or finite QUE (THAT) clauses in which the verb is in the 'conjuntivo'. Not all of the following adjectives can be used with both constructions, but all of them, he claims, can be used with at least one of them. Therefore *alegre, ansioso, apreensivo, atónito, ávido, curioso, cioso, cobiçoso, contentoso, desejoso, desgostoso, feliz, impaciente, medroso, radiante, raivoso, receoso, sôfrego, ufano*, can be used in examples like:

(6.41) Algumas crianças estão felizes de (ver / verem) os brinquedos funcionarem.

(6.42) Essas pessoas estão ansiosas de que venham a visitar um tal museu.

Similarly, (ibid: Table 4: 502-506) describes constructions with *em* with *ansioso, compassivo, confiante, contente, esperançoso, paciente, relutante, tímido* and *vaidoso*, as in:

(6.43) Os ciclistas estão relutantes em que tenham de entrar nessa prova.

(6.44) Os rapazes estão contentes em jogar com o Benfica.

His Table 5: 508-9, with the preposition *para*, only seems to contemplate *ansioso*, as in:

- (6.45) Essas pessoas estão ansiosas para que o problema seja resolvido.
(6.46) Essas pessoas estão ansiosas para resolver um problema tão delicado.

His Table 6: 510 lists *ansioso*, *ávido*, *curioso*, *furioso*, *impaciente*, *radiante*, *raivoso* *sôfrego* in constructions with *por*, as in

- (6.47) Os vistantes estão ansiosas por que os hoteleiros terminem a greve.
(6.48) Nós estamos impacientes por encontrar uma saída para essa questão.

Finally, in (ibid: Table 7: 512-3), *alegre*, *apreensivo*, *desgostoso*, *estupefacto*, *furi* *perplexo* and *triste* are seen to take the constructions *com o facto de que*, as in:

- (6.49) Os bombeiros estão tristes com o facto de que ainda não conseguem domar este tipo de incêndios.

Casteleiro's work describes adjectives from a syntactic point of view and is obviously based on what can be done, rather than on a large corpus. I cannot enter into any discussion of the patterns he discusses, however. Consultation of the corpora will reveal that there is only one example of an adjective + preposition + QUE clause, and only 2 with an adjective + QUE clause, on which I could begin to argue ^[2].

6.5.3 PFoc adjectives and Extraposition

PFoc adjectives describe the quality ascribed to the PHENOMENON by the SENSER. English languages seem to prefer the attributive type adjective to predicative ones here in a ratio of 6,9%(E) to 3,1%(E) of the total, and 7,1%(P) to 2,8%(P). Most of the predicative examples of the EC appear in simple SPCs patterns, with about 11,2% of these adjectives taking some form of the complementation described above.

When, however, one finds these patterns, one usually gets a sentence like:

- (6.50) She/the film/the actor in the play we saw last night is very annoying/depressing/boring.
(6.50) Ela/o filme/o actor na peça que vimos ontem à noite é irritante/deprimente/aborrecido.

but it is possible to find sentences like:

- (6.51) It is annoying/depressing/sad that so many people are sick.
(6.51) É irritante/deprimente/triste que tanta gente esteja doente.

In English, we would describe this as a case of extraposition, or that we have an anticipatory empty or dummy subject in *it* which stands in for the real Subject which is normally a (TH) clause. The reasons for creating this type of structure are largely stylistic, or related to thematisation, to avoid a clausal Subject that would make the sentence top-heavy, or to mark the process the Theme of the sentence. It is not a very usual structure and there are only a few examples in the corpus.

To achieve the same effect in Portuguese there is inversion of Subject and Predicate. The Predicate coming at the beginning of the sentence, without the need for any Subject substitution. Most of the PFoc adjectives of Emotion analysed by Casteleiro can take this construction.

However, given the generally complex and fluid system of word order in Portuguese sentences it was impractical to mark examples for this sort of structure.

Although (THAT) clauses frequently appear as the subject of sentences in books on linguistics as Quirk et al. (1985: 18.33) say, "it is worth emphasizing that for clausal subjects postponed position is more normal than the canonical position before the verb". Although I was prepared to mark examples of this type, I did not find any.

6.6 SPCp sentences

There are certain verbs which cannot function alone and need complementation, even though they cannot be described as transitive. Quirk et al. (1985) would classify this structure as S' as in *He (S) lives (V) in Paris (A)*, or as in *He(S) went (V) to Paris (A)*, and these verbs belonging to the 'stance' and 'movement' classes. Functional-systemic grammar prefers to consider the A element as a Cp, or predicator complement. The use of this structure with Emotion lexemes occurs in both languages, with the noun form of the emotion in prepositional phrase, as in:

- (6.52) He was in / a panic/ love.
(6.52) a) *Estava em pânico.*
b) *Está com medo / vergonha.*

The interpretation of these sentences sees the *in / em* + noun phrase as either referring to a metaphorical space concept, or to a state. Portuguese allows a large number of emotion verbs to combine with *em / com* + noun of Emotion, like *medo* and *vergonha*. Ranchod (1990) analysed this and related structures in detail. This study covers a wide variety of lexical items, but, being another disciple of M. Gross, she is more interested in syntactic than semantic details. Although the theme of her thesis is *estar* + nominal predicates, she also shows relationships between these constructions and others, like *ter* and the copula type verbs described above, + nominal predicates. From her point of view, these verbs have little intrinsic meaning of their own and are there to carry tense, aspect and mood for the noun which gives the meaning to the phrase. Her reason for choosing *estar* as the focus of interest seems to be that it is the most meaning-free verb of those considered, rather than any criteria of frequency of usage. On the other hand, it is as well to point out that it is the state type *estar* and not *ser*, that is used here, usually with *em* or *com* (*in* or *with*), which would seem to indicate an idea of *be in (a state of) X* or *be with X*. Several of the nominal predicates cited are related to Emotion lexemes, and most of them appear in the same syntactic group. This syntactic group shows the close relationship that exists between the *ser, estar, ter* + noun and other, copula type, verbs, nominal predicates, and, on occasion, the PFoc and -SE type verbs. Ranchod and others would consider *ter* as having little semantic content.

Although there is no doubt that this structure is perfectly possible with Emotion lexemes, it should be analysed in any reference to the subject, the actual number of occurrences of this structure would seem to be fairly rare. In the PC, for example, only 9 examples of *estar* + preposition + noun were recorded. I suppose most linguists in underlying or deep structure languages would point to adverbials consisting of a preposition + noun phrase as being abbreviated versions of full propositions, and that *He stared at her in terror* is a condensed version of *He stared at her + he was in a state of terror*.

6.7 SPOd sentences

The SPOd construction is the most common in the corpora, but the EC contains more examples, 83,7% for PFoc verbs and 54,8% for SFoc ones, as against the PC, 60,7% for PFoc verbs and 43,8% for SFoc ones. The extra dimension of the -SE verbs, not included in the

percentages, may have something to do with the difference between the languages. However, the SPOd pattern does not always appear as the simple noun + verb + noun type of *John loved Mary*. The direct object, Od, may also consist of a complex noun phrase, a non-finite clause or a finite clause. With PFoc verbs it is unlikely that clausal complementation will be involved since the SENSER Object is normally a person or personalised noun. These verbs will occur in sentences like:

(6.53) John frightened/annoyed Mary/the monster/the man selling peanuts at cinema last Saturday night.

SFoc verbs, however, are likely to occur with most forms of a clausal nature acting as Object given the nature of the PHENOMENON.

Interestingly enough, Quirk et al. (1985) classify the verbs which take noun phrase as Object according to whether they take the passive or not, and this is a common method of distinguishing between different types of transitive verbs. *Love* and *like* are both in the list of "common examples of monotransitive verbs allowing the passive", and *like* is used as an example of a sub-class taking a "typically animate subject + typically animate object". Another sub-class, however, is also made for those taking a "typically concrete or abstract subject + animate object", which largely consists of PFoc verbs of Emotion, like *shock*, *apprise*, and *please*. As I hope to show later, passives with SFoc verbs like *love* and *like* are extremely rare, but the PFoc ones are unusually frequent in their passive form.

Prepositional and phrasal-prepositional verbs are usually included in SPOd constructions because they behave more like mono-transitive than intransitive verbs. This is partly because of the resemblance of the prepositional object to a direct object, in that it can accept a passive voice, albeit with some awkwardness of style. When the prepositional verb is followed by a THAT-clause (THAT) or TO-infinitive clause, the preposition disappears, although it may reappear in the corresponding passive, or in extraposition, as Quirk et al. (1985: Ch.16.35) explain. The resulting passive and extraposition type sentences are of the kind that linguists stretch to fit their theories, rather than naturally occurring ones. Perhaps this fact could also be attributed to the idea of gradience which would leave these examples somewhere on the SPOp to SI gradient, making their status as direct or prepositional objects unclear. Examples of Emotion verbs in this class are *hope for*, *long for* and *rejoice at*, and the syntactic rules can be demonstrated as in:

- (6.54) a) John hoped for an early reply to his letter.
b) An early reply to his letter was hoped for by John.
c) John hoped that he would have an early reply to his letter.
d) That he would have an early reply to his letter was hoped (for) by John.

As already stated above, although there seem to be a certain number of English verbs with prepositions functioning like this, about 8,3%(E) of the total EC verbs, except for the obvious exception of *gostar de*, there are few examples in the PC.

The verbs which take (THAT) clauses as Od in SPOd sentences are carefully classified by Quirk et al. (1985 : 16.30-4) into factual, suasive, emotive and hypothesis verbs. Interestingly, *hope* is classified as factual and *prefer* as suasive. The emotive verbs given include *regret*, *marvel*, *rejoice* and *wonder*, and the adjectival constructions *be sorry / anxious* are felt to belong to this type semantically.

Emotion verbs are not really involved in the semantics which produce a WH-interrogative clause as Object. It is interesting to notice, though, that verbs of perception, like *discern*, *notice* and *see*, come into this class, as do verbs of intellectual process or action, like *do*

know, say, tell and *think*.. These verbs would seem to be involved in the rational receive processing, and discussion and explanation of information in a way that Emotion verbs not. The only way in which emotion can be expressed this way, and only negatively, is via the negative constructions like *not care* and *not mind*. However, nominal WH- clauses - O QUE clauses in Portuguese - can occur quite easily with these verbs, as in:

- (6.55) I liked what I saw. > *Gostei do que vi.*
(6.56) He feared what they might do. > *Receava o que poderiam fazer.*

There are a few examples of these structures in the corpora, 22 in the EC and 6 in the PC.

Complementation by non-finite clauses is fairly common with certain SFoc Emotion verb English, whether the subject of the non-finite clause is the same as that of the main clause or not, as in:

- (6.57) a) They like to visit the children.
b) They like the children to visit them.

The EC contains 237 examples of the first structure and 18 of the second, a total of 14% of the verbs. The frequency of infinitive clauses in this area is lower in the PC, as only 6 examples of the first structure were found in the corpus, or about 6,6% of all verbs. This is an area of syntax which has always provided trouble for the English language teacher and Portuguese students, as the following explanation using the Emotion verbs will show.

When the subject of a nonfinite clause is the same as that of the superordinate clause we have examples like:

- (6.57) a) They liked to visit the children.
c) They liked visiting the children.

The difference between the two sentences is minimal, although examples exist which show more clearly that the infinitive favours a potential or hypothetical interpretation, as in:

- (6.58) Would you like to see my paintings?
(6.59) I hate to interrupt your conversation, but the house is on fire.

whereas the -ING clause is more likely to refer to something which definitely happens or happened, as in:

- (6.60) They are moving to London as James hates living in the country.

This difference is not always easy to explain, even to English speakers, but it is particularly difficult for Portuguese speakers as only one translation is normal for the pair of examples:

- (6.57) *Gostavam de visitar as crianças.*

and the infinitive construction could be used to translate the others. This would not matter much if the -ING clause were less important - there are about 40 examples in the corpus - but it is the normal form for things done habitually, as in:

- (6.58) I love swimming / listening to music / playing football.

and Portuguese uses an infinitive in the translations:

(6.58) *Gosto de nadar / ouvir música / jogar futebol.*

However, when the subject of the nonfinite clause is different from that of the superordinating clause, the problem is even more complex. Here it is not just a question of explaining the difference between two perhaps stylistically different alternatives. If we say:

(6.59) They liked the children to visit them.

we cannot resort to a nonfinite verb in the subordinate clause in Portuguese at all with these verbs. Instead we have to use a finite QUE clause with some form of the 'conjuntivo' subjunctive :

(6.59) *Gostavam que as crianças os visitassem.*

The interesting semantic point here is the more or less hypothetical nuance that can be given by the type of complementation used.

6.7.1 SPOi patterns in Portuguese

Although all sentences in English which are classified as SPO are presumed to be SFO patterns, one could argue for an SPOi pattern in a sentence like:

(6.60) a) ?I (S) used to teach (P) her (Oi) when she was at school (A).

on the basis that TEACH also gives us:

b) I (S) used to teach (P) her (Oi) geography (Od).

but I think most people would agree that the SPOi sentence is a little forced and that the object could only be omitted by some process of ellipsis which allowed it to be retrieved from the immediate context.

However, in Portuguese an SPOi pattern can be specified, as in these examples from Vilela (1992: 34):

(6.61) Ele (S) obedece (P) ao médico (Oi).

(6.62) Ele (S) apaixonou-se (P) por cavalos (Oi).

where, although no Od is contemplated, the object is preceded by a preposition and, in the latter case at least, the Od becomes a dative when made into a pronoun, as in *Ele obedece-lhe*.

Examination of the PC data shows that about 60 examples of indirect objects have to be accounted for among the PFoc verbs, and predicative adjectives and participles, and a further 24 among the SFoc ones, not to mention a further 14 in the more ambiguous territory of the SE verbs. *Agradar* accounts for 25, *desagradar* for 15, *repugnar* and *doer* with 11 each, the rest from a variety of synonyms of these lexemes. *Doer*, as Vilela (1992: 122) explains, usually relates the part of the body which hurts to the person who feels the pain. In *agradar* and *desagradar* several of the lexemes belong to the Appreciation or Liking/Dislike groups, and many if not most of the examples use the dative pronoun, as in:

(6.63) Agradava-lhe também muito a vizinhança, aquela doce quietação de subúrbio adormecido ao sol. M

In English the existence or otherwise of such a structure is obscured by the fact that no da pronouns exist with which to perform tests, and by the controversial subject of prepositional verbs. While in no way challenging the Portuguese interpretation of this structure where the dative test can be performed successfully, I would suggest that some form of gradient cc possibly be postulated for Portuguese between these examples, and those where a preposition appears between a verb and its direct/indirect object or prepositional complement.

6.7.2 SPOd patterns and Extraposition

Extraposition can occur with PFoc verbs for the same reason that it does in SPCs patterns with adjectives and there are 30 examples in the corpus. Examples like:

- (6.64) a) It frightened me to hear you say that
(6.65) a) It annoyed me that he should be so rude.

are far more normal constructions than:

- b) To hear you say that frightened me.
b) That he should be so rude annoyed me.

In Portuguese we have similar patterns:

- (6.64) a) *Assustou-me ouvir-te dizer isso.*
(6.65) a) *Irritou-me que ele estivesse tão mal-criado.*

and

- b) *Ouvir-te dizer isso assustou-me.*
b) *Que ele estivesse tão mal-criado irritou-me.*

However, it is rare to find extraposition with SFoc verbs - only 3 examples were recorded in the EC. They are usually found with *hope* or *fear*, as in:

- (6.66) It is hoped that the President will arrive tonight.

In Portuguese attempts at such examples are not possible:

- (6.66) **É esperado que o Presidente chega hoje.*

but this is due as much, if not more, to the inadmissibility of the structure with a non-passivizing verb like *esperar* than the problem of extraposition.

6.8 SPOO, SPOC and SPOdA sentence patterns

The reason I have drawn attention to the gradient between the indirect object, the prepositional object and the adverb type of prepositional phrase is because it begs a series of questions in Portuguese analyses of the SPOO type of structure. In the first place, although Portuguese linguists happily use the term indirect object or 'complemento indirecto', it must be pointed out that, except when the dative form of the pronoun is used, as in *Dei-lhe a carta*, 'complemento indirecto' requires a preposition like *a* as in *Dei a carta à Maria*. To prove that it is an indirect object, they can resort to tests with dative pronouns but, according to the classification used here, the phrase is a prepositional object, albeit within a SPOO structure. The nature of this dative or SPOO structure is of little interest to English for the syntax of the Emotion lexicon, but the dative structure appears in over a hundred examples in the PC,

majority for PFoc lexemes.

It is only natural that this area of syntax should provide food for thought, given the problem already discussed as to the relation between indirect and prepositional objects, complements. Quirk et al. (1985 : 16. 59 -67) are at pains to demonstrate that this is an area of gradience rather than of clear-cut distinctions. In (ibid : 55-63) they go a little further and describe a third type of SPOO structure - in which the indirect object takes no preposition while the direct object does, as in:

(6.67) Mary (S) warned (P) John (Oi) of the dangers (Oprep). [3]

SPOO constructions are rare with Emotion verbs, the only really important one being *envy* in the EC and *invejar* in the PC. *Envy* would seem to use the first and third types of SP structure, as in:

(6.68) a) She (S) envied (P) John (Oi) his success (Od).

b) She (S) envied (P) John (Oi) for his success (Oprep).

It would seem that Portuguese would prefer the following interpretation of the equivalent structure:

(6.68) a) *Ela (S) invejou (P) o êxito (Od) do João (prepositional phrase qualifying 'êxito')*.

and this can be justified by pronominalisation of *João*, as in:

b) *Ela(S) invejou (P)-o (Od) por causa do seu êxito.*

although the dative form of the pronoun can also be used, as in:

c) *Ela(S) invejou(P)-lhe(Oi) o êxito(Od).*

The groups of emotions which have this element of ditransitivity are those which Ortony et al. describe as related to the Fortunes of Others, the Resentment and Sorry For groups. From a syntactic point of view, only *envy* and *invejar* behave in a true ditransitive way, but from a more semantic point of view, there is an element of ditransitivity in the other lexemes of these groups which can be recovered from a wider or more psychological view of the text. Only one of them is accounted for by *invejar*, *admirar* has 4, and there is another from *respeitar*, one for *amar* which is quoted below. An example in context is:

(6.69) O administrador ergueu o copo, depois de cheio, admirou-lhe à luz a cor e provou-o com a ponta do lábio, e piscando o olho para Afonso: M

If we were to translate an example like this, the dative structure would be turned into possessive form as in he *admired its rich colour against the light*.

6.8.1 The SPOCo and SPOdA patterns

The SPOCo structures occur with certain groups of verbs specified by Quirk et al. (1985 16.) but few have direct connections with Emotion, the nearest being the intellectual stative verbs like *believe* and *imagine*. They presume that the noun or adjective which acts as the C is or an Object complement. Certain verbs seem to like the prepositions *as* or *for* before the

but they are largely optional. The type of example usually given is:

(6.70) They (S) considered (P) him (Od) (as) a genius (Co).

or, in Portuguese:

(6.71) Toda a gente (S) considera (P) Mario Soares (como) (Od) bom presidente (Co).
[4]

These structures can be passivized, with the Od becoming the S of the passive sentence. They are of indirect interest to Emotion with examples in which the verb has a causative function and the Co is a resulting attribute, such as *She made him happy/angry*, or *Ela fez a família feliz* when an opinion is given as with verbs like *consider* and *considerar*. Several examples can be found in both corpora - about 75 for the EC and 25 for the PC.

One of the more interesting points of discussion in this analysis, from the point of view of comparing English and Portuguese, are the SPOdCo and SPOdA patterns which cover an area of syntax that causes confusion between the two languages, because they can seem similar to certain verbs, as in:

(6.72) She (S) left (P) the brush (Od) behind the door (A).

(6.72) *Ela (S) deixou (P) a vassoura (Od) atrás da porta (A).*

(6.73) She (S) left (P) the brush (Od) hidden behind the door (Co).

(6.73) *Ela (S) deixou (P) a vassoura (Od) escondida atrás da porta (Co).*

Also, given the normal post-noun position of Portuguese adjectives, one might argue of ambiguity of structure in:

(6.74) She (S) left (P) the door (Od) open (Co).

(6.74) a) *Ela (S) deixou (P) a porta (Od) aberta (A)*

b) *Ela (S) deixou (P) a porta aberta (Od).*

The examples given so far have nothing to do with emotion and it is fair to say that any further discussion of the SPOdA structure would be irrelevant here. However, Emotion verbs in English, like *like*, *prefer*, *want* and *wish*, can appear with the SPOdCo structure, as in:

(6.75) a) I (S) like/prefer/want (P) my coffee (Od) hot (Co).

which translate as:

(6.75) a) Gosto de/prefiro/quero (P) o meu café (Od) quente (Co).

b) Gosto/prefiro/quero (P) que o meu café seja quente (Od).

although intonation alone will disambiguate the first example, so that it either translates the English example given, or means:

(6.75) b) I (S) like / prefer / want (P) my hot coffee (Od).

The analysis made here of these structures is made to draw attention to the fact that attributive adjectives in English and Portuguese can cause problems of interpretation. The post-noun position of the adjective in Portuguese, as with *café quente*, by no means constitutes a problem that the noun+adjective order in Portuguese is always an Object+Complement phrase. However, it does draw attention to its position on the gradient which begins in what, in English

is an adjective premodifying a noun phrase in a simple SPOd structure. This may not be particularly important here but it starts a train of thought that, after the functions of adjective past participles and passives have been considered, may help to explain certain features of PC.

6.8.2 The SPOd, SPOdCo, and SPOO patterns and syntactic and semantic gradients

Quirk et al. (1985: 16.63-4) describe a syntactic gradient for interpreting patterns of infinitive complementation which is of interest here because it involves Emotion verbs with function in the more consciously perceived part of the emotional > intellectual spectrum. The problem is dealt with in detail in Quirk et al. (1985: 16.63 - 67), but here I shall just use some of their examples, modify others and translate them into Portuguese to allow for comparison. The problem is posed when a TO-infinitive clause is used after certain verbs, as in:

- (6.76) a) We (S) like (P) to visit the school (Od).
 b) We (S) like (P) all parents to visit the school (Od).
 c) They (S) wanted (P) James to win the race (Od).
 d) They (S) expected (P) James to win the race (Od).
 e) They (S) expected (P) James (Od) to win the race (Co).
 f) We (S) asked (P) the students (Oi) to attend the lecture (Od).
 g) The dean (S) invited (P) the students (Oi) to attend the lecture (Od).

The distinction between the different patterns underlying the apparently similar sentence structure is achieved by a series of tests using the passive, as in:

- a) no passive acceptable
 b) We (S) like (P) the school to be visited by all the parents (Od).
 c) They (S) wanted (P) the race to be won by James (Od).
 d) They (S) expected (P) the race to be won by James (Od).
 e) James (S) was expected (P) to win the race (Od).
 f) The students (S) were asked (P) to attend the lecture (Od).
 g) The students (S) were invited (P) to attend the lecture (Od).

As can be seen, the nearer the verbs are to the Emotion spectrum, the more easily infinitive complementation of the verb can be seen as a direct object. *Expect*, which is in the more conscious part of the spectrum, allows two types of passive, which allows for an SPOd and SPOdCo interpretation of the pattern. The syntactic independence of *the students* as Ois with the behaviour verbs, *ask* and *invite*, allows this phrase to become the subject of a passive sentence.

If we look at the Portuguese equivalents of these sentences:

- (6.76) a) *Gostamos de (P) visitar a escola (Od).*
 b) *Gostamos (P) que todos os pais visitem a escola (Od).*
 c) *Queriam (P) que o Jaime ganhasse a corrida (Od)*
 d) *Esperavam (P) que o Jaime ganhasse a corrida (Od).*
 e) *Esperavam (P) que o Jaime ganhasse a corrida (Od).*
 f) *Pedimos (P) aos alunos (Oi) que assistissem à conferência (Od).*
 g) *O reitor (S) convidou (P) os alunos (Oi) a assistir à conferência.*

and their passive counterparts:

- a) no passive acceptable
 b) *Gostamos (P) que a escola seja visitado por todos os pais (Od).*

- c) *Queriam (P) que a corrida fosse ganho pelo João (Od).*
- d) *Esperavam (P) que a corrida fosse ganho pelo João (Od).*
- e) **Que o Jaime ganhasse a corrida (S) foi esperado (P) por eles (Od).*
- f) *Que assistissem à conferência (S) foi pedido (P) aos alunos (Oi).*
- g) *Os alunos (S) foram convidados (P) a assistir à conferência (Od).*

we can see that, despite the fact that only a) and g) allow for an infinitive structure, that SPOdCo interpretation is not a feature that can be applied to Portuguese, and that passivizations of e) and f) are a little clumsy, a similar pattern emerges. One can therefore suggest that the more emotional words only favour an SPOd interpretation.

In describing this gradient, Quirk et al. are largely interested in the syntactic point of view in the specific problem of infinitive clauses and their interpretation. Before leaving this subject however, I should like to draw attention to the similarity between *They expected James to* as an SPOdCo pattern and the SPOd pattern also possible with *expect*:

(6.77) a) They (S) expected (P) that James would win the race (Od).

Although *like*, *want* and other verbs, like *love* and *hate*, use the infinitive construction with an SPOd interpretation, *expect* is unusual in taking both this and the (THAT) clause complementation. When arguing for a semantic gradient between more or less conscious processes of emotion, it is as well to remember both types of clause and to consider the following SPOd sentences:

- b) They feared (that) James would win the race.
- c) They hoped (that) James would win the race.
- d) They felt (that) James would win the race.
- e) They thought (that) James would win the race.

and their Portuguese equivalents:

- b) *Receavam que o João ganhasse a corrida.*
- c) *Esperavam que o João ganhasse a corrida.*
- d) *Sentiam que o João ganhasse a corrida.*
- e) *Pensavam que o João ganharia a corrida.*

These Clausal Objects or PHENOMENA involve some sort of proposition about the world we are dealing with the more consciously analysed emotional situations in all these examples. Although I shall argue for a certain degree of conscious evaluation in most cognitive processes related to emotion, it is at this point that the conscious processing of emotion is most obvious.

6.9 Syntactic clues to degrees of conscious evaluation with Emotion

Earlier in this chapter the nature of the PHENOMENON was discussed from a semantic point of view and the classification used in the analysis of the corpora was given. After analysing more syntactic aspects of the problem, it should now be clear that the syntactic forms of PHENOMENON can give us several clues as to the degree to which conscious mental processes are involved in the emotional situation. For this reason an examination of PHENOMENA which occur with the different lexemes and lexical groups can help to establish criteria for discussing this aspect of emotions.

When there is no expressed PHENOMENON, as in SP and simple SPCs and SPA sentence patterns like:

- (6.78) It is better to have loved and lost, than never to have loved at all. (Tennyson)
(6.79) I am very happy /depressed.
(6.80) He is in a panic.

it either has to be retrieved from the text, or reconstructed from the constellation of stir implicit in the context. In these cases we are probably dealing with the least consciously processed types of emotion - the objectless emotions or moods - for which the SENSER finds it difficult to provide a rational explanation.

As we have seen, SPOD and more complex SPCs patterns are not always as simple as:

- (6.81) John loves/fears Mary.
(6.82) John is angry with/afraid of the police.
(6.83) I am depressed/encouraged by your attitude.

In these examples the PHENOMENON is identified and localised in a person, a group of people, or personal behaviour. One can also identify objects in our world as causing emotions

- (6.84) Mary is afraid of snakes/thunderstorms /hospitals.
(6.85) She loves swimming.

However, the non-finite and finite clauses which frequently occur as PHENOMENA demonstrate a fairly high degree of conscious mental processes. When the Subject of both main and subordinate clauses is the same, the phenomena may be situations or activities which the SENSER is involved, as in:

- (6.86) She is afraid of going to hospital.
(6.87) He enjoyed riding the horse.

In these cases the PHENOMENA are more specific and show a higher degree of conscious appraisal by the SENSER.

As the clausal PHENOMENON becomes more complex, so too does the level of conscious appraisal involved. When the subject of both clauses is the same, as in:

- (6.88) I am afraid that I shall fail the exam.

the syntactic structure of the PHENOMENON already shows a high degree of conscious mental process in relation to events affecting the SENSER. When the subjects of the clauses are different, as in:

- (6.89) I am afraid that John will fail the exam.

the situation is understood intellectually to the degree that the emotion is recognised as even involving primarily the SENSER, but some Other whose fortunes are affected.

The extraposition of the PHENOMENON, as in:

- (6.90) It is hoped/feared that President Clinton will be re-elected.

carries the gradient of conscious appraisal to the point where the PHENOMENON is the focus of interest and the emotion, if such it can be called, is assessed as being common to several SENSERS.

Whenever a verb, adjective, past participle or noun was complemented in a way that gave syntactic clue to the identity of the PHENOMENON, the example was marked accordingly follows:

- a = noun phrase
- b = non-finite infinitive clause (S = same as main clause)
- c = non-finite infinitive clause (S = different from main clause)
- d = non-finite -ING clause (S = same as main clause)
- e = non-finite -ING clause (S = different from main clause)
- f = finite (THAT) / QUE clause (S = same as main clause)
- g = finite (THAT) / QUE clause (S = different from main clause)
- h = finite WH- / O QUE clause^[5]

The classifications 'c', 'd' and 'e' do not apply to Portuguese as, at least in this area, no examples were found. The analysis of the individual lexemes and lexical groups in later chapters explore this syntactic gradient in order to show why certain emotions can be classified as more sophisticated processes of cognition than others.

[1] This analysis assumes that:

- S = subject of the verb
- P = predicator
- Od = direct object
- Oi = indirect object
- Oprep = prepositional object
- Cs = subject complement
- Co = object complement
- Cp = predicator complement
- Adj = adjunct
- Disj = Disjunct
- Conj. = Conjunct

[2] Casteleiro's work covers a very wide selection of adjectives, and his analysis of Portuguese adjectives is exhaustive. No doubt there are similar works on English adjectives, but I have not yet found anything on quite the same scale.

[3] Quirk et al. (1985:16.56) analyse the indirect object nature of *John* by referring to underlying RECIPIENT or BENEFICIARY semantic role, and by demonstrating how prepositional object cannot be the subject of the passive.

[4] This and other examples are from Vilela (1992 : 36-7). He analyses them as " ... um gr mais ou menos numeroso de verbos, que prevêm, além de um complemento sem preposi (=cd [complemento directo]), um outro complemento (= designado comumente <<nc predicativo de complemento directo>>), podendo pertencer à categoria nome ou adjetivo que pode vir ou não acompanhado por como / por.

[5] The WH or O QUE clause in English begins with WHAT or another WH- form, as in: I liked what I saw.

Gostei do que vi.

It is often found with questions.

CHAPTER 7

THE VERB PHRASE OF EMOTION - SYNTACTIC RESTRICTIONS

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7.1 Introduction

The semantic classifications of verbs described in Chapter 5 were often based on synta

criteria. As far as the Emotion lexicon is concerned, the interesting point was considered to be that the SFoc verbs do not normally occur with the progressive aspect and the imperative, that this should be understood to demonstrate the non-voluntary or stative nature of these verbs. There are other aspects of the syntax of emotion verbs which are equally interesting even if less has been said about them. They include the behaviour of these verbs with the Perfective and with the true Passive and its cousins, which include the Portuguese verb + pronoun.

7.2 Tense and aspect with Emotion

Let us begin by analysing why the SFoc verbs resist usage with the progressive aspect. These verbs, more often than not, fit into a simple present or past tense scheme such as:

- (7.1) a) John loves Mary.
 b) John loved Mary.

in which the notion of time is defined in Quirk et al.(1985) as the State present/ past and which can be diagrammed thus:

Present

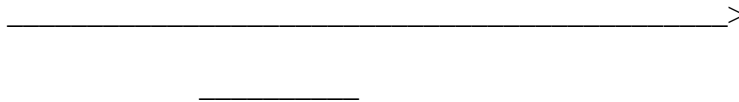
T1 (NOW)



Past

T2

T1(NOW)



The examples, therefore, are similar in nature to the quality statives like:

- (7.2) Cows are mammals.
 (7.3) Cats have four legs.
 (7.4) Dinosaurs were reptiles.
 (7.5) Dodos were birds.

in which no time span is stipulated, but the state exists insofar as it is relevant in the world referred to.

These examples, translated into Portuguese, show that the *presente* ^[1] is semantic equivalent under these conditions,

- (7.1) *O João ama a Maria.*
 (7.2) *As vacas são mamíferos.*
 (7.3) *Os gatos tem quatro patas.*

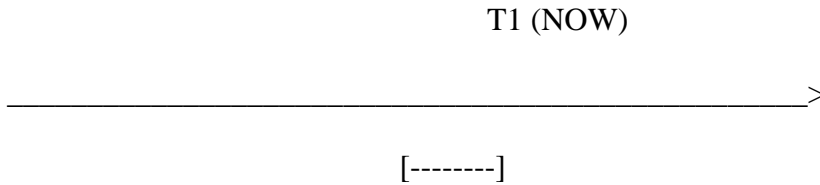
although, as we shall see, it can also be used with other notions of time. The examples in

past demand a further distinction in Portuguese, as will be explained below.

7.2.1 The Progressive Aspect with verbs of Emotion

The progressive aspect in English is normally associated with activity and has the following time frames:

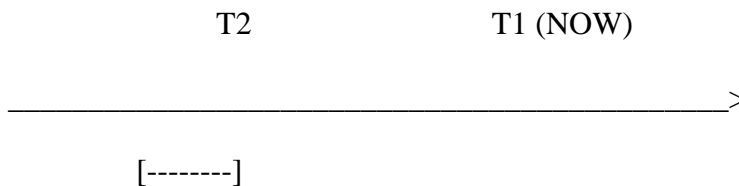
Present Progressive



(7.6) A. What are you doing? B. I am cooking the dinner

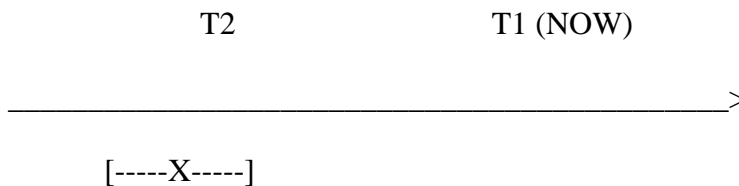
Past Progressive

a)



(7.7) A. What were you doing last night? B. I was cooking the dinner.

b)



(7.8) A. What were you doing when John telephoned?
B. I was cooking the dinner.

In the case of the present, and the past progressive in a) the notion of time is durative and time adverb is unspecified, or a fairly elastic period, like *last night*. In b) the progressive aspect acts as a frame to a definite time reference - *when John telephoned*. This, at least true at the level of the immediate sentence. Regarded semantically, however, there is always a definite interval of time involved. However short or punctual, all notions of time from aeons to fractions of a second are, by definition, durative - including *now*.

Portuguese has a similar construction with *estar a + infinitivo* or *estar + gerúndio*, the former being more typical of European Portuguese, the latter of Brazilian. *Ir* and *andar* (convey

ideas of on-going action) are also used with this structure to describe durative action. One can construct similar examples to those given for English with it, and the notions of time are the same as given for English.

- (7.6) A. *O que é que estás a fazer?*
 B. *Estou a cozinhar.*
- (7.7) A. *O que é estavas a fazer quando o João telefonou.?*
 B. *Estava a cozinhar.*

Generally speaking, it can be stated that SFoc verbs of Emotion cannot take the progressive aspect. It is unacceptable to say, **I am/was hating/fearing John*, or **Estou a detestar/recear João*, or **Estou detestando /receando o João*. However, according to Quirk et al. (1985: 4.1.1), in English it can be used in situations "when temporariness or tentativeness is being emphasized", as in:

- (7.9) A. What were you wanting?
 B. I was hoping you would give me some advice.

The use of the progressive with the more central verbs is most unusual, but there are some exceptions. If *enjoy oneself* can be classified as Emotion, it can also be durative, and as *love* sometimes has the sense of *enjoy*, it is possible to find:

- (7.10) A. Are you enjoying the party?
 B. Yes, I'm loving every minute of it.

The SFoc verbs of Emotion which seem to contain both the emotion and the behavior associated with it, like *gloat*, *grieve* and *admire*, can be used progressively as in:

- (7.11) John is gloating over Henry's defeat.
 (7.12) Mary is grieving over her child's death.
 (7.13) A. What is he doing? B. He is admiring your lovely picture.

In Portuguese, as with *enjoy* we can find:

- (7.10) A. *Estás a gostar da festa?*
 B. *Sim, estou a divertir-me imenso.*

One can also find, particularly in a Brazilian context, *Estou gostando de você*, which can be roughly translated as *I am beginning to like you very much.*

The corpora do not produce many examples of the progressive. The EC produced 10 examples for the SFoc ones with *admire*, *adore*, *hate*, *hope*, *mourn*, *look forward to*, *suffer*, *worry*, and 6 for the PFoc verbs, with *bore*, *bother* and *threaten*. The PC had even fewer SFoc ones, with *admirar*, *amainar*, *animar-se*, *gozar*, *recear* and *sofrer*, and 2 PFoc ones with *atrainar*. Most of the examples are explainable in terms of those already cited. Others are of a more marked variety, as in the following example where both the progressive form of *hate* and the nominalised -ING form of *love* are seen almost as activities - an interpretation made pragmatically possible by the phrase *with all that energy*:

- (7.14) "When people hate with all that energy, it is something in themselves they hating. Alex is hating all the illusions of boyhood -- innocence, God, hope. Poor L. Marchmain has to bear all that. A woman has not all these ways of loving." BH

An example in Portuguese combines the idea of progressive with the verb *ir* (*go*), instead

estar, with an emotion -NDO form.

(7.15) Agora, ao aproximar-se da Toca, Ega ia receando o primeiro encontro com Maria Eduarda. M 519

Given the right context, therefore, the progressive can be used, but it is definitely unusual.

The same is true of the verbs usually connotated with intellectual activity, like *think*, *believe*, *agree*, which are related to cognitive processes. To explain the fact that the progressive cannot be used with these verbs because they are static, and indicate states and not activities or performances as, for example, Kenny (1964: 171-8) argues, is a little misleading as to the nature of both emotional and intellectual verbs. The term *state* is connotated with a lack of mental activity which hardly corresponds to what is now known about the workings of the brain.

Halliday (1984: 5.3) prefers to classify these verbs as belonging to the "mental processes or processes of sensing", or as describing forms of behaviour associated with these processes, and points out that they do not function with substitute *do*. He argues too (ibid: 109) that the fact that the progressive present in English is somehow the more basic present is not necessarily justifiable simply because it is the unmarked form with most verbs, which are dynamic and describe actions. Instead, he prefers to consider the progressive aspect as "the present in the present", and suggests that, although it may be the unmarked type of present for such material processes, as in *they are building a house*, the simple present is the unmarked present for mental processes, as in *she likes the gift*. He points out that marked examples can be found in context to keep the balance.

7.2.2 Non-finite -ING / -NDO clauses with verbs of Emotion

Before leaving the progressive type construction, let us first account for the -ING and -NDO forms when they appear in non-finite clauses, because these are more numerous than the progressive forms. The EC has 37 SFoc examples which appear with *admire*, *appreciate*, *despair*, *fear*, *hope*, *jubilate*, *like*, *love*, *object*, *pity*, *regret* and *worry*, and 15 PFoc ones with *exasperate*, *frighten*, *comfort* and *soothe*. It also has 2 SFoc examples of *being angry* and 1 PFoc one of *being charming*. The PC has 40 SFoc ones with *adorar*, *amar*, *apreciar*, *aspirar*, *desdenhar*, *desprezar*, *esperar*, *gostar*, *gozar*, *lamentar*, *odiar*, *recear*, *temer*, *triumfar*, and 16 PFoc ones with *alegrar*, *aliviar*, *amargurar*, *consolar*, *contentar*, *divertir*, *humilhar*, *incomodar* and *melancolizar*.

As we can see in the following PFoc examples, the use of the -ING or -NDO clauses here does not imply the progressive aspect. They seem rather to be used for stylistic economy in long sentences, describing a sequence of events in the first example, and a sporadic state of affair in the second:

(7.16) The white man had obtained it, I was told, partly by exercise of his wonderful strength and partly by cunning, from the ruler of a distant country, whence he had come instantly, arriving at Patusan in utmost distress, but frightening the people by his extreme ferocity, which nothing seemed able to subdue. LJ

(7.17) Diante do canapé das senhoras lá se achava também o fiel amigo, o doutor delegado, grave e digno homem, que havia cinco anos andava ponderando e meditando o casamento com a Silveira viúva, sem se decidir - contentando-se em comprar todos os anos meia dúzia de lençóis, ou uma peça mais de bretanha, para arredondar o bragal.

Some examples are marked because the sense of the emotion verb is different from the central

meaning, as in:

(7.18) A questão estava simplesmente em que o Cohen o surpreendera amando-ll a mulher. Logo, podia matá-lo, podia entregá-lo aos tribunais, podia escavacá-lo na sa pontapés. M

where *amando* would be best translated as *making love to*. [2]

Some of the SFoc examples combine emotion with the behaviour associated with it, allowing a certain idea of activity, as in these examples with *admire* and *admirar*:

(7.19) He stood there for some time, as if admiring the purity and the peace of night. LJ

(7.20) E veio daí a um instante encontrar Teles da Gama admirando as belas faias holandesas. M

In these cases the non-finite clause could be expanded to full clauses with *He was admiring* and *Teles da Gama estava a admirar...* (*admirando* in Brazilian Portuguese), and some kind of continuous contemplation, if not progressive action, is implied. Other examples, though, cannot be explained so easily, as with these examples from the corpora with *fear* and its synonym in Portuguese, *recear*:

(7.21) Therefore, fearing he should be called upon to depose about this destroyed child, and so be the cause of her death, he hid himself. GE

(7.22) E ela, receando que a influência debilitante de Lisboa não conviesse a Chaves, estava com o vago projecto de lhe fazer ir passar algum tempo ao campo, Formoselha, a casa da avó. M

Here the non-finite clauses have an adverbial status, and if one were to expand these -ING forms to full clauses, one would end up with *Because he feared that...* and *Como receava que....* and not with **Because he was fearing that....* or **Como ela estava a receando que....*. In these cases the notion of *fear* or *recear* precedes and leads to the subsequent act or projected action.

The choice of this kind of clause would seem to be a question of style, rather than any basic syntactic choice, and even a grammar like Quirk et al. (1984) has nothing specific to say on the subject. Halliday (1984: 209) describes the construction briefly as an "imperfective clause which is often, but not always, introduced by a preposition". This notion of the imperfective helps explain the point which we shall see more clearly below, and which is obscured by the use of the simple past, *feared*, in the expanded clause in English.

7.2.3 The Perfective Aspect with verbs of Emotion

The perfective aspect in Romance languages tends to refer to actions which have been completed. However, in English this is not necessarily the case with the notorious present perfect, as in:

T2(1974)

T1 (1994)

_____>

[-----]?-->

(7.23) Mary has loved John for 20 years.

This means that Mary's love of John has lasted for 20 years so far, but unless the Speaker informs us to the contrary, we can presume she still loves him and will continue to love him.

Calling this a perfective is a misnomer if it is expected to coincide with the idea of *perfeito* Portuguese, which implies that the period of time referred to by the verb has ended. The example would be translated with the simple present:

(7.23) A Maria ama o João há 20 anos.

because the Portuguese *presente* accounts for situations in the past which are still valid in present, whether they refer to a state or habit. To balance this and show its parallel with Halliday's notions of 'markedness', the unmarked form for a material process would be the *estar a + infinitive*, as in *Há 20 anos que estão a construir esta casa*. The *pretérito perfeito*, unlike the English past tense, can only refer to actions completed in the past.

This point becomes clearer if we compare the examples:

- (7.24) a) John loved Mary when he married her.
b) John loved Mary all his life.

to their Portuguese translations:

- (7.24) a) O João amava a Maria quando casou com ela.
b) O João amou a Maria toda a vida.

Portuguese makes a distinction between the *pretérito imperfeito* and the *pretérito perfeito* which is not possible at the level of the English verb. This may seem a fine distinction to make but it draws attention to a different facet of the situation which is not explicit in English - the time span can be explicitly undefined, using the *pretérito imperfeito*, or explicitly defined by using the *pretérito perfeito* and a suitable adverb. Quality and state examples which use simple past in English will use the *pretérito imperfeito* in Portuguese, as in:

(7.4) Os dinosauros eram reptéis.

The *pretérito imperfeito* can also function in a way that would be translated by the progressive in English as in the following example and its respective translation:

- (7.25) Olhou para a esquerda e reparou pela primeira vez numa mulher alta, com cabelos compridos, que, sentada numa mesa a seu lado, o olhava de frente. A
(7.25) He looked to his left and noticed for the first time a tall woman with long hair who was sitting at an adjacent table and looking at him. A:Tr.

but the same cannot be done in the following example with the verb *amar*:

- (7.26) E Afonso não se atrevia já a contrariar a pobre doente, tão virtuosa, e que amava tanto! M
(7.26) And Afonso no longer dared to thwart the poor invalid, who was so virtuous loved him so! M: Tr.

These examples do not make *amava* and *olhava* syntactically equivalent in Portuguese, for the *pretérito Imperfeito* is substituted in each case by the *estar a + infinitive* construction. *olhava* can be changed to *estava a olhar*, because it is an activity or material process,

amava cannot be substituted by **estava a amar*. The semantic difference in the notion: time expressed through the syntactic criteria between English and Portuguese is worth notice and support Halliday's perspective that the verbs others label stative are not merely defective dynamic verbs, but have a status of their own.

7.3 The Imperative and Emotion

It is also considered impossible to use SFoc verbs with the imperative. As Kenny (1964: 1) says, "no static verb has an imperative". Although he is careful not to actually state emotional and intellectual processes are involuntary, he claims that "voluntary action is action which can be commanded" and "only what can be commanded can be decided upon or form immediate object of an intention". If one follows a strictly Jamesian or Behaviourist line of reasoning, not to mention certain ideas inherent in folk wisdom, this all goes to prove emotions are beyond our volition, or at least are controlled only in the sub- or un-conscious.

The disallowance of the imperative would seem to be a valid syntactic rule for both English and Portuguese. We do not normally say things like:

(7.27) *Hate John! > **Deteste o João!*

However, there are exceptions such as:

(7.28) Love thy neighbour! > *Amai o próximo!*

(7.29) Enjoy yourself! > *Diverte-te!*

(7.30) (Have) pity (on) us! > *Tenha piedade de nós!*

but to call these phrases commands is strong. As Bolinger (1977) demonstrated, using context and intonation, what is syntactically an imperative can fulfil a variety of functions semantically. Quirk et al. (1972) discusses commands with the imperative structure, concedes a persuasive imperative with *do*, but Quirk et al. (1985) provides fifteen different ways in which the imperative can be interpreted. Thus, one can describe the Biblical exhortation to *Love thy neighbour* as either a command, a recommendation or a special lexical variation of *love*; saying *Enjoy yourself!* functions as *Good Wishes*; and the *Have pity!* plea, and certainly not a command.

The situation with the negative imperative is different and more complex. Normally the imperative precedes the obeying, or otherwise, of the command. With the negative form one can be asking or persuading someone to stop something they are doing, or change the state they are already in, as in:

(7.31) Don't hate him for what happened. His intentions were good.

Admittedly, this is not a popular construction, but the function is persuasive, and, it is perfectly acceptable, if not very frequent, with the adjectives/past participles of Emotion in English, and other structures in Portuguese, as in:

(7.32) Don't be angry / sad / frightened.

(7.32) *Não te zangues* / *não estejas triste* / *não tenhas medo*

Of the 40 examples of the Imperative in the EC, 29 were negatives, and 22 of these were *Don't worry!* Of the others, some were exhortative - like *Cheer up!* and *Be grateful!* - or were commanding not the emotion but the behaviour associated with it, as in *Look angry!* The classic example of commanding *love*, repeated several times, was by the eccentric Miss Havisham in *Great Expectations* in her attempts to make poor Pip even more in love with Estella - hard

normal example, but worth noting as an example of how the context can make such a structure acceptable.

The PC produced even fewer examples - 26 in all - and none of them were negative imperatives, although the structure is possible, *Don't worry!* being translatable by *Nãe aflige!* Interestingly, the pragmatic equivalent to *Don't worry!* seemed to be more normally expressed in the PC original texts as *Calma!* and *Sossega!* and these forms accounted for 21 of the examples. Also whereas the EC examples had 9 examples of *be* + adjective, there was only one example, with a PFoc adjective, in the PC, when, in *Os Maias*, Ega, off to a party exhorted teasingly by his friends - *Sê fascinante!* (Be fascinating!)

If one follows the argument that all this shows that emotion is not voluntary, one could argue here that one cannot persuade someone out of a true emotion. However, by the time someone is being persuaded to abandon a certain behaviour resulting from an emotion, the whole situation is largely in the realm of conscious control anyhow.

Before leaving this subject, in which those supporting the involuntary aspect of emotion, it seems to have gained the upper ground, I should like to make a suggestion. Are we not perhaps being over-hasty in assuming that since a person cannot command emotions in another, they cannot, like activities, performances or material processes, be considered voluntary? Although Halliday (1984) does not explicitly make this point, perhaps one could continue his line of reasoning on the unmarked and marked usage of the progressive a step further, and simply assert that with unmarked mental processes imperatives are not used, whereas with material processes they are. This would maintain the balance already established for the progressive.

If one moves away from syntactic linguistics to a more pragmatic level, however, one could argue that, at least in the type of society in which English and Portuguese are spoken, attempting to command someone else's intellectual or emotional processes is not acceptable culturally, whatever political or religious régime one lives under. Perhaps there is some deep-rooted kind of Politeness Principle, of the type discussed by Leech (1985: Ch. 4), which can explain the situation. As already stated, the few examples quoted are of the persuasive or persuasive variety, and one could argue that Miss Havisham's *Love her!* does not go against the possibility principle - she already guesses that Pip loves Estella - but rather that she is deliberately violating his personal psychological integrity and asserting her own authority by commanding such a thing.

Psychiatrists recognize that it is more effective to encourage patients to control their reactions than to attempt to exercise some sort of outside authority over them. Although most of us are aware of how demagogues, and nowadays the media, attempt to control our thoughts and emotions, there is some deep-rooted objection to this that obliges even the most dictatorial régimes to attempt to disguise what it is doing. So the existence of some sort of Politeness Principle that disallows the imperative may well be a better way of explaining the problem than by dragging in the traditional philosophical hot potato of Free Will.

7.4 PFoc verbs and their limitations with the Progressive and Imperative

All the arguments about the problems with the progressive and the imperative have centred on the SFoc verbs, and no-one seems to have suggested that the PFoc ones are subject to similar restrictions. One can immediately point to the syntactic acceptability of *He is irritating me* and *Frighten him!* However, it should not go unnoticed that, in actual usage, PFoc examples with the progressive and imperative would seem to occur even less frequently than those with SFoc ones. The EC shows that there is only 1 example of a PFoc imperative, and 6 PFoc examples of the progressive. Even if one takes into consideration that the SFoc verbs are more numerous than the PFoc ones, 19,2% against 5,1%, one is still left with the SFoc imperatives va

outnumbering the PFoc ones and the progressive only having proportionally slightly more P examples. In the PC, where the proportion of SFoc to PFoc verbs is more similar, 14, against 9,6%, the larger proportion of SFoc examples is even more marked.

Here again one can demonstrate the internal nature of the mental process and the lack deliberate action on the part of the PHENOMENON. Examples in the corpora were *mar DELIBERATE* where the PHENOMENON explicitly tried to provoke a reaction - 13 in the and 14 in the PC. Even though we can say *John is irritating me* without John's being aware of the fact, it would seem that we do not even make this sort of claim very often. We seem to prefer to water it down and turn *irritating* into an adjective instead, preferably an attributive one. With imperatives, PFoc examples are particularly few, perhaps because they involve a third element, the person issuing the command, which makes the whole situation very complex.

7.5 Auxiliaries, Modals, and Emotion

An area of syntax which is not mentioned very frequently in the discussion on emotion verbs is their relationship to those verbs which we designate as auxiliary or modal in English. Although these auxiliary and modal verbs by no means translate easily between English and Portuguese particularly at a syntactic level, at a more semantic level, certain similarities exist.

7.5.1 Auxiliary verbs and Emotion

Quirk et al. (1985: 3.31-8) present the 'primary' verbs, *be*, *have* and *do* and discuss their functions both as lexical and auxiliary verbs. As far as Emotion is concerned, both SFoc and PFoc Emotion verbs in English use the auxiliary *do* quite normally to form negatives and questions. However, the use of both *be* and *have* with the SFoc verbs to form the progressive and perfective aspects is, as we have already seen, restricted to the very few situations in which they occur. Portuguese does not have an auxiliary like *do*, but *estar a* and *ter* are restricted to the formation of the progressive and perfective aspects with the SFoc verbs for the same reasons as their opposite numbers in English. The use of *be* and *ser* to form the passive will be discussed below.

Halliday points out that SFoc verbs reject the pro-verbs *do* and *fazer*^[3], because one cannot ask the question *What did you do?* or *O que fizeste?*, and get the answer **I feared / he feared John*, or **Receei / detestei o João*. Again, this is a question of verb type. *Do* can only be used like this with dynamic or activity verbs, although those Emotion verbs which can be interpreted as behaviour may occasionally appear with them, as in:

(7.33) A. What did he do when you told him he couldn't go?
B. He sulked.

(7.33) A. *O que é que fiz quando dizeste que ele não podia ir?*
B. *Amuou*.

7.5.2 The Modal verbs and Emotion

The use of modal verbs with SFoc verbs is also very restricted, because of their specific semantic content. Modern grammars are rather less sure about what constitutes a modal verb than they used to be, a point which Quirk et al. (1985) develops in some detail for English, which Pontes (1973) develops into a book for Portuguese.

Quirk et al. (1985: 3.40) define a gradient from 'central' and 'marginal' modals, through 'modal idioms', 'semi-auxiliaries' and 'catenatives', to full main verbs^[4]. They describe how

modals behave syntactically, giving various different syntactic tests to show how they function on this gradient, using *can*, which they consider a full modal, in contrast with *hope*, which they define as a full verb.

Interestingly, few of these tests could be used in a similar analysis of Portuguese of *poder* and *esperar*, either because they depend on the use or otherwise of *do* as an auxiliary, or conventions of ellipsis which function differently in the two languages. This is also partly due to the fact that whereas *can*, and the other central modals, are defective and limited to one or two forms, which cannot even be described as present and past versions of each other, *poder* can function as a normal verb in Portuguese - although it disallows the imperative, as is pointed out by Cunha and Cintra (1984: 428) [5]. Pontes (1973: Chapter 4) shows how certain uses of *poder* can be considered as modal, and how *dever*, *ter/haver que*, and *precisar*, verbs which serve to translate the notions expressed by the various types of modals in English, and *costumar*, *começar*, *continuar*, *por-se a*, *tornar a*, *voltar a* and *acabar*, which cover several of the meanings implicit in Quirk et al.'s semi-auxiliaries and catenatives, can be analysed in similar terms.

Apart from describing those verbs normally considered as auxiliaries or modals, Pontes (1973: Chapter 3) also analyses, and rejects, the proposal by Said Ali (1963) to include as modal verbs certain 'causative' and 'sensitive' verbs. The interesting point is that the sensitive verbs include several of the SFoc verbs considered here, such as *querer*, *desejar* and *odiar*. If one takes the same point of view together with Quirk et al.'s choice of *hope* + infinitive complementation as the end of the modal > main verb gradient, it is not unreasonable to suggest that some of the SFoc verbs do in fact come very close to being modal.

Quirk et al. (1985: 4.49-66) describe the semantic uses of the various modal type verbs and how they tend to vary from one variety of English to another. The modals seem to cover semantic gradients between:

- a. permission and possibility - e.g. *can* / *could* and *may* / *might*;
- b. obligation and necessity - e.g. *must* / *have (got) to* / *need* and *should* / *ought to*;
- c. volition and prediction (future) - e.g. *will* / *would* and *shall*.

These notions do not easily agree semantically with emotion, for reasons already discussed. Even a simple future prediction, although possible, is extremely rare. It is difficult to imagine contexts for examples such as:

(7.34) He **can*/**may*(permission) / **shall*(obligation) / **must* (obligation) love/hate/fear Mary.

(7.35) He **had better* / **would rather/sooner* love/hate/fear Mary.

(7.34) Ele **pode*/**deve* amar/odiar/temer a Maria.

(7.35) Ele **deveria*/**preferiria* / * amar/odiar/temer a Maria.

However, there appear to be exceptions, as in:

(7.36) He must love her very much, if he risked his life for her.

(7.37) He can't love her very much, if he doesn't bother to visit her.

In these examples, however, *must* and *can't* do not refer to obligation or ability to love. They express instead the Speaker's conviction about the 'epistemic necessity' of what is being said, as explained by Quirk et al. (1985: 4.54).

There are a few modals which do appear with SFoc verbs. For example, the marginal modal *used to*, expressing a habit or state in the past, can be used with these verbs provided a state not a habit interpretation is assumed. A hypothetical use of *would* is often used with *like*, *love*, *prefer*, "to indicate a tentative desire in polite requests, offers or invitations" (Quirk et al. (1985: 3.64 n.(c)):

- (7.38) Would you like a cup of tea?
No, thank you. I'd prefer / love a cup of coffee.

Dare is related to *fear* when used in the negative form but means rather *not to have courage* than *to be afraid*. Catenatives like *appear to* and *seem to*, also appear with SFoc verbs describing the Speaker's impression of someone else's emotion, which puts the situation at a remove from one's personal attitude. However, these are minor examples, which avoid more central meanings of the modal verbs.

In Portuguese, although, as we have seen, it is even less easy to make syntactic distinctions between verbs on this modal > main verb gradient, the semantics of these verbs offer similar possibilities to the English verbs, and for that reason their usage with SFoc verbs is also limited. Examples of epistemic necessity can be found:

- (7.36) *Ele deve gostar muito dela, para ariscar a própria vida por ela.*

- (7.37) *Ele não pode gostar muito dela, se nem sequer a visita.*

The hypothetical use of *would*, however, is a function of the *presente*, *futuro do perfeito* or *pretérito imperfeito*, depending partly on the degree of politeness involved.

- (7.38) *Quer/gostaria de tomar uma chavena de chá?*

Não, obrigado. Preferia um café.

Costumar translates the *used to* modal but, as it functions normally with tense, it also translates English phrases with the present + *usually*, which probably accounts for Portuguese students' confusion of the English constructions. However, it is limited to habitual situations and does not appear with SFoc verbs. Besides, in Portuguese, the *imperfecto* is possible with these verbs, thus making a modal unnecessary. *Parecer*, like *appear* or *seem*, could be classified as catenative.

The stative quality of SFoc verbs would, for various reasons, therefore, seem to be emphasized by their incompatibility with the semantic notions expressed by the modal verbs. The appearances they make together seem to fit into either the epistemic necessity, or tentative polite categories.

7.5.3 Can a lexical verb be modal?

Before leaving this subject, I should like to speculate a little about this notion of the SFoc verbs as close to modals or quasi-modals, despite their apparent status as normal lexical verbs. The semantic gradients proposed for modals above have been formulated very much on the basis of what English-speaking grammarians, including Chomsky and his followers, say, and they tend to be attracted to the subject by the irregularity of the syntax of these modals in English. Poole (1973) quotes these authorities in defence of a position which rejects the idea that the sensitive verbs are modals, despite the infinitive construction which is common to both the verbs which she agrees are modals, and the sensitive auxiliaries which she rejects as such. However, as she points out in her first chapter, other Portuguese grammarians have toyed with the idea that the

is something special about these verb + infinitive structures, although few risk declaring the real auxiliaries.

Naturally, one of the reasons why modal verbs are of interest semantically is that they seem to represent some sort of basic or primitive mood or attitude at the level of syntax. To enlarge or diminish the number of these moods or attitudes is therefore subject to the wider and deeper notions of philosophy and psychology. However, to limit the notions of ability, capability, volition, intention and others to those which are expressed through the small number of defective modal verbs in English, may seem sensible and economical, but one could call it linguistically chauvinistic and restrictive.

It is not my intention to rush in where experts fear to tread, and I would not argue for a strong hypothesis that verbs of Emotion + infinitive clauses in English and Portuguese are quite modals. All I would like to suggest, given the tendency nowadays to accept gradients rather than clear-cut distinctions in language, and given the syntactic arguments which I shall now put forward, is that a weaker hypothesis is acceptable - that in certain circumstances, these verbs should be seen as the continuance of the gradient of modality a little further, until it reaches a position on the gradient marked for behaviour rather than attitude.

As I have already pointed out, these verbs have syntactic features in common with other modals. Apart from *do*, in English, they cannot combine with the other modals in their core semantic senses. They also occur with infinitive clauses in which the understood Subject in the subordinate clause is the same as that of the main clause. Quirk et al. (1984: 16.38) list verbs that accept this sort of complementation according to semantic category and most of them are of the type we are discussing, or are from the closely related classes of intellectual verbs like *intend* or *plan*, or intellectual performatives, like *ask*, *offer* or *promise*. Significant among some of the others are of the *begin*, *continue* and *cease* type whose Portuguese equivalents, *andar* and *continuar*, are considered by Cunha and Cintra (1984: 380-2) as a means of conveying aspect, and which Mateus et al. (1983: 142) describe as *auxiliares aspectuais*: aspect auxiliaries. The remainder are nearly all synonyms of the above mentioned category or of the verb *try*, which also has a trace of volition in its semantics.

The semantic categories proposed by Quirk et al. are not labelled and they are ordered on a syntactic basis - according to which accept other forms of complementation - rather than in relation to any particular semantic criteria. They could, however, be classified in a different order to show a progression from emotion > mental process > action [6]. As one moves away from the emotion end of the gradient, the possibility or permission modals become increasingly acceptable. Interestingly enough, the *begin* type verbs, similar to the Portuguese aspect auxiliaries, can accept these modals quite easily.

A few examples of the infinitive structure were found with a number of these verbs, in both EC and the PC, but the percentages are only really significant with the Desire, Liking and Hope groups, all of which are strongly related to volition, particularly when this syntactic structure is used.

Desire would certainly stand for consideration as having a modal status of the volition type as one of its most important functions. In the EC, the main verbs are *want* and *wish*, and 47,9% of the examples recorded take an infinitive construction; in the PC, the verb *querer* is the most important with 60,1% of the examples taking an infinitive. Quirk et al. (1984: 3.51) actually suggest that *want* in the present tense, as in *I want*, is "syntactically different from a main verb because the meaning changes if the past tense or progressive aspect is used. They choose to discuss it as a 'pragmatic particle', and claim that with *I*, it "introduces an expression of wish and implies an attitude of volition.

Hope, which Quirk et al. consider to be at the end of their auxiliary > main verb gradient, which can be seen to mean some sort of volition towards the future, has 4,6%(E) of examples with infinitives in the EC, and 11,2%(P) for *esperar* in the PC, which could be seen in similar light to *want*. *I hope* usually expresses a similar attitude of volition.

The Liking verbs with this structure can be seen, if not as volition, at least as some sort of positive, or willing, attitude towards whatever process is implied by the infinitive following them. The examples in the PC were few, 4,2%, but in the EC 18,2% makes these verbs, at least *like*, which accounts for 16,4%, a strong contender for quasi-modal, or pragmatic part status. The use of *would like* + infinitive is very close pragmatically to the modal idioms *would rather/sooner*.

One can, therefore, point to a certain syntactic connection between the lexical verbs Emotion, and their close relative *want*, and the modals. The verbs in the Desire, Liking Hope groups usually define personal attitudes, moods or dispositions, and, as we shall see later on, these are among the more consciously processed emotions.

7.6 Passivization and SFoc verbs

Another point that can be made about the syntax of SFoc verbs is that they do not undergo passivization. This point comes across when one observes the tiny or non-existent percentage of passives involved with these verbs in both the EC and the PC. *Hope* and *fear* produce a small but noticeable number of passives in the Birmingham Corpus, owing to impersonal constructions like *It is hoped/feared that*. These structures are found in official letters and informative documents and so they do not appear in my corpus of literary texts. The passive *love* appeared only about 15 times in the whole Birmingham Corpus (BC), which had 17 examples of the form *loved* alone, and a total of 8642 examples for *love*. These examples are rather unusual. Apart from examples like:

(7.39) She was loved by all who knew her.

where the SENSERS are several in relation to a PHENOMENON which is also the The they refer to *love* in general, rather than in particular, as in:

(7.40) It is better to be loved by a fool than not to be loved at all.

(7.41) She regards loving and being loved as a normal part of life.

Others have noticed this point and yet, influenced perhaps by early training in reciting verbs based on the Latin *amare*, Quirk et al. (1985: 3.70) use the example *Mary was loved by John* as an example. I have yet to find an example like this outside books on grammar and linguistics where, nevertheless, it continues to be a favourite. Bresnan (1982: 6) uses *Fred is loved by Mary* as an opening example in the 'The Passive in Lexical theory', and in Bresnan (1976: she has the complicated *John wants to appear to be loved by Mary*. Even Halliday (1976) when arguing the problem of whether *The gift pleased Mary* is the passive of *Mary liked the gift*, says that the passive sentence *The gift was liked by Mary*, "although a much less common type, undoubtedly exists also".

I am not claiming this type of structure does not, or cannot, exist. The BC also produced at least 17 examples of the passive among 1746 occurrences of *liked*. Besides, so many eminent linguists, speaking as ideal native speakers, feel that the structure is acceptable, so it must be merely a matter of wanting to stress the fact that it is much rarer than they seem to realise. Halliday is arguing against attempts by Lakoff, Chomsky and others to make *like* a sort of passive form *please*, a point on which I agree with him, but why, one asks, could those discussing the passive in other circumstances not have used some more obviously agentive verb, like *kiss* or *kissed*?

instead? For the purposes of the examples quoted, it would not have made any difference.

If the rejection of passivization were confined to just one lexeme or another, it might be a problem of the lexeme, but in the analysis made of the BC and the other corpora, whole groups of Emotion lexemes - Satisfaction, Relief, Pride, Self-Reproach, Gratitude, Gratification, Remorse, and Surprise - produce not one example of the passive, and two other quantitatively important groups, like Joy and Distress, only manage to produce a tiny number of rather doubtful examples. To quote examples of the passive using these verbs, therefore, is to be unforgivably unrepresentative.

In my own English and Portuguese corpora, where not only more obvious passive structures but also every possible example of an PFoc past participle form in this lexical area were analysed, these examples only accounted for 0,6%(E) and 1,3%(P) of the total examples in corpora. Although such a tiny number, it is noticeable that this still leaves the PC having proportionally more than twice as many examples as the EC, but, as we shall see, this use of the past participle in Portuguese is sometimes different. There are 12 attributive and predicative examples in the EC, and over three quarters come from the Appreciation/Liking groups, with examples like *admired*, *loved*, *respected* and *favoured*, or from groups allowing a negative appreciation, with examples like *detested*, *dreaded* and *despised*. The only example which did not imply either multiple or unknown SENSERS was the following with *despise*:

(7.45) I began to consider whether I was not more naturally and wholesomely situated after all, in these circumstances, than playing beggar my neighbour by candlelight, the room with the stopped clocks, and being despised by Estella. GE

and this is part of an -ING clause which, as we have seen, favours unusual structures.

The situation with past participles formed from SFoc verbs is by no means as straightforward in the PC. Although the majority of examples come from much the same lexical groups, they follow a similar pattern to the EC, as in:

(7.46) Às vezes pergunto-me se todos temos mesmo que fazer esta via-sacra porque a verdade é que o dinheiro compensa muito os que não amam nem são amados, os que não acreditam em si... SU

there were more examples in which an individual SENSER was explicitly described, as in:

(7.47) Era amado por Joana Angélica? AQ

There are also several examples in which *o meu amado/a minha amada* have a Vocative function, as in:

(7.48) Tu, minha amada, és o inconsciente; amas as coisas pelas coisas; eu amo-as muito. AQ

In English, this could be translated as *my beloved*, which is used very rarely, and the attributive use of *amado*, as in:

(7.49) Raras vezes se pronuncia a palavra revolução como raras vezes se pronuncia o nome da mulher amada, no café, em frente de estranhos. A

would also be rendered by *beloved*, of which there are 4 examples in the EC. However, the use of the participle form of these verbs attributively is rare in the EC, the very few examples in

corpus coming in phrases like *a wealthy and respected merchant* or a *dreaded enemy* and but one - *the cherished glamour* - refer to human, or human type, PHENOMENA, which the subjects of the emotion described. In this way, the PFoc past participle typically refer the accepted fact that the PHENOMENON is *detested*, *respected*, or *beloved*, rather than any emotion-causing quality it possesses. For this reason, these participles are quite distinct from the PFoc adjectives which typically describe just these qualities.

In the PC, however, there are about seven times as many examples. Several are of attributive type which projects the SENSER's feeling onto something else, as in:

(7.50) O povo e nós próprios já considerávamos o carbúnculo um acidente desprezível mas alguns haviam-me custado noites atormentadas. N

but there are examples of past participles like *desconsolado* and *divertido*, which apply describing the quality of the PHENOMENON, as in:

(7.51) Não era divertido assistir em silêncio, do fundo de uma poltrona, às infundadas discussões de Carlos e de Craft sobre arte e sobre ciência. M

These examples are nearer the PFoc adjectives than past participles, and this example can only be translated by *amusing* and never *amused*. However, it is interesting that they can also be used as SFoc past participles, translatable by *amused*, as in:

(7.52) Carlos pulava nos joelhos do avô, muito divertido com aqueles longos abraços que juntavam as duas cabeças dos velhos. M

The distinction between adjective and past participle in Portuguese would therefore seem rather fuzzier than in English, but the more passive-like examples of the PFoc participles would seem to follow similar pragmatic rules in both languages. The copula used in the English examples, and the vast majority of the PC ones used either *ser* or a zero copula. The unknown nature of the SENSER(s) is underlined by the fact that complementation by phrases such as *by X* is only found with a tiny minority in both languages.

The semantic reasons why the SFoc verbs reject passivization are not difficult to find. It would seem fairly obvious that, if the Subject of these verbs is not an Agent, but a SENSER EXPERIENCER, they are hardly likely to accept passivization, which usually requires some kind of AGENT even if it is neither known nor mentioned. It also should not be forgotten that the status of the PHENOMENON depends on the SENSER, as explained above. If the nature of the PHENOMENON is essentially internal to the SENSER, it is psychologically difficult to make the PHENOMENON an independent reality which acts as a Theme ^[7], or in the nominative Subject position in the sentence. This is emphasized by the fact that the avoidance of passivization by the SFoc verbs is balanced by a high proportion of passive-type examples with PFoc ones, as we shall see below.

Perhaps it is precisely the fact that so many well-known linguists have argued the *please/don't please* dichotomy backwards and forwards for so long that has made people shy away from the problem. Passivization has raised all kinds of problems for the different grammatical theories but more has been said about the syntax than the pragmatic or psychological reasons for the passive.

7.7 Emotion, adjectives/ past participles, and the Passive

Although the passive is conspicuous by its absence with emotion verbs, similar structures v

adjectives and past participles of emotion, and which some see as being on a Passive > Active gradient, are quite important. One needs to consider the morphology and syntax of adjectives in order to understand this better.

7.7.1 The morphology of the adjective in English and Portuguese

Although certain adjectives in both languages are recognizable from the suffixes, like *-able*, *-ível*, *-ive* and *-ivo*, which are added to verb or noun stems, many, like *happy*, *old* or *good* are not immediately identifiable from their morphology. One of the problems with adjectives is whether they derive from verbs or nouns, or whether verbs and nouns derive from the same stems. Another linguistic problem is whether adjectives are simply surface manifestations of deeper structures, or whether they derive from verbs or nouns. Of course, the validity of these arguments will depend very much on the adjectives one chooses to prove one's point. With Emotion there are plenty of adjective/noun pairs with no verb form, like *happy* /*happiness*, *furious*/*fury*, *alegre*/*alegria* and *fúria*/*fúria* which would favour an adjective/noun relationship. With some SFoc verbs like *love* and *love* in English, it is not apparent from the form which comes first, the verb or the noun, although adjectives like *lovable* seem to derive from them. PFoc verbs often seem to be the nearest stem, as with *irritate* > *irritation*, *irritated*, *irritating* and *irritable*, and its cognate Portuguese, *irritar* > *irritação*, *irritado*, *irritante* and *irritável*.

In the case of Emotion, a large number of adjectives seem, at least morphologically, to resemble participles, as with *annoyed/annoying*, and the verb *annoy*. There are some participial forms, like *anguished*, *aggrieved*, *disgruntled* and *dissatisfied*, which seem to function without any real corresponding verb form. Used predicatively, participles can appear to be ambiguous, it being unclear syntactically if they are being used as the adjectival form or as the progressive aspect, unless an Object is present, as in:

(7.53) She is alarming (the children).

or the adjectival form or passive, unless the agentive phrase is given, as in:

(7.54) She is disgusted (by your behaviour).

In Portuguese one has a similar situation with past participles, as in:

(7.55) *Ela está zangada (com o teu comportamento).*

although the agreement between the subject and the past participle points to an adjectival interpretation. However, a present participle like *alarmando* is easily distinguishable from the adjectival form, *alarmante*.

Like the verbs, the adjectives related to Emotion can be classified as SFoc or PFoc. SFoc verbs like *love* are related to SFoc adjectives like *loving* and to PFoc adjectives/participles like *lovable* and *loved*. PFoc verbs like *irritate* are connected with SFoc adjectives like *irritated* and *irritable*, and with PFoc adjectives such as *irritating*. The participle type adjectives we seem to follow a distinct pattern according to which verb type they derive from. Thus, *-ing* and *-nte* adjectives deriving from SFoc verbs will be SFoc, and *-ed/-do* and *-ble/-vel* adjectives will be PFoc. *-Ing/-nte* adjectives deriving from PFoc verbs will be PFoc, and *-ed/-do* and *-ble/-vel* adjectives will be SFoc. Other verb-related adjectives, like *envious* and *resentful* are usually SFoc, whereas *delightful* and *offensive* are PFoc, but it is not so easy to predict the suffix will influence the focus, as a study of *hateful*, usually PFoc, will show.

Those adjectives which are not related to verbs are less easy to analyse, particularly if they are used attributively. They can be quite clearly SFoc, as with *jealous*, *anxious* and *furious*.

ciumento, *ansioso* and *furioso*. Some English adjectives, like *afraid* and *aghast*, can only be used predicatively, and are always SFoc. However, there are others, like *happy* and *sad*, *feliz* and *triste*, which can be both SFoc and PFoc.

There would seem to be a gradient for adjectives, therefore, which would stretch from those related to nouns only, like *happy* or *sad*, through those which can be related to both nouns and verbs like *irritable* and *lovable*, to those like *alarmed* and *disgusting*, whose relationship with the verb is self-evident. A similar gradient can be shown in Portuguese, with the exception of the present participle type adjective. As we shall see, this gradient forms part of another which Quirk et al. (1985) call the passive gradient. The more sophisticated linguistic arguments, however, go well beyond morphology.

7.7.2 The syntax of the adjective in English and Portuguese

The adjective is traditionally regarded as modifying the noun in some way, and in Portuguese the bond between noun and adjective is strengthened by the fact that they agree in number and gender, whether used attributively or predicatively. The position of adjectives is what usually identifies them, and in English one can distinguish between attributive and predicative adjectives, those that usually occur before the noun described and those that act as complements to a copula, usually *be*. The relationship between attributive and predicative uses of adjectives is close and it can usually be assumed that if we talk about *the beautiful girl* we are usually prepared to state that *the girl is beautiful*. For this reason transformational grammar, as Wardhaugh (1977: 120-1) explains, liked to show how *the beautiful girl* derives from the deeper structure *the girl is beautiful*, using a BE-deletion transformation to give **the girl beautiful*, followed by an adjective movement one to make the adjective precede the noun - a transformation that was not necessary for languages like Portuguese. Nowadays more attention is given to the pragmatic reasons why one structure is used in preference to another.

Halliday (1984) prefers to call attributive adjectives 'modifiers' within and at the level of nominal group in the clause, and to classify the copula + predicative adjective as a process of being, one of the relational processes to be found at the level of the clause. The modifiers of various kinds, which I need not describe here, and when, as often happens in English, there is more than one of them, there are certain definable rules as to the order in which they appear.

Halliday's classification of the predicative function as a relational process is in line with the assumption by many linguists that adjectives occurring in a predicative position are usually equivalent to stative verbs. It follows from this, therefore, that stative verbs, or processes, and copulas + adjectives, or certain relational processes, must be semantically close.

In Portuguese the same distinction can be made between attributive and predicative adjectives and the rules for the copula + predicative adjective constructions, and their relationship with verbs, are very similar to those for English. However, it is not so easy to compare the usage of attributive adjectives, as Portuguese normally places them after the noun, and, unlike English, dislikes accumulating a large number of adjectives to describe one noun. This means that certain adjectives, particularly those which look like nouns in English, like *stone wall*, are expressed by other structures, like prepositional phrases, as in *parede de pedra*.

As has already been mentioned in Chapter 6, although the grammatical rules for the behaviour of Portuguese predicative adjectives are very similar to those for English, pragmatically, particularly with the SFoc adjectives, there is a significant difference between actual usage in the two languages. When one examines the behaviour of adjectives in actual texts in both languages, one notices other differences in their behaviour.

In English an adjective is usually securely tied to the noun it modifies, either by proximity usually immediately preceding it as when it is attributive, or by a connecting copula. The rules of agreement of adjectives with nouns in Portuguese, on the other hand, allow for greater flexibility of sentence structure. This can be seen if one examines the following sentence:

(7.56) Tirei-a depois com ostentação dos dedos engelgados da comadre, lavei-a com carinho, feliz, alvoroçado. N

which describes the doctor, the *I* or *eu* implicit in the first person use of the verb, who has delivered a baby or *criança* - understandable from the feminine pronoun *a* after *tirei* - with help of the *comadre* or village midwife. Despite the fact that three people are involved, - defined by feminine gender - the apparent isolation of the adjective *feliz*, and the fact that an adjective which does not have masculine/feminine agreement, one can deduce that it describes the (male) doctor. This is partly because it appears to be related to the adjectival participle *alvoroçado*, which shows masculine agreement, but also through conventions of conjunction and ellipsis in Portuguese which allows a conjunction and a copula like *estava*, to disappear. An extended version of this sentence would give something like "..... carinho, e estava feliz...". Any attempt to reproduce the same structure in English without a copula would give, at best, a very

The flexibility of the position of the adjective in the sentence in Portuguese sometimes makes it difficult to decide if it is acting attributively or predicatively. The following examples from the PC give an idea of the problem:

(7.57) A mamã chamava a Mac Gren o 'bebé'. Era com efeito uma criança estouvada e feliz. M

(7.58) E aquela aldeia de que nunca soubera o nome, tão quieta e feliz na luz, deu a Carlos um desejo repentino de sossego e de obscuridade, num canto assim do mundo. M

(7.59) Ele mesmo descerrou os estojos e a rapariga, enlevada e feliz, mergulhou os olhos em tais lindezas. AQ

In (7.57) both *estouvada* and *feliz* can be described fairly easily as attributive adjectives as they immediately follow the noun with no punctuation or intonation breaks. In (7.58) the agreement of *quieta* indicates that *quieta e feliz* describe the *aldeia* but the adjectives are separated from the noun by another clause, and the possibility of extending the sentence would allow a copular structure to emerge. Therefore this is best described as an ellipted predicative example. (7.59) is more difficult to classify. Although the adjectives *enlevada e feliz* appear in the normal attributive position after the noun, they are separated from it by a comma in written text, and this would indicate a slight break in the intonation when reading aloud. One can assume from this that the girl is not being described as essentially *enlevada e feliz*, but she is like this temporarily as a result of what *ele* - he - has just done. The apparently more natural English translation *and the girl, excited and happy, gazed at the beautiful jewellery*, would definitely be preferable, in this context, to **and the excited and happy girl gazed at the jewellery* for similar pragmatic reasons. (7.58) is therefore best classified like (7.59), as an ellipted predicative one.

The difference in use of copulas between the two languages described in Chapter 6 can be largely explained by the type of flexibility of the Portuguese adjective described above. Another factor which probably contributes slightly to the difference is the fact that the EC uses *-ly* adverbs rather more than the PC uses *-mente* ones. Although these adverbs account for only a small number of the total examples, Table 4.2 records over twice as many examples in both the PFoc and SFoc groups for the EC. This type of difference can be seen in exam

such as the following, using *angrily*:

(7.60) "Digging for apples, indeed! said the Rabbit, angrily. W

which was translated by two different translators as an adjective separated from the preceeding noun by a comma as: ...*tornou o Coelho, furioso*, and ...*disse o Coelho, irritado*.

I was particularly careful with these examples but, if the results had shown a bias in favour of predicative over attributive examples in the PC, I might have doubted my judgement. As it is however, the data actually show a slightly higher percentage of attributive adjectives and participles for the PC. In any case, with or without copulas, the (copula) + adjective/ participle structure needs to be considered in relation to the passive.

7.7.3 The Passive gradient

The passive voice is traditionally considered to be formed by "putting the verb *to be* into the same tense as the active verb and adding the past participle of the active verb", and "is used in English when it is more convenient or interesting to stress the thing done than the doer of it when the doer is unknown" (Thomson and Martinet: 1969). In more formal grammatical theory, the passive as a transformation of an underlying active sentence is one of the transformations that is still taken seriously. This means that the passive form of *John kicked Mary* is *Mary was kicked (by John)*. In the surface structure the S and O switch roles, but semantic roles remain the same, although the Agent function, obligatory in the active sentence, becomes optional in the passive construction.

Portuguese grammars such as Cuesta & Luz (1971) and Cunha e Cintra (1984) describe the form of the passive as being formed by combining the verb *ser* with the past participle of active verbs. Mateus et al. (1983) go a little further than the *ser* passive and include a passive construction which in some ways resembles a reflexive and in other ways impersonal verb structure.

As the notions of transformation and deep case with the passive were examined further, it emerged that a finer definition was needed and, for English, Quirk et al. (1985: 159-161) describe a 'passive gradient' from 'central passives', through 'semi-passives' to 'pseudo-passives'. This proposal is a synthesis of several individuals' work, notably Svartvik (1966) and Stein (1979).

The classes called semi-passives and pseudo-passives are of particular interest to anyone studying the language of Emotion. The first of these classes is represented by examples "have both verbal and adjectival properties". According to Quirk et al., "they are verb-like but have active analogues":

- (7.61) a) We are encouraged to go on with the project.
b) (The results) encourage us to go on with the project.
- (7.62) a) Leonard was interested in linguistics.
b) Linguistics interested Leonard.

"On the other hand, their adjectival properties include the possibility of:

- a. coordinating the participle with an adjective;
- b. modifying the participle with *quite*, *rather*, *more*, etc.
- c. replacing *be* by a lexical copular verb such as *feel* or *seem*."

as in:

(7.61) c) We feel rather encouraged and content.

(7.62) c) Leonard seemed very interested in and keen on linguistics.

They add that these examples are "stative rather than dynamic" which "tilt(s) the scale: favour of an adjectival analysis, since all participial adjectives have stative meaning, when the corresponding verbs do not". This class of passives does not often use BY-phrases some agent-like phrases are introduced by prepositions such as *about*, *at*, *over*, *to* and *with*.

The pseudo-passive has "neither an active transform nor a possibility of agent addition" an known by some as a statal passive. Although many examples of this type of passive use *t* past participle forms, the fact that *be* can be substituted by other copulas and the past participle by adjectives, as in:

(7.63) Mary was/felt/seemed + thrilled/disillusioned/happy/angry.

(7.63) A *Maria estava/sentia-se/parecia* + *excitada/disillusionada/feliz/zangada*.

shows that we have reached the end of the gradient between central passives and copular complement, or SPCs constructions. At this stage the current and resulting copulas are possible with adjectives and adjectival past participles.

Most of the cases when Emotion is expressed using the SFoc past participle of an PFoc v can be considered semi-passives or pseudo-passives, and about 47% of these examples in EC had some form of complementation indicating the PHENOMENON. 11,6% was accounted for by clausal complementation, but the remaining 35,4% consisted of a preposition + noun phrase as complement. However, *by* phrases accounted for only 14,2%, *with*, *of* and *about* being used with most of the rest. The phrases with these latter prepositions emphasize the Senser's attitude, rather than any Agentiveness on the part of PHENOMENON. The PC past participles showed a far lower percentage of example complementation, only 26,8%, clausal complementation being virtually non-existent, and only 6,3% appearing with *por*, the usual equivalent to *by* with passive constructions. *Com* and roughly the same as *with* and *of*, both exceeded the number of *por* phrases, for similar semantic reasons.

The SFoc adjectives show a similar pattern to the past participles in copular structures. In EC these adjectives are complemented in 49,2% of the examples, slightly more than for participles, and in the PC, 21% are complemented, rather less than with the participles. This difference between the languages shows the same similarity as regards complementation in general. However, when an analysis is made of the type of complementation, the PC shows clausal complementation again to be minimal, whereas 21,7% of the EC adjectives take this type of complementation. Of the remaining 27,5%, about two thirds use *of*, and *for*, *with* and *about* account for most of the rest. None of the EC adjectives use *by* phrases, and only a small number of the PC ones use *por*, the most popular Portuguese preposition here being *de*, similar to *of*, which accounts for two thirds of the examples. Despite the fact that these prepositions can be considered of little semantic value, and often apparently tied by linguistic convention to the preceding adjective, as with *afraid of*, the absence of *by/por* phrases in favour of *of* ones, indicates again that the focus is on the SENSER rather than on any Agent PHENOMENON.

The problem of the choice of *ser* and *estar* arises again with the passive. The central passive uses *ser*, but the semi-passives and pseudo-passives will very often use *estar*, particularly with the past participles of PFoc verbs of Emotion. Casteleiro (1981: 69-102) describes the debate between grammarians as to whether past participles can, under certain circumstances,

be considered adjectives. Although recognising the fact that past participles in examples like

(7.64) A Maria está deprimida.

agree with the Subject, which does not happen with a regular passive type with *ser*, as in:

(7.65) A Maria foi beijado pelo João.

he argues from a transformational point of view which naturally favours the explanation of SFoc past participles being essentially passives. With examples like:

(7.66) a) Encontrámos a Maria, que se tinha zangado com o João.

b) Encontrámos a Maria, zangada com o João.

he argues that the second sentence is a reduced form of the first, and that the disappearance of the perfective *ter* and the -SE must contain a rule obliging the resulting past participle to agree with the noun. Few would quarrel with the view that most of the PFoc verbs, and their SFoc past participles, are connected syntactically in what would be described by traditional grammarians as an Active <---> Passive relationship, and transformational grammar naturally accentuate the importance of this fact. However, the passive gradient described by Quirk et al. allows for a more flexible interpretation

This passive gradient is of considerable significance when describing the language of Emotion. Given the relatively large quantity of copula + participle /adjective structures with the PFoc verbs already discussed, the interpretation of this phenomenon is important. We have already seen that the SFoc verbs do not like passivization, probably because they all refer to a state in which the agentivity of the PHENOMENON is minimal. It should follow that PFoc verbs and adjectives are unlikely to be strongly agentive. Besides, since we prefer to focus the more psychologically relevant SENSER of the emotion in actual texts, it is natural that normally PFoc verbs should favour the passive voice syntactically as a way of expressing this. However, given that the PHENOMENON is only very occasionally agentive, it is unlikely that an unambiguous passive, with an obvious Agent, should emerge, in contrast with strongly agentive verbs, like *make*, which need an expressed Agent.

As we have seen, the fairly high level of complementation of the EC past participles and adjectives does not indicate Agentivity on the part of the PHENOMENON, and the same percentages for the PC also lacked Agentivity. The complementation that does exist can be better understood as some form of explicit recognition of the nature of the PHENOMENON by the SENSER, or by the Speaker. This still leaves us, however, with over half of the examples, and three quarters of the PC ones, with no complementation at all, which we seem to indicate a definite tendency to concentrate on the Senser's emotional state or process, particularly in Portuguese.

7.7.4 The semantic importance of the Copula + adjective /past participle structure

Copulas + adjective / past participles indicate either qualities or states, which in their turn can be seen as current or resulting. However, a more cognitive classification of Emotion lexemes does not fit easily with the classification of these SPCs structures as states, unless some form of process leading up to this state, and the nature of its inherent temporariness is somehow taken into consideration. To become this specific in relation to the SFoc adjectives/past participle structure, English requires reflections on the nature of *be* which go beyond the evidence of syntax. Other copulas with SFoc words, 12,6%, give a few clues to the semantic possibilities involved. Table 6.1 showed that *feel* accounts for most of the self-reports on these situations.

4%, and *look* and *seem* for most of the reports on others, 2,2% and 1,8%. Only a small percentage of examples, 1,2% explicitly use *become*. The zero copula examples, which indicate some type of inherent temporariness in the situation, do not seem to be particularly significant in this area, the SFoc ones being actually proportionally fewer, 8,3%, than the PFoc ones, 10%.

The evidence from the PC would suggest, however, that language usage in this area can allow for a more finely discriminated perspective. *Ser*, which is predicted to co-occur with adjectives or participles describing 'quality', is, as would be expected, the major copula with PFoc words accounting for 53% of these examples. However, despite predictions to the contrary, *ser* appears with 6,1% of the SFoc ones, which allows for a degree of permanence to be expressed with certain lexemes. *Estar*, which is predicted as a major copula here, and appears regularly in any analysis done by linguists orientated towards syntax, in fact accounts for only 8% of the examples. Its significance lies in its specific implication of a 'temporary state'. As with the EC, a small number of examples can be found with other copular type verbs like *senti* and *parecer*, for self-reports and reports on others. However, *ficar*, which describes a state but implies a process leading up to it, has 7,4%, and here we have evidence of the process probably mental, leading to the state. If one can then presume that the majority of examples, 66,9%, which use a zero copula, imply some sort of temporariness, and can usually be expanded to include an *estar* or *ficar* copula^[8], thereby underlining both the temporary process aspects of emotion lexemes in copular structures, there is no doubt that the intuition based on the mother tongue of the Portuguese speaker can contribute more positively to analysis of the mental processes involved, than those of the English speaker.

We saw in Chapter 6 that the corpora suggest that the Portuguese speaker feels less need to specify the PHENOMENON than the English speaker, and more interest in the process itself. This may be due to this greater range of possibilities offered by the Portuguese language in describing the process. Whether we can deduce from all this that the Portuguese speaker is generally more interested than the English speaker in the process than the PHENOMENON is a matter for speculation.

More immediately, the different lexical groups vary considerably as to the degree in which they favour the various possibilities offered by all aspects of the SFoc and PFoc verb + adjective and past participles, and the way they behave on some sort of Active < - > Passive gradient, and this gradient will be important in assessing the psychological nature of the different groups later on.

7.8 Emotion and the VERB + -SE construction in Portuguese

One difference between Portuguese and English, which is interesting as far as Emotion groups concerned, is the Verb + -SE construction. There is a small percentage of occurrences in Emotion groups. -SE can act as both a reflexive and a reciprocal pronoun. Like other clitics, it can appear separated from the verb, especially in negative and interrogative constructions. A question that arises with Emotion verbs is whether -SE is acting as a reciprocal or a reflexive pronoun, or whether the verb + -SE should be considered a compound verb form, rather like an English phrasal verb, where the -SE, like the adverbial particle with the phrasal verb, is just an extra bit of the verb. Another aspect of the construction is its function as a sort of passive. Both of these positions are defensible - depending on which verb and example one chooses to support one's point of view.

Apart from the examples already quoted, when -SE appears with a SFoc verb, it is usually reciprocal, as in:

(7.67) E nada os podia embarçar; amavam-se; confiavam absolutamente um no outro

ele era rico, o mundo era largo M.

(7.68) *And they had nothing to hinder them; they loved each other, they trusted in each other completely; he was rich and the world was largeTr. M.*

but, one could probably find an example of the reflexive, like:

(7.69) *Detestava-se quando pensava no mal que tinha feito.*

(7.70) *He hated himself when he thought of what he had done.*

if one searched a big enough corpus.

When discussing the transitivity of SFoc verbs in English above, the fact that apparent intransitive uses of these verbs could be translated in Portuguese by the verb + -SE is mentioned. On the one hand there are examples like *divertir-se* which correspond to similar expressions in English, *enjoy oneself*; and on the other hand there are those that can be used intransitively, like *amuar-se, to sulk*, and *arrepender-se, to repent*. With these verbs, as Cuervo & Cintra (1984: 308) and Vilela (1992: 77-8) point out, the -SE can be considered an integral part of the verb. The argument put forward by Vilela is that these are inherent reflexives which are merely variants of other non-reflexive structures, and, since the reflexive particle can reappear in tests using questions, substitution, coordination or modification, they are not reflexives.

The notion that the -SE construction is a passive can be found in Mateus et al. (1983) and Berman & Vilela (1986). The examples favour the verbs *comprar* and *vender*, *buy* and *sell*, as in:

(7.71) *Esses livros compram-se na Livraria da Associação.*

(7.72) *A casa vendeu-se facilmente.*

Among the arguments put forward in favour of this interpretation are a) the agreement of the verb with the S of the sentence, and b) the impossibility of providing another, agentive, subject for the sentence without removing the -SE. The English translations do in fact favour a passive interpretation:

(7.71) *These books can be bought at the Union Bookshop.*

(7.72) *The house (was) sold easily.*

and *books* and *houses* are usually sold by some kind of agent. However, if one wishes to create an example to prove a point, one could suggest that the following example is ambiguous:

(7.73) *As prostitutas vendem-se na Via Norte.*

Who sells the prostitutes - their protectors, or themselves - and is this a passive or a reflexive situation? A literal, rather than a more colloquial, translation, would give us *The prostitutes themselves on the Via Norte*, even if their protectors are more active in this respect than they are.

Other examples that are sometimes described as passive are those in which the subject is undetermined, or can be substituted by the third person plural (see Vilela (1986 : 72)^[9] as in

(7.74) a) *Diz-se que há muito desemprego.*

- b) Dizem que há muito desemprego.
 (7.75) a) Receia-se que as coisas vão ficar pior.
 b) Receiam que as coisas vão ficar pior.

which in English give us the empty *It* subject or the impersonal *they* equivalent with existential clause or THAT clause:

- (7.74) a) *It is said that there is a lot of unemployment.*
 b) *They say that there is a lot of unemployment.*
 (7.75) a) *It is feared that things will get worse.*
 b) *They fear that things will get worse.*

These structures are more typical of official letters and documents and rarely appear in the text of literary texts that form the corpora.

7.8.1 The PFoc verb + -SE - analysed at a deep level

Both in Portuguese grammars and in conversation with Portuguese colleagues, the explanations which are given for the Emotion verbs + -SE are those which favour either -SE as an integral part of the verb, or the passive explanation. However, in many cases, the Emotion verbs which take -SE can also function as normal PFoc verbs which, as such, combine with normal Objects. Macedo de Oliveira (1979) describes this facet of the PFoc verbs which are subject of her thesis. She quotes Rouveret and Vergnaud (1978) and Gross (1975) on reflexive clitics in Romance languages. The former consider that "the reflexive clitic -SE is basically generated as an affix on the verb". Apparently Gross has suggested another explanation for reflexive forms as follows:

"l'objet de No V N1 doit être un nom 'approprié' dont le déterminant est un adjectif possessif obligatoirement coréférent du sujet. Cette formulation de la dérivation de reflexif a une généralité très souhaitable parce qu'elle permet d'amorcer les cas où le verbe, dans son emploi transitif, n'accepte pas un complément d'objet 'humain'".

Macedo de Oliveira's analysis shows the influence of her supervisor, Maurice Gross. According to her analysis

- (7.76) a) A Maria angustia-se com o Pedro.

is the same as:

- b) A Maria está angustiado com o Pedro.

which, in its turn, is a passive of:

- c) O Pedro angustia a Maria.

and that this shows that the -SE is an affix of *angustiar* when it is acting as a reflexive or passive. She supports this claim by saying that, although one can say:

- (7.77) a) A Maria angustia-se com o comportamento do Pedro.
 b) A Maria angustia-se a si própria com o comportamento do Pedro.

one cannot say:

- c) *A Maria angustia-se a si própria com o Pedro.

d) *A Maria angustia o João com o Pedro.

This, she argues, is because in the first examples *o comportamento do Pedro* is *non a* whereas *o Pedro*, in the second set, is *actif*. She reinforces this argument by exchanging *ti se a si própria* for *o João* and assuming an *actif* role for *A Maria*, on the understanding one cannot have two *actif* or agentive roles in the same sentence. She explains the correctness of the following example by suggesting that Pedro, as *actif*, upsets Maria by telling her of João's behaviour:

(7.78) a) O Pedro angustia a Maria com o comportamento do João.

b) O Pedro angustia a Maria com o facto de que o João tenha procedido de forma ignóbil.

If one assumes, as she does, that there is an *actif* or Agentive role somewhere in the sentence is difficult to argue with these syntactic arguments, especially as certain semantic pragmatic arguments are used to defend them. She does, however, say that with the pair:

(7.79) a) A Maria angustia-se com o Pedro.

b) A Maria angustia-se com o comportamento do Pedro.

Pedro must be considered as *non actif* to be acceptable, thus making *Pedro* and *o comportamento do Pedro* semantically equal. She suggests that these sentences *syntaxiquement ambigües* as both must be interpreted actively as:

c) (O comportamento do) Pedro angustia a Maria.

and can both be considered as relevant to:

d) A Maria angustia-se a si própria com o (comportamento do) Pedro.

It is on this point that she, and her mentor, draw attention to a certain weakness in the argument. They have presumed all along that there is an equivalence between the verb + reflexive pronoun and a passive construction with *estar*. They have also assumed that a reflexive reading of *A Maria angustia-se* and their understanding of *O Pedro angustia a Maria* to have the same roles, of an AGENT Subject + PATIENT Object variety. As we have already seen, using concepts of another school of linguistic analysis, it is more appropriate to argue for SENSER Subject + PHENOMENON Object roles for both sentences, in which case *o comportamento do Pedro* is merely a more explicit form of *Pedro* and both act as PHENOMENA. One can argue for the AGENT/PATIENT roles for *o Pedro angustia a Maria*, because one can imagine Pedro deliberately doing something to upset Maria. This, I agree, is not the case with *A Maria angustia-se*, but, as I have pointed out before, an AGENT understanding of *o Pedro angustia a Maria* is extremely rare, and a PHENOMENON reading is more normal. If, therefore, we assume the same notion of mental process, with SENSER and PHENOMENON roles, that has been discussed in previous sections, it becomes clear that to simply write this structure off as passive does not do justice to its overt reflexiveness.

As we have seen, there is a resistance to the idea of reflexiveness attached to Emotion which may have something to do with Behavioural psychology, or with the older ideas that Passions are caused from without. If, as Cognitive psychologists would argue, one can attribute mental processes, even of a sub-conscious kind, to Emotion, it becomes possible to explain *A Maria angustia-se* on a PHENOMENON / SENSER basis, in which the subconscious mental processes of Maria affect her conscious self. This would add a dimension of conscious appraisal

to Emotion in Portuguese which is not easy to achieve in English.

So far I have used the arguments of others to discuss this problem, together with a lot of linguists' sentences as examples. One important point on which I would disagree with Ranchod is that, however much she may argue for syntactic equivalence of the verb + -SE and the *estar* + past participle, and although, according to the school of syntax to which she subscribes, there is this idea that the passive is just a transformation of the active, one still has to find a semantic and pragmatic justification for having two different ways of saying (approximately) the same thing in a language. Although one can trace a deeper com- structure if one tries, the fact is that, in everyday usage, people continue to choose between the two possibilities and may feel that there is a different explanation from the one given by experts.

7.8.2 The PFoc verb + -SE - analysed at a surface level

I shall now approach the problem using more naturally occurring sentences, and compare acceptable reflexive verb, like *lavar-se* or *wash oneself*, which can also be used non-reflexively, and compare it with *assustar-se*, which, translated by *frighten*, gives a similar pattern in English, and with *irritar-se*, which does not. One can construct the following set of examples:

- (7.80) a) Ele lavou-me.
- b) Ele lavou-me com a esponja.
- c) Ele lavou-se.
- d) Ele lavou-se com a esponja.
- e) Ele lavou-se quando a mãe ralhou com ele.
- f) Ele lavou-se quando sujou os dedos.
- (7.81) a) Ele assustou-me.
- b) Ele assustou-me com os foguetes.
- c) Ele assustou-se.
- d) Ele assustou-se com os foguetes.
- e) Ele assustou-se quando a mãe ralhou com ele.
- f) Ele assustou-se quando queimou os dedos.
- (7.82) a) Ele irritou-me.
- b) Ele irritou-me com o seu comportamento.
- c) Ele irritou-se.
- d) Ele irritou-se com o meu comportamento.
- e) Ele irritou-se quando a mãe ralhou come ele.
- f) Ele irritou-se quando queimou os dedos. [\[10\]](#)

These examples can accept tests with other tenses, and with the negative or interrogative without showing any difference in behaviour. The -SE pronoun acts as a direct object, and additional information, *com* + noun can be described as prepositional object, with Instrument-type semantic role, and the *quando* + clause as an adverbial. Furthermore, if one prefers to construct examples with the passive, with the non-reflexive verbs one gets:

- (7.80) g) Fui lavado pelo João.
- (7.81) g) Fui assustado pelo João.
- (7.82) g) Fui irritado pelo João. [\[11\]](#)

but none of the -SE versions can be passivized, as reflexives cannot passivize directly. This point could be used to demonstrate that reflexives are not true SPO constructions, but, as K

(1979: 63-4) points out, in English one can make a construction with *get*, although the reflexive feature is dropped. For example, the examples given here, using a *get* passive, would give *got washed / frightened / irritated*.

Although the reflexive pronoun allows one to distinguish actions done to oneself, or some of process between the unconscious and conscious self, it does not seem strong enough to create a passive. This would indicate that there is a gradient of passivization which functions at a semantic and pragmatic level for all verbs.

As we have already seen, one argument that is put forward in defence of -SE as a verb part is that, whereas English need only add the -SELF reflexive pronoun to the verb, and not otherwise, in Portuguese one can also add *a si próprio*, as in:

(7.83) Lavou-se/ matou-se/ assustou-se / irritou-se a si próprio.

Despite the syntactic arguments put forward by Macedo de Oliveira that one has to view *própria* as an emphatic interpretation of *a si* as in:

(7.84) É a si (própria) que a Maria angustia, com essas ideias mórbidas.

one could equally well argue that the *a si próprio* after -SE is an emphatic additive - rather than an emphatic *do* accompanying the verb in an English statement, adding force, but not essential and say that the reflexive meaning in Portuguese is perfectly understandable without it, whereas in English the reflexive pronoun is essential, except with *wash*, because *wash* is marked to mean *wash oneself* unless some other object is specified. The additive nature of *a si próprio* after -SE is in fact easier to defend than the emphatic *do* - which usually has to come before the verb it is emphasizing. In spoken Portuguese, it will be distinguished as an additional factor by marked intonation. Instead of saying that Portuguese allows for excess baggage here, one can sympathise with English for lacking the emphatic option.

I hope I have demonstrated that there is a case for considering at least the PFoc type verb Emotion as reflexive constructions when used with -SE.

7.8.3 The SFoc verb + -SE

Although I understand the position that with verbs + -SE, which do not have a normal PF function, like *arrepender-se*, the -SE can be considered an integral part of the verb, I wonder if it is really defensible. Vilela (1986: 69) considers a case like this as a *lexema complexo* complex lexeme, in which the -SE has no syntactic function, but in Vilela (1992: 77) he prefers to describe it as an inherent reflexive in which the reflexive forms part of the verb. I do not think there is anything wrong with considering it a reflexive, even if it is inherent rather than true and is syntactically limited, particularly since it is rather an intellectual lexeme. After all, English linguists see no harm in considering *pride oneself* reflexive and, not so long ago, according to the S.O.E.D., *repent* was also reflexive. If this is acceptable, one can argue that these verbs are SFoc reflexives, and perhaps there is a reflexive notion half-buried somewhere in these languages which may appear in other languages as well. *Sentir-se*, which will be discussed separately in Chapter 13, is very interesting because it can act as a copula in a SF structure, can be considered as a verb in what could be called a SPOCs structure, would appear to be a passive as in *sentiu-se o ar do rio*, and also has some notion of reflexiveness inherent in its meaning.

7.8.4 A perspective based on the corpora

Although all the examples in the EC of verbs in this lexicon with a SELF reflexive pronoun

only account for the tiny percentage of 0,4% of the total lexemes, in the PC the verbs + account for 4,2%. As percentages of the syntactic groups the -SE examples amount to 28,8% the PFoc verbs, and 11,6% of the SFoc ones. The PC examples are, therefore, quantitatively significant.

One of the problems with these structures was how to classify them. First of all they had to be put into the classification of SFoc/PFoc when, in practice, they could be seen as somewhat between these two poles. However, the distinction was made by taking the following factor into consideration.

Some verbs, such as *irritar* and *afligir*, could be used as ordinary PFoc verbs, as in:

(7.85) Já aquele arzinho gordo de tranquilo triunfo irritou Carlos. M

but they also could appear with -SE alone, although the PHENOMENON is retrievable from the context, as in:

(7.86) Havia um comerciante de madeiras, de nenhuma letra, também viciado em cartas, que ali vinha todas as noites mas demorava a jogar. O João irritava-se: SU

and also with -SE, together with the PHENOMENON, usually introduced by a preposition *com*, as in:

(7.87) Abel, que magicava adular Quina por intermédio do rapaz, mostrando-se até mesmo sugerindo uma disposição testamentária que o resguardasse de privações futuras irritou-se muito com aquela selvagem atitude. Si

These examples were classified as PFoc, although some might say that only the first example is truly PFoc. However, whether the PHENOMENON is implicit or explicit, there is a certain degree of overt reflexiveness in these examples which allows for an PFoc classification.

The SFoc examples were those which could not be used without -SE as normal PFoc verbs although they could take prepositional objects. So although one cannot find **O João zangou Maria*, one could find them alone with -SE, as in:

(7.88) Palma alastrou as cartas largamente, sem se zangar. M

and with a prepositional object, as in:

(7.89) Custódio sorriu. Não se zangue comigo - disse, candidamente. Si

With these examples the verb refers more directly to the SENSER's feeling or behaviour, the syntactic arguments in favour of considering

The difference between *irritar* as a full transitive and *zangar-se* as an intransitive verb is on a gradient between the two, with the other examples of *irritar-se*, and that of *zangar-se* with a prepositional object falling somewhere in between, as either true or inherent reflexives. The idea of reflexiveness is perhaps more obvious with *irritar-se* than with *zangar-se*, given the possibility of forming a normal transitive sentence with *irritar*. However, the distinction between the *irritar-se* type verbs as PFoc, and the *zangar-se* ones as SFoc is very fine, and is made more to give some idea of the relative distribution of the different types within the corpus than as a rigid classification. Both the PFoc and SFoc examples thus classified take prepositional complements in much the same proportions, and, if one considers all the verb -SE alone examples together they account for 2,1% of the total examples, whereas those with

prepositional object amount to 2,5%.

The corpus would seem to show that, with these structures, transitivity and reflexiveness a matter of degree rather than a fixed norm, but that some sort of reflexiveness, of the SENS explicitly formulating the emotion internally, even when an explicit PHENOMENON is given is a feature of the Emotion lexical verbs. Here again, we come up again the tendency Portuguese to focus on the internal emotional process, rather than the state. If the -SE were the only feature of Portuguese suggesting this tendency, the syntactic arguments against reflexiveness would be more valid but, when considered as part of a bigger picture, semantic points in favour of this reflexiveness become more acceptable.

7.9 Adverbs of Emotion

Most of the problems of adverbial uses of Emotion lexemes have already been discussed. There seems to be a slight preference in Portuguese for zero copula adjectives over *-me* adverbs, and preposition + noun phrases.

Adverbs of the type formed by adding *-ly*, in English, and *-mente*, in Portuguese, to adjectival lexeme are not a common feature of the Emotion lexicon, the SFoc and P examples accounting for a total of 6,9%(E) and 2,6%(P). Of those that do appear, the S type are more frequent - 4,7%(E) and 2,2%(P). These describe the emotional behaviour/physical feelings of the SENSER, as in:

(7.90) The baby grunted again, and Alice looked very anxiously into its face to what was the matter with it. W

(7.91) O seu pobre coração pôs-se a bater ansiosamente, no terror daquela decisão
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and were all classified as examples of BEHAVIOUR, although a few examples were explicitly so orientated.

Classifying the type of PHENOMENON was not always an easy task as, since the adverb typically used to describe the behaviour of the SENSER by an outside observer, one has to assume that the observer is interpreting this behaviour correctly. Thus, in an example like:

(7.92) She stroked the little dog lovingly.

one has to take her behaviour on its face value and presume that she loves the dog, and is just pretending affection in order to curry favour with its owner. Besides, describing emotional behaviour is often made when the observer is actually in doubt as to the true nature of the SENSER's feelings. In any case, doubtful examples were always classifiable as PHENOMENON 1 types.

PFoc adverbs of this kind which actually focus the PHENOMENON are rare, but they occur in examples like:

(7.93) Yvette loudly and irritatingly trilled a tuneless tune. VG

where there is an implication that *Yvette* is *being irritating*. This rarity is quite natural if one considers the non-active function of the PHENOMENON, or PHENOMENON. After all, this type of adverb is essentially dynamic in nature.

There are a number of adverbs of this kind which may seem to refer to the causative PHENOMENON aspects of Emotion, but which, in practice, have become more normal

Emphasizers, as in:

(7.94) She looked up -- what demon possessed him, her youngest, her cherished? -- saw the room, saw the chairs, thought them fearfully shabby. VW

(7.95) Era apenas introduzir um burguês mais num segredo, tão terrivelmente delicado que ele mesmo se assustava de o saber. M

Another use of Emotion lexicon adverbs is as disjuncts, or adverbs with which the Speaker inserts his/her own evaluation of the situation, as in:

(7.96) Above all, she was a blessing to Joe, for the dear old fellow was sadly cut up by the constant contemplation of the wreck of his wife. GE

(7.97) - Não se sabia amar... Ninguém nos ensinou a amar e a gente amava aquilo que era mais fácil: as flores, os gatos, e, felizmente, as crianças... Su

These examples, which focus neither the SENSER nor the PHENOMENON, but are an external comment on the whole emotional process or relation, were not included in the corpora. [1] This decision was taken partly because of the unrelatedness of the items to the process, but also because to include them would have caused certain anomalies in the balance of particular lexical items. For example, *happily* is rarely used as a disjunct, but its apparent Portuguese equivalent *felizmente* is used frequently in this way. However, *felizmente* would usually be translated as *fortunately*, and to include these examples would have definitely upset the balance of these items in the Joy groups without contributing significantly to the general understanding of the lexicon of Emotion.

[1] The reason I prefer to use the Portuguese grammatical term - taken from Cunha e Cintra (1984) - is to avoid the confusion caused by rough translation. These terms are traditionally used to describe Portuguese verbs, not English verbs, and to assume that an equivalent in English is to start off with the wrong presuppositions.

[2] This is a good example of the Portuguese verb with a dative - a P + Oi + Od pattern - which does not have an equivalent in English.

[3] See Halliday (1976: 3.3.3.3) and Maia (1976: 4.4)

[4] The central modals are - *can, could, may, might, shall, should, will, would, must*..

The marginal modals are - *dare, need, ought to, used to*.

The modal idioms are - *had better, would rather / sooner, be to, have to, have gone to*, etc

The semi-auxiliaries are - *have to, be about to, be able to, be bound to, be going to, be obliged to, be supposed to, be willing to*, etc.

The semi-auxiliaries are - *have to, be about to, be able to, be bound to, be going to, be obliged to, etc*

Hope is used as an example of a 'full main verb' here specifically because it can be complemented by a non-finite infinitive clause, and also *begin* because it can also be complemented by both infinitive and -ING clauses.

[5] The use of *poder* with the 'tempos compostos' with *ter*, *tenho podido*, *terei podido* etc., the structure with *estar - estou a poder*, etc., although not impossible, must be extremely rare.

[6] The present order could be classified roughly as follows:- i) emotion verbs; ii) action verbs; iii), iv) and v) intellectual/mental processes and attitudes; vi) and vii) intellectual performatives, and viii) verbs of *trying* etc. If they were reordered to allow for the emotion mental process > action gradient, ii) would come at the end.

[7] I am using here the notion of Theme/Rheme, put forward by Halliday on several occasions which is used to explain the Passive as a way of 'thematizing' the Object of an Active sentence i.e. of putting the 'theme', or 'topic', of the communication at the beginning of a sentence.

[8] It is possible that *ser* could be used in some of these expanded examples, but it is unlikely that if *ser* were possible on these occasions, it would be elided in a way which produces the normal attributive adjective.

[9] For non-Portuguese speaking readers, I should point out that Portuguese verbs can, very often do, function without a subject in the 'surface' structure, and rely on the context to provide the necessary information.

- [10] Tr. (7.80)
- a) *He washed me.*
 - b) *He washed me with the sponge.*
 - c) *He washed himself.*
 - d) *He washed himself with the sponge.*
 - e) *He washed himself when his mother got angry with him.*
 - f) *He washed himself when he dirtied his fingers.*
- (7.81)
- a) *He frightened me*
 - b) *He frightened me with the fireworks.*
 - c) *He frightened himself.*
 - d) *?He frightened himself with the fireworks.*
 - e) *He frightened himself when he burnt his fingers.*
- (7.82)
- a) *He irritated me.*
 - b) *He irritated me with his behaviour.*
 - c) *?He irritated himself.*
 - d) **He irritated himself with my behaviour.*

e) *He irritated himself when his mother became angry with him.

f) *He irritated himself when he burnt his fingers.

[\[11\]](#)

I was washed by John.

I was frightened by John.

I was irritated by John.

CHAPTER 8

THE SEMANTICS AND SYNTAX OF NOUNS OF EMOTION

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8.1 Introduction

To restrict oneself to the verbs and other syntactic structures discussed so far in an analysis of the lexicon of emotion would be to ignore 30,4% of the EC and 41% of the PC. Apart from being sizeable proportions of the corpora, this is a clear difference between the languages which should not go unnoticed. The examples in the corpora were marked for countability/non-countability, different types of complementation, and their occurrence with certain prepositions and verbs, and it is possible to discern certain syntactic and semantic patterns.

8.2 The countability / non-countability of nouns of Emotion

I shall begin by discussing the countability or non-countability of emotion nouns in a way which owes more to the preoccupation of linguistic philosophy with the elements of conceptualisation than to the type of semantically based linguistic theory that has predominated in my analysis of the verbs. It was Oscar Lopes who first drew my attention to the complexity of the nature of the countability of abstract nouns, and although perhaps the theoretical constructs used to analyse them pose as many problems as they attempt to solve, the intellectual discipline imposed by attempting to use them is salutary.

As we have seen, Averill, in his criticism of Ortony et al., brought up the problem of whether

the study of emotions was one of natural kinds or logical individuals concluding that general, it was the former. When the psychologists or philosophers are talking about Love, Anger or Fear, the chances are they are discussing natural kinds. However, this is not common use of these nouns outside psychology and philosophy.

If one looks for grammatical information about nouns of emotion in dictionaries and grammars they will usually provide the information that one should consider them normally as abstract uncountable or non-count nouns, with an occasional countable exception. Quirk et al. (1985: 5.75) go no further than to say:

"Abstract noncount nouns normally have no plural but some can be reclassified as count nouns where they refer to an instance of a given abstract phenomenon.... Many abstract nouns are equally at home in the count and noncount categories."

which is not the most explicit of explanations. However, given the complex nature of problems involved, perhaps it would be impossible for such a grammar to be more precise without entering areas which go beyond its scope.

Halliday (1984: 161-2) takes a wider view and distinguishes between singular, and plural, and describes mass nouns as either non-singular or non-plural, depending on the system of deixis that are used with them in English. Although this view is fairly suitable for explaining the nature of the patterns that emerge in the corpora, I feel a need to go a little further into what is meant by singular, plural and mass nouns first.

8.2.1 Emotion as a Concept or Nominal Term

The first type of noun form that is often discussed in an analysis of this sort is that of the noun as-concept, or what is often referred to as its nominal form. One does not have to be a linguist to talk about the concept of Love, Hate, or Fear, but it helps if one is to understand the implications of what one is saying. A few examples may help to draw attention to the problem involved:

- (8.1) "Friendship is Love without his wings" (Byron)
- (8.2) "Fear is the parent of cruelty". (Froude)
- (8.3) "Love conquers all". (Virgil)
- (8.4) "Anger is a short madness". (Horace)
- (8.5) Love/anger/hate/fear is an emotion.

These examples show that the concepts in the first three examples are (near) personifications and function like names or Proper Nouns. All of the examples show that this form of the noun syntactically requires:

- a) a nominal function, or S position
- b) the relevant verb in the third person singular
- c) in English, a zero article.

Portuguese also accepts the criteria a) and b) as in:

- (8.5) *O amor/medo/ódio é uma emoção.*

but, despite the counter examples in the sonnet by Camões in which, *Amor é um fogo que a sem se ver*, (translatable as *Love is a fire which burns unseen*), it is normal in modern

Portuguese for nouns of this kind, as well as Proper Nouns, to take a definite article - the rule for exceptions to this rule being as relevant for a name like *João* as for a personification *Amor*.

The reason why the verb in these examples is in the singular is because the abstract noun/concept is acting as a proper noun, name or nominal term, and referring, as with *Napoleon*, *Lisbon* or the *Earth*, to something that is singular or unique. This analysis is based on the logic of nouns put forward by philosophers and linguists such as Strawson (1959), Quine (1960), Montague (in Pelletier (Ed.): 1979) and others. Alice ter Meulen in her book "Substances, Quantities and Individuals" (1980) applies this type of theory to the analysis of mass terms. As part of this analysis she refers to proper nouns as rigid designators. She defines a rigid designator as "a term that refers to the same entity in all possible worlds where that entity exists". She then goes on to demonstrate with examples of substances like gold and water how, if these terms appear in a nominal position unpreceded by an article (in English as nominal mass terms, they behave syntactically like proper nouns. This is because "Substances are properties of sets of quantities".

If one applies the same syntactic tests to nominal abstract terms such as *love*, we obtain very similar results. The main difference between mass and abstract terms is that whereas the former are properties of sets of quantities, the latter are properties of sets of individuals, or, to Strawson's (1959) term, of individual instances.

It should be noted that Alice ter Meulen is careful to restrict her examples of nominal terms to such scientific definitions as *Gold is an element* and *Water is H₂O*. The nearest one can get to this with the concepts under discussion is *Love/hate/fear is an emotion*, for there are no suitable chemical formulas (yet!) with which we would be happy to define these phenomena. However, the fact that each of us may have a different notion of *love*, - the 1st edition of The Oxford Book of Quotations cites at least 34 examples of "Love is..." - does not invalidate the status of these nouns as proper nouns or nominal terms. Each speaker will make his/her definition based on his/her experience in his/her world, and will be speaking in the context of that world. One must not forget that this also happens with proper nouns - Winston Churchill, for example, must have been described in fundamentally contradictory terms by the English and the Germans during the last War, and in everyday life each of us has a slightly different view of whoever is the subject of the conversation, despite that person's apparent reality in the physical world.

Although this usage of emotion words has interesting philosophical implications, it remains that they are very rarely used in this way. 0,8%(E) of the total examples for the PC and 0,6%(P) for the PC could be described in this way. No doubt, if books on the psychology or philosophy on emotion had been included in the corpora, the percentage might have been higher, but if one examines such books one will find that their authors rarely come themselves to a direct *Love/fear is.....* definition ^[1].

8.2.2 Emotion nouns as Subject of the sentence

Emotion nouns often appear as the subject of a sentence, and on these occasions they appear without an article in English but with one in Portuguese. However, one should make a distinction between the true Nominal, which acts as a concept and is independent of any specific emotional situation, and cases where the SENSER, and often the PHENOMENON, the emotion acting as Subject is defined in the sentence or immediate context, as in:

(8.6) He was afraid - afraid for Sam, afraid for Sarah, afraid for himself - fear poured like an invisible gas from the mouth of the silent telephone. HF

The SENSER and several PHENOMENA are actually specified here and this, and a number of similar examples, were classified as normal nouns qualified by zero in English, and by a determiner in Portuguese. The argument, like that given for predicative uses of the noun, that, despite the apparent Nominal or concept function of *fear* in the sentence, it should be seen as related to specific instances and not to the concept. If we created an example with *water* like:

(8.7) When the flood reached her town, there was water everywhere - water in streets, in the house - water poured through the door as she opened it.

The same analysis would be made - not of water as a concept, but of those actual quantities of water, resulting from the rain and causing the flood.

However, although people may argue that there are several propositions underlying the sentence that define different instances of *fear* - *fear for Sam*, *fear for Sarah* and *fear for himself* - (or *water*, for that matter), I feel, intuitively rather than logically, that the image of *fear* as an *invisible gas* still carries a vestige of some more generic concept, or Nominal, in its surface interpretation. This is probably another example of a gradient in natural language which evades the stricter classifications of logic.

8.2.3 Emotion as a Relation

As with the verbs and adjectival constructions considered so far, underlying nearly all uses of Emotion nouns other than true Nominals is the notion of a relation between the SENSER and the PHENOMENON. These nouns are often used in expressions like *John's love for Mary*, *Philip's fear of thunder*, *the child's happiness at seeing its mother* and related constructions, although, in actual stretches of language, the relation is not always so explicit, and often has to be retrieved from the context. The corpora show that the noun groups show a high proportion of PHENOMENON 1 types, 26%(E) and 26,8%(P) as against the corpora averages of 12,2% and 17,4%(P) [2]. This is to be expected because the noun does not oblige complementation in anything like the way verbs and even copula + adjective structures do. However, if one maintains the view that all emotions have some form of PHENOMENON, the notion of the noun as a relation between SENSER and PHENOMENON is self-evident.

Although one may, therefore, put forward the notion that all non-Nominal uses of the Emotion nouns must have some underlying relation in their semantics, this does not mean that the relation is always explicit at the level of syntax. Let us look at ways in which these nouns appear syntactically, first from a theoretical point of view, and then with reference to the corpus.

8.2.4 Emotion nouns as Instances

The examples used to describe the Relation at the beginning of the previous paragraph are those used by Quine (1960) to exemplify his idea of individual instances of the abstract nouns or general things, he classified as 'quality- or property-names':

"Thus we may speak of 'the wisdom of Socrates' as an instance of wisdom; of the redness of Smith's face as an instance of redness; and we may also speak of John's present mental state as an instance of anger".

He chose *redness*, *anger* and *wisdom* as his examples and this led him to claim that these nouns "are derived from adjectives and the general things they name usually enter our talk by way of the adjectives from which their names are derived".

One can make the analysis he makes of *angry* > *anger*, with other copulas + adjectives, as *Philip was sad to hear the news* and *the child was happy to see its mother*. However, perhaps Quine had not considered terms like *love*, *hate* and *desire* which can more suitably be described as nouns derived from verbs. This type of noun can be shown to be a nominalisation of the verb phrase as in *John loves/hates/desires Mary*. This point is interesting in that it contributes to the notion that there is a close semantic relationship between verbs and copula + adjective constructions. The semantics of both the verb and adjective structures, therefore, are relevant in an analysis of the nouns.

Quine's examples with *wisdom* and *redness* are different in one important point from that of *anger*. Whereas the sentences:

(8.8) Socrates was wise.

(8.9) The house is red.

are intransitive copula + adjective constructions, the sentence:

(8.10) a) John is angry.

usually requires a wider interpretation such as:

b) John is angry with Jane.

either at the level of the sentence or the context, and can, therefore, be considered semantically transitive. This can also be explained by the fact that, whereas *wisdom* and *redness* are qualities or properties that are inherent and permanent, *anger* is related to Jones' present mental state which is transitory. *Jones is angry* temporarily, and we assume that this anger is provoked by someone or something.

This is also the case with instances of *love*, *fear*, and other emotion nouns, and can be seen in phrases like *Jones' anger at Smith's rudeness*, although *John's love of Mary*, and *Mary's fear of snakes* may last a lifetime. An instance of these nouns can, therefore, be seen to reflect the relation between the SENSER and the PHENOMENON of the emotion. In Alice ter Meulen's terms, this relation is an individual, as distinct from a quantity, and therefore indivisible and unique.

However, Quine's meta-term of 'instance' is possibly more appropriate for an abstract noun because it lacks the definiteness of individual and allows for the fuzziness which is characteristic of these nouns. Since there are cases of pluralisation of emotion words as in:

(8.11) His loves and hates are no affair of mine.

or

(8.12) Their fears for my safety were unjustified.

which can be shown to be referring to more than one relation between the SENSER/SENSITIVE and PHENOMENA, it is possible to refer to these nouns in terms of singular and plural. The use of using ellipsis and coordination only serve to emphasize this point^[3] and, as we shall see, the corpora produce enough examples to merit consideration of the countability of these nouns.

8.2.5 Emotion nouns as Mass Terms

Further comparison of *love* with *gold* and *water* using the tests of Alice ter Meulen reveal it can also be used similarly as a bare predicative mass term:

- (8.13) Henry drinks water. (a quantity of)
- (8.14) Mary wants love. (an instance of)
- (8.15) This ring is gold. (a quantity of)
- (8.16) What John feels for Mary is love. (an instance of)

This type of example can take mass quantification as in:

- (8.17) Children need (much) love and attention.
- (8.18) The lecturer showed (considerable) irritation at the interruption.

When the noun is in a predicative position, or performing a predicative function, therefore can be understood to be similar to mass nouns which do not require a determiner but quantifiable by *much* and other expressions. Interestingly enough, the same is syntactically for Portuguese:

- (8.13) *O Henrique bebe água. (uma quantidade de)*
- (8.14) *A Maria precisa de amor. (uma instância de)*
- (8.15) *As crianças precisam de (muito) amor e carinho.*
- (8.16) *O professor manifestou (bastante) irritação a ser interrompido.*

Portuguese also omits articles before mass or mass-type nouns with a predicative function.

It should be noted, however, that, despite the apparent 'mass' usage, there is still an underlying notion of 'relation'. *Mary* and *the children* need *love* and *attention* from some individual individuals.

8.2.6 The fuzziness of Emotion nouns as Instances and Mass terms

It is not always easy to define a particular use of emotion words as being an instance or a mass term. Let us look at the following examples:

- (8.19) a) Fear of spiders, arachnophobia, is believed by some psychologists to be innate.
- b) A fear of spiders is a useful aid to survival in tropical countries.
- c) The fear of spiders that Jane had acquired from her mother was something John had little patience with.
- d) Her fear of spiders was well-known.
- e) Her fear of spiders and snakes was well-known.
- f) Peter and Mary's fear of spiders (and snakes) was acquired from their mother.
- g) Her reaction to spiders was a mixture of fear and fascination.

In these examples the phrase *fear of spiders/snakes* specifies the emotion and its cause, and acts as a Nominal in (a), as an unspecified singular noun in (b), as an apparently singular noun specified by a definite article in (c) and by a possessive pronoun in (d). The singularity of these nouns seems to be borne out by the singular verb forms, but perhaps Halliday's term non-plural might be more appropriate with c) and d) if one wants to avoid a mass definition.

In (e), the ellipsis of *her fear of spiders* and *her fear of snakes* does not necessarily require us the plural form:

(8.20) ??Her fears of spiders and snakes were well-known.

in the same way that:

(8.21) a) Her book on spiders and her book on snakes are well-known.

would give us:

b) Her books on spiders and snakes are well-known^[4].

Similarly, in (f), *Peter's fear of snakes* and *Mary's fear of snakes* does not become:

(8.22) ??Peter and Mary's fears of spiders (and snakes) were acquired from their mother.

with ellipsis, in the same way that:

(8.23) a) Peter's book on snakes and Mary's book on snakes are well-known.

becomes:

b) Peter and Mary's books on snakes are well-known.

This suggests that *fear of snakes* has the mass quality which requires that the ellipsis of *John's gold is pure and Mary's gold is pure* (unspecified quantities belonging to different individuals), gives us *John and Mary's gold is pure*, and not **John and Mary's golds are pure*. Example g) was included to show that emotions, when 'mixed', convey much the same meaning in sense as *sugar* and *flour* when mixed together in cooking.

This analysis, which works similarly for Portuguese, is based on normal everyday language structure. The fact that a certain ambiguity is involved, and that in most cases there is more than one underlying semantic situation, should not obscure the fact that the way the surface syntax deals with it shows that both English and Portuguese speakers are somewhat ambivalent in their interpretation of these abstract nouns.

8.3 A perspective based on the corpus

The general results for the syntactic groups in the corpora, given in Table 4.2, show that there are 10% more noun forms in the PC, than in the EC, and this point needs to be considered before the more specific details. We have described the semantics of these nouns as relations which reflect the SENSER and PHENOMENON connection. Although the verbs, adjectives and participles also described the same sort of relation, the focus with verbs and copular structures was usually quite unambiguously on either the SENSER or PHENOMENON, although they posed more problems, the attributive adjectives and participles described the noun they were tied to.

With verbs, the nature of the SFoc verbal construction made it easy to classify the nature of the PHENOMENON in these examples, and only a small percentage, about 3%, were classified as PH. type 1, as against the 12,2%(E) and 17,4%(P) average. The copular structures in the PC were less frequently complemented but the PH. 1 types are fairly near the average. This fact and that that the PC produced a higher number of intransitive and reflexive structures can be interpreted as showing a tendency of the PC to focus the SENSER's internal processes, rather than the nature of the PHENOMENON.

However, unlike the verbs and copular structures, the noun form quite obviously focuses process rather than the participants, and to describe it as a relation is fairly appropriate. So, in the other areas it has been noted that the PC focuses the process rather than the participants is perhaps natural that the PC noun forms should exceed the EC ones by a large margin. However, the percentage of PH. 1 types - another indicator of less interest in PHENOMENON - is only slightly higher in the PC, 26,8%(P) as against 26%(E).

8.3.1 The problem of countability

When analysing the examples of nouns in the corpus, they were marked for 'singular' when preceded by the indefinite article, as well as expressions like *one* or *only*; 'plural' when appearing in plural form; 'determiner' when some form of defining determiner was used; 'possessive' when preceded by a possessive pronoun; 'zero' when no qualifying or quantifying item were used; and quantifiers like *some*, *much* and *more* were recorded as well. In order to simplify this analysis, all optional features of the noun phrase - like attributive adjectives - were to be ignored, despite the influence they sometimes had on the syntax of the phrase as well as, for example, when their role was defining.

As the analysis progressed, it became necessary to create a category, described as 'x-of-0', or 'de-0', to account for the fact that a substantial number of the examples, 15,8%(E) and 12,8%(P), used phrases which could either be seen as some sort of quantification of emotion, as in *a scream of fear*, or a mixture of quantification and qualification, as in *a sort of fear* or *a kind of love*. The 'x' stands for a variety of possibilities, the connecting preposition is *of* in English and *de* in Portuguese, and most, but not all, of the examples take a bare emotion noun.

The different categories were then put into three groups. The first group contained those with overt countability, or those marked for singular and plural, and the very few examples with *many* and *few*. The third group contained those with overt non-countability, or those marked with zero or 'x-of-0', and a few examples of quantifiers like *much* and *a little*. The middle category absorbed all those examples which belong to Halliday's 'non-plural' categories, which were more often than not of the definite article or possessive pronoun type, or the non-singular quantitative type, like *some* and *any*. These examples were all rather fuzzy in nature and an attempt to separate them into countable and non-countable groups would deserve a book in itself.

The results for the two languages for the PFoc nouns were almost uncannily similar, giving approximately 41%, 39% and 20% for the three groups, with a variation of less than 10% between the two languages in all groups. The results for the SFoc nouns showed about 36% for both languages in Group 2, but a variation of about 8% between the other two, leaving the EC with fewer count examples, or 13%, and more non-count ones, 51%, and the PC with more count examples, or 21% and fewer non-count ones, or 43%.

The explanation for the difference in countability between the examples in the EC and the PC is not easy. It may be partly explained by the influence of the fact that the zero qualifier is used in English when the noun acts as the Subject, as in

(8.6) He was afraid - afraid for Sam, afraid for Sarah, afraid for himself - fear could be like an invisible gas from the mouth of the silent telephone. HF

whereas a similar structure in Portuguese would demand a definite article, as is demonstrated by the published translation:

(8.6) *Estava com medo - medo pelo Sam, medo pela Sarah, medo por si mesmo - medo evolava-se como um gás invisível da boca do telefone silencioso.*

However, nouns with definite articles were not classified as countable but as belonging to ambiguous group 2 of non-plural / non-singular, so these structures should swell the rank of this group and not that of the first one of countables. So there must be some compensating mechanism at work here which allows the numbers in Group 2 to remain the same for both languages for the SFoc nouns, and for the extraordinary sameness of the data for the PFoc nouns.

The fact that the results for the PFoc nouns, which refer to the PHENOMENON, are so similar indicate that there may be some significance in the differences between the SFoc nouns, which focus the SENSER's internal emotional process. If one consults the examples in context however, the interpretation that results is that the non-count, or zero qualified nouns, are more precise in reference than the countable ones. The former tend to occur with prepositions and describe behaviour, as in :

(8.24) He was screwing his face up, he was scowling and frowning, and flushing with anger. VW

whereas the latter focus more on the emotional process, as in;

(8.25) Afonso da Maia ficou diante do filho, quedo, mudo, como uma figura de pedra, a sua bela face, onde todo o sangue subira, enchia-se, pouco a pouco, de uma grande cólera. M

The fact that the EC seems to favour the less specific or more behaviour orientated usage at countable/non-countable level is confirmed by its greater tendency to produce examples preceded by prepositions with an adverbial status. The tendency to countability of the nouns therefore demonstrates a certain preoccupation with the specific relation, rather than with more generic behaviour.

8.3.2 The complementation of nouns

This tendency to concentrate on the specific relation in the PC reappears when one examines the degree to which these nouns are followed by complementation. The PFoc nouns, with 12,5%(E) and 11,9%(P), show slightly fewer examples for complementation for the PC, but the SFoc ones with 13,2%(E) and 15,9%(P), show a slight tendency for the PC to favour complementation here. The difference is small, but is probably related to this attitude towards specificity.

The majority of complements are of the simple noun phrase variety and are predominantly introduced by *of* in the EC and *de* in the PC. These prepositions also tend to appear in possessive constructions, and confirm the idea that the explicit relations expressed by *John's love of Mary* and *Philip's fear of thunder* are used, but are not often so fully developed at the level of syntax.

8.3.3 The behaviour of Emotion nouns in adverbial phrases

When the Emotion nouns appear in adverbial phrases, they assume a more explicit uncountable function. These phrases are rare with the PFoc nouns in the corpora, 3,8%(E) and 5,6%(P) of the totals, but account for significant proportions of the usage of SFoc nouns, with 29%(E) and 24,2%(P). The lower percentage for the PC has already been referred to as a supportive factor for the suggestion that the PC shows a tendency to focus the relation rather than the behaviour.

The classification of these examples sometimes posed the problem of whether the preposition belonged to the noun following it, or to some other structure, like a phrasal verb, before it.

the first of the following examples the phrase *with admiration* can be removed without creating a problem of understanding. In the second there is a definite connection between *bristled with* which makes it less easy to remove *with anger*.

(8.26) He saw me looking with admiration at his car. GG

(8.27) 'I don't know that I want to do anything with him.' 'Don't you?' he spluttered; grey moustache bristled with anger. LJ

Since *bristled with* requires the complementation of *anger*, however, there is a connection between *with* and *anger* which allows this example to be classified as 'with + 0 noun'. It is difficult to make rules about this sort of phrase and these examples had to be analysed individually in context.

The main prepositions used in the EC with SFoc nouns are *with/ without* which account for 54,3% and *in/into/out of* which account for 34,5%. The phrases with *with/without* tend to describe the emotion which accompanies, and is sometimes exemplified in a certain behaviour as can be seen in the examples above. A similar effect is achieved with the Portuguese *com/sem* pair which account for 41,5% of the PC examples. *In/into/out of* tends to give an idea of *being in a state of*, and refers rather to emotional process or state than to the behaviour resultant from it. The PC examples with *em*, which account for 24,3%, convey a similar idea. The Portuguese preposition *de*, standing alone, can often be translated by *with*. It is often preceded by an adjective or past participle - the most significant of which is *cheio* - and on these occasions, as with most of the other less quantitatively used prepositions, the translation will vary according to the context. A comparison of the languages here would not prove very fruitful or accurate because of the fluidity caused by the possibility of more than one translation or interpretation in a number of examples.

The two main notions conveyed by the prepositional phrases, however, seem to allow for an idea of behaviour and of emotional state or process. These phrases are important in the consideration of the Emotion nouns, as they account for over a quarter of the noun examples in both corpora.

8.3.4 The possessive pronoun and the nouns of Emotion

One of the elements that qualify the nouns in the non-singular and non-plural group is the possessive pronoun. Whereas determiners like the definite article account for 12,4%(E) 24,6%(P) of all the SFoc noun examples, the possessive element accounts for 17,8%(E) 10,7%(P). This shows an interesting difference of focus between the corpora, the EC shows a decided preference for possessives and the PC for determiners. With the PFoc nouns the EC shows a marked reversal of this situation with 26,6% for the determiners and only 10,7% for the possessives. The PC merely shows an added preference for determiners, 33,2%, even less interest in possessives, 5,2%.

The difference between the languages probably owes a certain amount to different syntactic usage. English uses possessives rather more than Portuguese, particularly when referring to parts of the body ^[5], and the Portuguese possessive pronoun is preceded by a definite article anyhow. The examples recorded in the corpus, however, included not just those examples using the possessive pronoun, but also a few which used the OF or DE genitive.

The possessive notion with the SFoc nouns would seem to show a stronger connection between the SENSER and the emotional process than the more impersonal determiner. Patterns of usage seem a little ambiguous though, and can only be analysed in relation to the different groups. Perhaps another reason why the PC produced fewer examples than the EC is because the TER + noun construction, which is used quite frequently, also contains this possessive

notion.

8.4 TER + nouns of Emotion

When the SPCp patterns were discussed in 6.4, it was seen that Ranchod (1979) considered *ter* + noun structure as similar to the SPCp structures with *estar com* + noun. *Ter* + noun fit instead into the SPOd class. Ranchod and others see *estar* and *ter* in these sentences as mere carriers of tense, aspect and mood for the noun, but I believe that the use of a *have* type verb here rather than *be* is significant. In common with other Romance languages, Portuguese frequently uses the verb *ter*, or *have*, + a noun of Emotion where English would use a verbal *be* + adjective construction. Also, whereas the *estar com* + noun structure was represented by a tiny number of examples in the PC, the *ter* + noun is responsible for 286, or a significant 6. (P) of all the noun examples. This percentage goes some way to explaining the higher number of noun examples in the PC in relation to the EC.

The use of *ter* has, no doubt, an interesting history, but I shall not go into that here. As an English > Portuguese bilingual, however, I used to find the use of a *have* verb with Emotion slightly amusing, although, now that I have examined the problem more closely, I can suggest that the implications can be seen as far from frivolous. In English we can *have* most kinds of illness - *flu*, *appendicitis*, *measles*, *mumps* and *a nervous breakdown* - as we can with *ter* in Portuguese. One of the lexical areas Ranchod (1990) deals with exhaustively is that of illness, showing how these lexemes function with both the *estar com* and *ter* structures. When it comes to Emotion, though, the Portuguese can also *ter* (have) an Emotion, and *estar com* a noun like *medo/vergonha* etc. (**be* with *fear/shame* etc.). Apart from rare *have* constructions like *have pity*, English either translates the *ter/estar com* + Emotion noun constructions with an SFoc verb, like *fear* or *hope*, or, more frequently, with *be* + adjective, as with *afraid/ashamed/jealous*.

To minimise the semantics of *ter* and *be* by saying they are only space fillers between SENSER and the Emotion is to dodge the issue. *Be* is felt by many English speakers to have a very fundamental meaning, and English-speaking psychologists assume a certain identification of the Self with a state of Emotion. I just wonder if Portuguese psychologists or doctors feel the same. If they are speaking a language which uses the same syntax for illnesses as it does for emotions, do they tend to feel that emotions, like illnesses, are temporary nuisances that go away if properly treated? Or have I got it wrong, has *ter* here lost the force it has with material things, like money and sports cars - although the syntax is the same, and do they somehow see illnesses as associated, like Emotion, with the state of *being*? I have no statistics to show the relative frequency of the *ter* and *estar com* + nouns with examples describing illness, but it would be interesting to know which prevails.

In any case, I think that one could say that the *ter* + noun construction does provide for an indication of distinction between the SENSER and the emotional process at a syntactic level which is evident with the *be* + adjective one. *Ter* and *have* may only be a little way further down the Stative > Dynamic gradient than *be*, but it is far enough to make the difference between the notion of identity claimed for *be/ser/estar*, and the distinction between possessor and possessed claimed for *ter/have*.

In Portuguese, the verb *ter* combines with nouns of Emotion like *medo*, *vergonha*, *ciúmes*, *pena*, and the PC show that most of these nouns, 78% of them, are preceded by zero qualification. There are a few examples of *ter* with the plural, particularly with examples like *ciúmes* (plural form of *ciúme*), and *esperanças*, and some are quantified with *mais* and *menos*, depending on the possibilities of the context. Some of these nouns can take an indefinite article, particularly in rather emphatic usage, as in:

(8.28) Além do mais, Diamantino tinha um medo pavoroso à trombose das coronárias com que o ameaçara, a certa altura .da vida dissipada, o famoso lente da Faculdade Medicina do Rio Dr. Algorindo Ariosperis. AQ

This structure is an interesting facet of Portuguese usage with this lexicon, and it again highlights a certain preoccupation with the idea of process, or a distinction between SENS and process, which seems to be a feature of the PC.

[1] For example, Fridja (1986) makes statements like:

"Love and affection refer... to that urge toward..." (p.83)

"*Hatred* is an emotion that contains the component of object evaluation".

which show that he is conscious that he is talking about the term rather than any real although he only makes this clear, by using italics, in the second example.

[2] Since the number of noun examples overall for Portuguese is about 10% higher than English, it is possible that the higher percentage of Phenomenon 1 types overall for Portuguese may well be influenced by this factor.

[3] In the case of the examples given we can analyse the first example as referring to:

His (love for Mary + love for Susan +) and (hate for John + hate for Jane + ...) are affair of mine.

or

(Mary's fear for my safety + John's fear for my safety +) were unjustified.

[4] One could, of course, say *her book on spiders and snakes*, meaning a book which dealt with both topics, but this would not be a case of ellipsis. One must also accept that *her books spiders and snakes* has other interpretations than the type of ellipsis proposed here - she may have a whole collection of books on these topics - but that does not affect the type of ellipsis proposed here.

[5] For example, in English one says: "He hurt his arm", and in Portuguese: "Magooou braço".

CHAPTER 9
THE LINGUISTIC BEHAVIOUR
OF THE REACTIONS TO EVENTS LEXICON

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9.1 Introduction

The lexical groups established in Chapter 4 will be analysed in this and the following chap at the levels of the lexicon, syntax and semantics, using the criteria described in Chapter 5

For this purpose I shall use the data from the English Corpus (EC) and the Portuguese Cor (PC), which were collected and prepared by myself. Each group suggests specific problems the significance of which will be considered within the relevant section.

The relative conscious awareness and differentiation of the PHENOMENON shown by emotion groups will be examined. There will also be an analysis of the data on the pattern SFoc and PFoc frequency in order to discover whether the psychological interest is primarily in the SENSER, in the emotional processes or state, or in the relationship of the PHENOMENON to the SENSER. Predictably, it appears that there is more psychological interest in the SENSER and the emotional processes or state, although the degree to which this is true varies from one lexical group to the other. In most cases, the EC and the PC showed striking similarities in SFoc and PFoc usage, but there are differences, and the breakdown into verb, adjective and noun patterns demonstrates this point. All this provides interesting insights into the way we express emotion.

At the more general level, I shall be looking for linguistic information which might help analyses of philosophers, psychologists and others on Emotion and the emotions. This type of analysis also has a parallel function - that of showing how these non-linguistic analyses of Emotion may have been affected by the presuppositions inherent in the language used by researchers.

9.2 Reactions to Events - Fortunes-of-Self

Ortony et al. begin by looking at those emotions which they describe as Reactions to Events. The Well-being, or Joy and Distress emotions are probably the most universally recognized types of Emotion, as they even fit into those theories which see Emotion as two simple set reactions - positive and negative. For those who require some physical indication of emotion there are facial expressions, like smiling and weeping, which are so similar in all cultures they are probably genetically programmed. The internal physical sensations are also easily recognizable and can be controlled artificially with the use of drugs.

Ortony et al.'s description of these emotions is one of the simplest they make. They in (1988: 89) that "The important point about Joy and Distress emotions is that they result from focusing only on the desirability or undesirability of the event". However, they do admit that their definitions are often too simple to describe what happens, and elaborate on *grief* (ibid: 90), for example, which they agree is "much underspecified by the type specification of being displeased about an undesirable event". The analysis into 11 PH. types show that Ortony et al.'s notion of EVENT is deliberately simplistic. At a linguistic level, these include references to both simpler and more directly focused PHENOMENA, like individual people or things, rather than the actions or EVENTS they were involved in, as well as weaker examples, *despondent*, which involve a PH. type 1, and which Ortony et al. might dismiss as moods rather than emotions. The scenarios they propose for these two groups are, therefore, rather vaguely defined.

9.3 The Joy Group

The Well-being, or Joy emotions are those which they describe as being the ones we have when we are [PLEASED ABOUT A DESIRABLE EVENT]. These are seen as fairly simple emotions, with the only variable affecting their intensity being:

- 1) the degree to which the event is desirable.

as in their example:

(9.1) (Joy) The man was pleased when he realized he was to get a small inheritance from an unknown distant relative.

Normally speaking these events are in the realm of accomplished or on-going facts, although they might take in future events, as in Ortony et al.'s example of *the joy a couple may experience on learning that they are going to have a baby*. However, on these occasions they warn, "care has to be taken to distinguish Well-being emotions from the Prospect-based emotions, such as Hope, that might also arise". Other examples are close to the Appreciation and Liking groups, but in the end the Joy group was the fourth most popular group with 10.1% (E) and 9.8% (P) of the total examples, and accounted for 11.7% (E) and 7.7% (P) of all lexemes analysed.

9.3.1 The Joy lexicon

Joy is the word chosen here by Ortony et al., but a more commonly used lexeme, both at the everyday level and at that of the literature on the subject, is *happiness*. Perhaps they chose it because it usually expresses a stronger, and therefore more transitory, emotion. Apart from this notion of duration, the main difference between lexemes would seem to be the way in which they express a lesser or greater degree of feeling.

The EC yielded examples of 48 different lexemes, whereas the PC produced only 24. There is no one dominating lexeme in this group, although in both corpora the three main ones account for about 40% of the total. *Happy*, *pleasure* and *glad* were the most frequently used ones in the EC, but 25 lexemes, over half, account for only 8.3% of the total. In the PC the most popular lexemes are *alegre*, *feliz* and *prazer*, then come *sereno* and *contente*, and only 10 lexemes yielded under 1% each, or a total of 2.1% of the group. It would seem that, at the medium frequency level - 1 > 10% frequency of occurrence in the group - the PC uses a wider selection of lexemes, with 18, than the EC, with 15.

This is an area of the lexicon where, largely because of the variety of lexemes and the individual choice of words will vary widely, as shown by Fillenbaum and Rapoport (1971), one can classify the lexemes roughly into which are habitually connoted with greater or lesser degrees of Joy, as shown in [TABLE 9.1](#). The evidence from this table shows a similar distribution of examples among the three groups, although the PC offers a higher percentage of the stronger Group 3 lexemes, 27.2% (P) as against 25.9% (E), and lower percentages in the other groups.

In group 1, although lexemes such as *content* and *contente* describe a degree of Joy, the inclusion of lexemes such as *peace* or *paz* may be questioned. However, the examples which reflected the peace of mind which indicate a form of happiness, the more political ones being excluded. *Serene* and *sereno*, *tranquil*, and *at ease* and *à-vontade*, reflect a similar frame of mind. At first sight, *tranquilo* would seem to be a candidate for this group but, in context, it behaves differently to *tranquil*, all of which are PFoc. *Good-humour* and *bem-humorado* refer more generically to a positive frame of mind and, in context, the examples of *equanimity* (*equanimidade* was not found in the PC) are similar to those of *serenity*. *Brighten*, *encourage* and *enliven*, as well as *encorajar* are rather marginal, but often refer to processes which indicate greater happiness in the SENSER.

The second group of Joy lexemes accounts for over half of the examples in both corpora, and it is here that we find the three main lexemes in both cases. Although *happy* and *feliz*, *pleasure* and *prazer*, are the more central lexemes and usually translate each other, the same is not true of the other words. *Glad*, nearly always used predicatively, translates *feliz* and *contente* in similar syntactic circumstances, but is also close to *pleased* (classified under Appreciation). The Portuguese *alegre* is similar to *happy* when it is PFoc. Otherwise it is

translated by *cheerful, merry*, and the former sense of *gay*. *Cheer*, as a PFoc verb, is similar to *encourage* but it is a more central Joy lexeme. *Enthusiasm* and *entusiasmo* are less central and imply a degree of conscious appreciation. Close to them are certain uses of *animated* and *animado*, although the Portuguese cognate is more relevant than the English one. *Optimism* (*optimismo* was not found in the PC) is also marginal and more easily seen as a pre-disposition to being happy about an event.

Although the third group only accounts for about 25,9%(E) and 27,2%(P) of the example set, it contains the widest variety of lexical choices, few of which pose problems of marginality, although *triumph* and *triumfar* combine the element of Joy with the idea of success, usually at someone's else's expense. Several of them have cognates in both languages, but few of them are suitable translations of each other. *Exult* and *exultar* and *ecstasy* and *extâse* are fairly close, and *euphoria*, which did not appear in the EC, is close to *euforia*. However, *delight* and *deleite*, and *radiant* and *radiante*, and the emotional senses of *delirium* and *delírio*, are easy equivalents, either in meaning or in relative popularity. In the EC, although *delight* takes pride of place, followed by *joy*, in the PC all the lexemes show similar levels of popularity.

However, *deleite* is not frequently used, even in literary Portuguese and, therefore, although it can usually be translated as *delight*, *delight* cannot usually be translated by *deleite*. For example, *She tried the little golden key in the lock, and to her great delight it fitted!* (W) was translated as *com grande alegria* by one translator and as *com grande satisfação* by another. *Radiante* is often used in modern Portuguese to express the notion of *delight*, but *radiar* is limited to facial expression. Although we might say *she looked radiant*, it is unlikely that she would say *she felt radiant*. *Delirious* is used once in the EC with the idea of Joy but otherwise it seems to be confined to its more medical sense. *Delírio* has this more medical sense, but is often used to mean a strong form of Joy, rather like *ecstasy*.

The BC showed how the lexical cohesion described by Halliday helped in the understanding of Joy lexemes by the company they kept. *Happy/happiness* occurred with synonyms and complementary emotions, but also with the causes of these emotions, like *freedom, harmony, peace* and *champagne*. *Joy* combined with stronger notions like *vitality, health, creativity* and *triumph*, and *delight* with *love, awe, wonder* and *dread*, as well as *surprise, excitement* and *astonishment*. *Pleasure* associated more easily with more worldly notions such as *power, privilege, and pride*. *Cheerful* combined with words more indicative of external behaviour, like *smiling, flushed* and *lively*, or with emotions apparent in facial expression, like *relieved* and *enthusiastic*. On the other hand, *content/ment* combines more easily with lexemes expressing interiorly experienced feeling, like *relaxed, tranquil, satisfied* and *comfortable*. *Glad*, being predicative, hardly ever co-occurred with other lexemes.

9.3.2 The semantics and syntax of the Joy lexicon

PHENOMENON types

TABLE 9.2 shows that there is a high proportion of the PH. type 1, and types 2-5, which demonstrates that Joy is a central emotion of the less consciously assessed, and SENSIBLE focusing variety. Although clearly defined PHENOMENA also occur, particularly with certain lexemes, this group is one in which an exterior PHENOMENON occurs least frequently. The EC and PC differ in that they show 25,9%(E) and 38,7%(P) for the PH. type 1, and 33,4% and 26,4%(P) for the Self-orientated types 2-5. However, they show a relative degree of similarity in the quantity of exterior types 6-11, with 41,3%(E) and 39,3%(P).

The central lexemes in both corpora, *happy*, which is 86% SFoc, and *feliz*, which is 93% SFoc, are both favoured type 1, 34,2%(E) and 68%(P), with types 2-5 - 37,7%(E) and 12%(P) - leaving the exterior PH. types with only 28,1%(E) and 20%(P). However, the other lexemes vary quite

considerably and the type of PHENOMENA they favour is a good guide to the difference between them. In the EC, with *cheer*, which is 73,5% SFoc, 65,6% of the examples took type 1, usually referring to mood, with 3 examples of type 2, referring to temperament. The 2 which took types 9-10 correspond to PFoc examples of *cheerful*. *Content*, almost entirely SFoc, favours types 3-5 - nearly 50% - the rest being divided equally between type 1 and types 9-10. *Delight*, being a 'strong' lexeme, always took an identifiable Phenomenon, with 36% for types 3-5 and 50% in the 9-11 groups. *At ease* and *enthusiasm* favoured type 1 - 56% and 43% often reflecting a mood or attitude. *Encourage*, however, is 89% PFoc, and naturally favours types 9 (68%) and 10 (14%).

Only one Ph. type 1 example was recorded for the central lexeme *glad*, which, being predicative, usually requires the PHENOMENON to be specified, favouring the more orientated types 3-5 (57%), but also types 7-9 (29%), and types 10-11 (13,7%). Although nearly all the examples of *joy* are SFoc, they seem to be fairly evenly distributed between types 1, 3-10. *Peace*, 59% PFoc, seems to favour either the multiple stimuli of type 1 (28%) or the specific type 10 (36%), with 22% in the 3-5 group, showing the Self also as general peace. *Pleasure*, 46% PFoc, favours specification - types 3-5(34%), 6-9 (29%) and 10 (22%) - and only 11% are type 1. Type 5 (71%) is the natural PHENOMENON for the marginal *triumph*.

In the PC, the 35% PFoc examples of *alegre* largely refer to type 10 (31%), but 33% of SFoc examples are tagged for BEHAVIOUR, contributing to the overall 37% for type 1. An unusually large percentage were labelled type 2 - 7% - indicating that *alegre* is sometimes used as a character trait, and relatively small percentages, 11% and 14%, took types 3-5 and 6-9. With *animar*, the 43% PFoc verbs explain the 25% of type 9 examples, but there is also a 45% tendency towards type 1, especially with -SE PFoc verbs or SFoc past participles. *Contente* seems more likely to specify the PHENOMENON than its cognate *content*, and only 14% of type 1, with types 3-5(44%), and types 6-9(44%). The existence of type 10 examples shows that *contente* and *content* are similar, but the more specific nature of PHENOMENON with *contente* shows why it is stronger than its cognate, and a good translation of *glad*.

Encorajar is too infrequently used to allow any evaluation of its nature here, but 26% of *entusiasmar* examples are type 1 - largely with the phrase *com/sem entusiasmo* - type 1 (33%), and types 6-9 (25%). *Paz* typically likes type 1(70%), with types 3-5(21%). *Pra* favours types 3-5(62%), with type 1(16%), and types 6-9(only 14%). *Radiante* is 50% type 1 and most of the rest are types 3-5. The *sereno* examples are 80% type 1, but 12% are type 2. 55% of the examples for *triunfar* focus types 3-5 and only 23% types 6-10, with 22% type 1.

SFoc/PFoc and Behaviour distribution

The EC has rather fewer SFoc items for Joy, 76,7%(E), than the corpus average, but it has quite a lot more, 80,8%(P). Despite the fact that this is an area where one might expect a high number because of the psychologists' association of it with facial expression, the number of examples tagged for BEHAVIOUR is near the average. If, however, one takes into consideration the fact that this behaviour has its own vocabulary, with lexemes like *smile*, *laugh*, *sorrir* and *rir*, one realizes that this average is, in fact, relatively high.

SFoc/PFoc ambivalence

The distinction between SFoc and PFoc lexemes in this group was often difficult to make, particularly with the attributive adjectives. It is easy enough to classify *delightful* and *pleased* as PFoc, and *glad*, *content* and *contente*, by virtue of their almost obligatory predicative position, are nearly always SFoc. However, *cheerful*, *gay*, *happy*, *serene* and *tranquil* in

EC, and *alegre, radiante* and *sereno* in the PC, can all be either SFoc or PFoc in a rough 70/30%(E) or 73/27%(P) ratio. With the main lexemes, *happy* and *feliz*, the PFoc percentage is rather lower, as it is with *radiante* and *sereno*, but *cheerful, gay and tranquil* and *alegre* are primarily PFoc.

Typically PFoc adjectives, like *delightful*, usually describe a quality that is presumed to be fairly generic or valid for anyone, but the PFoc examples of adjectives like *happy* indicate specific situations. Collocation restrictions also mean that the PHENOMENON tends to vary according to the sense of the PFoc adjective. For example, PFoc uses of *serene* and *sereno* and *tranquil* tend to appear with places and meteorological phenomena, *cheerful, gay, and ale* with the behaviour of others, and *happy* and *feliz* with events or periods of time.

A similar but less pronounced pattern can be found with the SFoc/PFoc classification of nouns. Several nouns in both corpora, particularly *delight, peace* and *serenity* in the EC, *alegria* and *regalo* in the PC, can be analysed both ways, but the general ratio is lower than for the adjectives, 90/10%(E) and 85/15% (P). One or two verbs in the EC also reflect double usage, but the situation is more ambiguous, and, in the PC, the verbs with -SE pronouns are almost twice as high as the average, 37,4%.

High proportion of SFoc nouns

In both corpora the proportion of SFoc nouns - 30,9%(E) and 41,8%(P) - is the most significant of any of the lexeme types. The SFoc nouns in the EC are about average in terms of countability, the percentage of preposition + emotion noun constructions, usually adverbial noun phrases, is a little higher at 34,4%(E) and complementation of the noun is lower at 9%. In the PC the notion of countability varies considerably from the averages, although interestingly, these percentages show more similarity to those for the EC in this group than those of the PC averages. The type of adverbial phrase suggested by a preceding preposition occurs with 29,8%(P) of the examples and there is a low percentage of complementation, 10,5%(P). The most popular EC SFoc Joy noun is *pleasure* (21%), with *triumph, joy, happiness, ease, delight* and *enthusiasm* accounting for most of the rest. *Prazer* (17%) was also the most popular, with *felicidade, alegria, paz* and *entusiasmo* following close behind.

High proportion of SFoc adjectives

There are high proportions of SFoc predicative adjectives in both corpora, 25,6%(E) and 17,8%(P), but the numbers of SFoc past participles, 4,2%(E) and 5,2%(P) are considerably lower. The proportionately large number of Joy SFoc adjectives in the EC is largely made up of predicative adjectives, although the percentage of attributive ones is also a little higher than average. Of these, *glad* made up 43% and *happy* 34%, *content* 9%, with *ecstatic, enthusiastic, serene* and *triumphant* accounting for a few each, and the use of copulas is normal. *Delighted* accounts for 39% of the SFoc past participles in the EC, the rest being distributed fairly evenly among 11 other lexemes. Some of these, like *high-spirited* and *overjoyed* have real PFoc verb forms and were included here more for their form than their function, which is more strictly adjectival.

In the PC, both the attributive and the predicative adjectives are above average by 2,1% and 12% respectively. Although *contente* accounts for 20% and *feliz* 25%, there is a fairly even distribution through *alegre* (3,5%), *radiante* (6,7%), *sereno* (8,5%), and *triumfante* (5,7%), and a few examples of others. The behaviour with copulas shows some differences from average, because there are only 45,7% zero copulas (the corpus average is 67%), *estar* at 10,5%, *ficar* 5,7%, and there are a fair number of other copula type structures. The most interesting difference is the frequency of *ser*, with 19,5%, and, although there are a few examples with *alegre* and the odd example with others, the vast majority are with *feliz*.

accounting for about a third of the examples with this adjective. In the PC, the distribution is more evenly distributed between 10 lexemes, the most important being *animado*, *enlevado*, *entusiasmado* and *regalado*.

The EC SFoc adjectives and past participles show an exceptionally high level of complementation because of *glad* which accounts for 72% of the complemented adjectives. In the EC, *Content* and *happy* are responsible for most of the rest, and *delighted* is the past participle most often complemented. However, the opposite is true of those in the PC^[1], where *feliz* and *contente*, and *entusiasmado* account for most of the complementation.

Low frequency of SFoc and PFoc verbs

There are no major SFoc verbs in this group, 3,2%(E) and 4,7%(P)^[2] and even the PFoc verbs do not belong to the more central lexemes. This is particularly true of the EC. When a SFoc verb is used in either corpus in this group, it tends to focus the SENSER's emotional process to the extent that the PHENOMENON is either unmentioned, because the verb is intransitive or is represented by a -SE pronoun, or is of the less direct quality of a prepositional object. These verbs, like *exult*, therefore allow an interpretation of non-directed, or internally focused emotion, and favour a PH. type 1 of the multiple and indefinite variety. The SFoc verbs in the EC are *brighten* and *cheer up*, (both of which are more often used in a PFoc sense), the unusual intransitive example of *jubilate*, and examples of both intransitive (12), and either preposition + prepositional object (14), or normal transitive use (7) with *exult*, *rejoice*, *revel* and *triumph*. In the PC, the SFoc verbs are *delirar*, *enlevar*, *exultar*, *jubilarse*, *comprazer*, with 32 interesting intransitive examples, 5 verbs + preposition + prepositional object, and 19 verbs + -SE pronoun. The lower than average number of PFoc verbs are largely represented by *encourage* in the EC and *alegrar(se)* and *contentar(se)* in the PC.

Other PFoc examples

A large proportion of the PFoc examples in the EC are adjectives and adverbs describing provoking qualities, like the ambivalent ones already mentioned, and others like *encouraging* and *peaceful*. They appear in greater frequency than the average for the corpus, particularly attributive ones. Apart from the nouns already mentioned, most of the PFoc nouns were accounted for by *encouragement* and *enthusiasm*.

In the PC, all the PFoc types are lower than average. The PFoc adjectives also are largely represented by the ambivalent ones and *deleitoso*, usually used predicatively. The number of PFoc nouns is few and those already mentioned, *prazer* and *trunfo* account for most of them.

9.3.3 A Linguistic profile of the Joy group

Several factors would suggest that this group is central to notions of emotion described by psychologists. The large number and variety of lexemes allows it to cover a wide range from mild moods to violent emotions, with a few examples describing temperament. There are also close lexical connections with other emotion groups, such as Liking and Appreciation.

The semantic analysis shows that the focus is generally on the SENSER and the emotional processes, and the PHENOMENON is often of little interest with the more central lexemes which favour the PH. type 1. The symbiotic relationship which often exists between SENSER and the perceived PHENOMENON can also be seen clearly in the ambivalent SFoc/PFoc behaviour of the normally SFoc attributive adjectives and, to a lesser extent, SFoc nouns.

At a syntactic level, the low level of complementation of the SFoc Joy nouns, and the high number of examples in adverbial phrases, particularly in Portuguese, referring either to states of emotion, introduced by *in* or *em*, or behavioural or internal processes, introduced by *with com*, supports the view that they focus the emotional state, or processes, of the SENSER, rather than the specific relationship between SENSER and PHENOMENON..

One of the main indicators that this is a less consciously processed area is the rarity of both SFoc and PFoc verbs. This factor, together with the high proportions of SFoc predicative adjectives and low numbers of SFoc past participles in both corpora, also underlines the focus on the SENSER's internal processes or state.

The PC offers us further syntactic clues to the psychology of Joy through the finer tuning of Portuguese, with its use or non-use of copulas. First of all, the lower ratio of zero copulas which often indicate a situation in which the emotion is additional, rather than central information, shows that the SENSER's centrality with the Joy emotion is better focused than usual in the PC. Secondly, the unusually high level of *ser* copulas, particularly with *feliz* allows for a longer time duration, or a more definite or stronger interpretation of the emotion to be attributed to these examples than to the *estar* examples. However, there were only a few examples of the type 2 personality trait analysis.

The fact that the complementation of the adjectives and past participles is so different between English and Portuguese would be more significant if *glad* and *delighted*, with their specific lexical characteristics, mentioned above, did not dominate the figures so much. Their high percentages of explicit types 2-5 also contribute to the disparity between the balance of type 1 and types 2-5 between the languages.

9.4 The Distress Group

The Distress emotions are those which are described as being the ones we have when we [DISPLEASED ABOUT AN UNDESIRABLE EVENT]. The only variable affecting their intensity is:

- 1) the degree to which the event is undesirable.

and the example they give is:

(9.2) (Distress) The driver was upset about running out of gas on the freeway.

It was not always easy to allocate some lexemes because of their strong connections with other groups, Fear and Dislike. However, once these decisions had been taken, Distress emerged as the most numerous group in the corpora, accounting for 18,8%(E) and 18,5%(P) of the examples, and 21,1% (E) and 20,6% (P) of the lexemes.

9.4.1 The Distress lexicon

The number of examples and the number of lexemes would seem to bear out the type of evidence described by Oatley (1992: 362) which suggests that negative emotions are reported far more frequently than positive ones. *Distress* itself is a strong lexeme, roughly translated by *aflição*, and not often used. *Triste*, numerically the most important lexeme in either corpus and *sad*, its nearest translation equivalent and the second most important one in the EC, probably the most central lexemes in the groups. They are the nearest antonyms to *feliz* / *happy* and, as such, figure as the opposite to *happiness* in psychologists' research, as in Izard (1991).

The EC provided 82 lexemes and the PC 67. Several of these lexemes are represented by a few examples, 57,3%(E) and 61,2%(P) of them accounting for only 15,2%(E) and 18,3%(P) the total. However, in the EC, the maximum for any individual lexeme is 5,9%, for *horror* then comes *sad, pain, shock, suffer, bored, hurt* and *lonely*, followed by 10 lexemes with 2-4% and 17 with 1-2%. In the PC, *triste* dominates with 11,5% followed by *desesperado, sofrer, horror, dor, saudade, aflito, angústia*, and a further 15 lexemes with 1-2% each.

Certain lexical tendencies can be discerned within the general framework of this group. **TABLE 9.3** shows how the lexemes can be roughly divided, like the Joy lexemes, into 3 levels of weak > strong emotion, with the PC again favouring stronger language than the EC, this time by quite significant percentages.

TABLE 9.4 shows how these lexemes can also be classified into those which imply that someone or other person or thing is responsible, like *hurt* or *ferido*, and those in which the lexeme implies some internal process of the SENSER, or some multiple PH. type 1 - like *depressed* and *deprimido*. In the former group the PFoc verb functions normally, but in the latter the corresponding verb either does not exist, e.g. *dejected*, or has a different lexical meaning with *distract* and *distracted*, or is rarely used, as with *bewilder*.

The role of the Other is often inherent in those lexemes which imply a PHENOMENON. For example, *grief* and *mourn* imply the Other is dead; *miss* and *saudade* refer to the absence of a loved one; *shock* and *choque* imply Surprise. *Embarrassed* and *embaraçado* indicate a certain shame, sometimes at one's own behaviour, sometimes at the Other's; *disconcerted* and *desconcertado* imply uncertainty on how to proceed; others include a definite intellectual notion like the social, moral and psychological connotations of *degraded, demoralized* and *humilhado*; and several imply physical or psychological aggression by the Other, like *injured, wounded, oppressed, and ferido* and *oprimido*.

Although several more central lexemes do not imply a PHENOMENON at a lexical level, they are usually present at a syntactic or contextual one, particularly with the stronger lexemes. This group often overlaps with others, like Fear and Dislike, but the examples chosen are largely focussed on the negative feelings of the SENSER. For example, the cognates *horror* include traces both of Dislike and Fear; *despair* and *desespero* include a substantial element of Fear; *misery* and *miséria* often include reference in the context to the socio-economic reasons for the distress and *ánsia* is a mixture of Distress and Desire.

The medium and weaker lexemes in this group are often not directed at a specific PHENOMENON and - to use Johnson-Laird and Oatley's test - can give sentences like *I am sad /depressed but I don't know why. Apathy* or *apatia* is both weak and non-directed, so some might question its inclusion. However, it is a negative enough state to indicate the type of interior psychological distress which sometimes needs psychiatric help.

There are several lexemes which are difficult to translate. For example, Portuguese does not have a single lexeme to translate *grief* - *chorar* and *lamentar* could be used if the context allows for expressive and noisy lamentation, but does not translate the often silent quality of *grief* more typical of English-speaking culture. *Lonely* is the negative feeling associated with being *alone*, but the Portuguese lexeme *só* or *sózinho* refers directly to the notion of being *alone*, and only contextually to the notion of *loneliness* or *solidão* [3].

There is a small number of lexemes, focussing more on the SENSER, which would seem to be more physical than emotional - like *dazed* and *aturdido*, or *weary* and *cansado* - but they were included because their interpretation in context was more psychological than physical. Although only psychological examples of *pain* and *dor* were collected, they were quantitatively significant. *Suffer* and *sofrer*, and *agony* and *agonia* reveal psychological

physical elements in an almost inseparable combination. The medical profession now gives more importance to the relationship between mind and body than it did a few decades ago, perhaps the close relationship of these lexemes to both physical and psychological problems simply reflects the point of view of more traditional folk-medicine.

In the BC it was possible to observe that most of the more significant Distress lexemes like co-occur with each other, and with other negative emotion words, like *fear*, *terror*, *disappointment*, or words indicating possible related causes, such as *failure*, *hardship*, *madness*. As with Joy, the tendency was for the stronger lexemes to go together but, besides this, weaker lexemes, or those which reflect behaviour, like *bored*, *bewildered* and *lonely* earned their place in the group partly because they were so often associated with the more central or stronger ones. Combinations with antonymic words would seem to be unusual.

9.4.2 The semantics and syntax of the Distress lexicon

Although the sheer numbers of the Distress examples would seem to contribute to the norms and averages of the corpora themselves, there are enough differences to help distinguish the group from the others. There are also interesting differences of focus between the two corpora.

PHENOMENON types

As can be seen in [TABLE 9.5](#), the overall picture of the PH. types shows that the corpora are similar in the emphasis they give to the PH. types, particularly PH. type 1, with 29,8(E) and 29,9(P). However, there are small differences in types 2-5, 21,2(E) and 17,1(P), and type 11, with 48%(E) and 52,5%(P), and within the exterior PH. groups there is a divergence between the corpora, with types 6-9 with 29,8%(E) and 24,6%(P), and types 10-11 with 19,1(E) and 27,9%(P).

The distribution of the PH. types between the different lexemes tends to vary considerably. The distinction between Self and Other focussed Distress made in Table 9.4 might suggest that Self focussed lexemes favour high levels of PH. type 1, as with *anguish* (55%), *depression* (55%), *desperate* (52%), *despondent* (88%), *distress* (65%), *grief* (50%), *lonely* (68%), *loneliness* (47%), *sorrow* (69%), *strain* (50%), *suffer* (44%), *unhappy* (58%), *weary* (60%), and *wretched* (49%) in the EC, and *aflição* (58%), *agitação* (45%), *angustia* (59%), *confuso* (45%), *infeliz* (88%), *melancólico* (53%), and *triste* (49%) in the PC. The Other focussed Distress favours the types 6-11, *confound* (100%), *discomposure* (100%), *disconcerted* (75%), *disturbance* (74%), *horror* (73%), *hurt* (79%), *miserable* (58%), *mourn* (56%), and *shock* (70%), in the EC, and *horror* (93%), *humilhado* (79%), *impressionado* (89%), *magoado* (72%), *miserable* (79%), and *saudade* (91%) in the PC.

SFoc/PFoc and Behaviour distribution

Like Joy, despite the fact that this emotion is associated with definite physical expressions it has its own vocabulary to express Distress related behaviour - with lexemes *cry* and *scream* and so the number of BEHAVIOUR tagged examples is about average. Although Self focussed examples still dominate the picture, the most noticeable difference of the group from the norm is the high percentages of PFoc examples, 38,9%(E) and 35,8%(P)^[4], particularly in the EC, which diverges 17,6% from the norm.

SFoc/PFoc ambivalence

As with Joy, certain adjectives can be classified as either PFoc or SFoc, the ratios being 46%/54% (E) and 55%/45%(P) in these cases, a rather more equal balance than with Joy. I

happy and *feliz*, the adjectives *triste* and *sad* can be either PFoc or SFoc, with a tendency attributive ones to favour the former and predicative ones the latter. Other lexemes that show similar pattern are *unhappy* and *infeliz*, *melancholy* and *melancólico*, and *miserable* and *miserável*. The problem of SFoc/PFoc ambivalence also arises with 44%(E) and 57%(P) of the nouns in this area. Although the general SFoc/PFoc ambivalence ratio for both corpora is high at 63%/37%, the individual lexemes vary a lot within these figures [5].

An interesting example of ambivalence at verb level is with *bother*, one of the weakest of Distress lexemes, which contributes quite substantially to the small number of SFoc verb examples. However, it is slightly more central to the Distress lexicon when it is PFoc, as in

(9.3) "I hope the police have not been bothering you?" HF

than when it is SFoc, as in:

(9.4) This shaft had also gone wide of the mark, and he was not the man to bother about stray arrows. LJ

and it is one of the rare English verbs which can be reflexive, as in:

(9.5) "I didn't get brain fever, I did not drop dead either," he went on. 'I didn't bother myself at all about the sun over my head. LJ

Few SFoc verbs and nouns

Despite a certain lexical variety, the SFoc verbs account for only 5%(E) and 5,4%(P) of lexemes, and they demonstrate a low degree of conscious appraisal. 59%(E) and (50%) of them are intransitive or take prepositional objects, which indicates that the PHENOMENON is lacking in importance here, and the transitive ones belong to the more peripheral lexemes [6]. 36% of the EC examples are accounted for by *suffer* and 83% of the PC ones by *sofrer*. These verbs can be used intransitively or transitively, depending on whether they focus on SENSER's emotional processes, or include the PHENOMENON as well. *Despair* and *desesperar* both account for about 10% of the examples, and behave in a similar fashion.

Although the percentage of SFoc nouns is lower than the average for the corpora, the degree of countability, up to 12,5% less in the PC, and the low complementation of nouns, particularly in the EC where it is almost half the average [7], points to a greater interest in SENSER's emotional processes than in the PHENOMENON in this area. The lower incidence of adverbial noun phrases may indicate that the need for them to describe behaviour is substituted by more specific behaviour vocabulary, or by zero copulas with adjective participles which describe emotional behaviour as an additive rather than central pragmatic function.

High proportion of SFoc adjectives, past participles and adverbs

The forms of the lexemes which are well above average in both corpora are the SFoc adjectives and past participles, whether they are used attributively or predicatively, although a far larger proportion of the attributive ones are tagged for behaviour. The variety of adjective forms is smaller than that of the past participles, with *lonely*, *miserable*, *sad*, *uncomfortable*, *unhappy* and *wretched* dominating in the EC, while *triste* accounts for nearly half of the PC, with *desconsolado*, *infeliz* and *melancólico* showing a fair number. The predicative form of the past participle appears in much the same proportions in both corpora, but is more often accepted attributively in the PC than the EC. The past participles seem to be fairly even

distributed among the different lexemes, although *bewildered, bored, bothered, confused, disturbed, embarrassed, hurt, shocked* and *upset*, are the most numerous in the EC, and *afangustiado, desesperado, embaraçado, enervado, estonteado, humilhado, impressionado e magoado* stand out in the PC.

In the EC the *be* copula appears less with the adjectives than usual, in 53,5% of the examples although the situation with the participles is around the average [8]. Of the other examples *feel* + adjective stands out as unusual with 18%, the EC average being 4,5%. The adjectives show a decided decrease in zero copulas to only 37,2% (from 62,4%), and although *ser* accounts for 16%, *estar* appears less than usual, and *ficar* not at all. On the other hand, PC past participles show a slightly higher than average number of zero copulas, 71%, with other copulas, including *ficar*, maintaining the general averages. Complementation of adjectives and past participles is considerably lower than average in this group in both the EC and the PC [9].

There is a significant increase in the normally small average of SFoc adverbs in both corpora and this probably matches the increase in attributive adjectives tagged for behaviour, compensating partly for the fall in adverbial noun phrases.

Above average proportion of PFoc examples

Since the levels of SFoc adjective, past participle and noun complementation, and of transitives with SFoc verbs are so low with Distress, the tendency to identify more external PHENOMENA than Joy must come from the PFoc lexemes. All the syntactic groups of PFoc examples in the EC, except the past participles, are larger than usual here, but the PFoc adjectives, particularly the attributive ones, show the greatest increase and total 21,2% of the group.

The most numerous PFoc adjectives in the EC are *desperate, lonely, miserable, sad, unhappy* and *wretched*. *Triste* accounted for 74% of these examples in the PC, followed by *melancólico* and *miserável*. The ambivalent type of adjective accounted for 40%(E) and 60%(P) of all the PFoc adjectives. A further 20%(E) were accounted for by present participle adjectives ending in -ING, and 13%(E) and 19%(P) went to the cognates *horrible* and *horrível*.

Except for a slight decrease in uncountability, the situation is fairly close to the overall average for the PFoc nouns [10]. This is not surprising since the Distress PFoc nouns account for nearly a third of all PFoc nouns in both corpora and therefore contribute considerably to the general averages.

Both corpora show a slightly higher than average number of PFoc verbs, 8,4%(E) and 11,3%(P) [11]. In the EC these are nearly all (94%) transitive, with *bother, disturb, shock* and *upset* being the most important of the 19 verbs involved. One interesting point about the data for the PC is that it involves 36 different verbs, a much wider variety than in the EC, and this is reflected in the wider variety of SFoc past participles. Besides this, although 62,2% of the PC examples are transitive, most of the remaining examples, 29%, are of the -SE reflexive type and nearly all of the verbs can occur in both types of structure. *Afligir, ferir, impressionar, injuriar, magoar, and torturar*, account for most of the transitive examples, and *afligir-se* and *cansar-se* are the most significant in the -SE group. Although the PC has relatively more PFoc verbs than the EC, one should not forget the EC -ING PFoc adjectives which are further along the gradient towards an PFoc verb than other adjectives.

9.4.3 A Linguistic profile of Distress

As with Joy, the lexicon of Distress covers a central and wide-ranging area of emotive experience, and covers everything from moods through to very strong emotions. The need to distinguish between lexemes which simply describe the Senser's emotion and those which imply the involvement of the Other is already found at the lexical level, although this division has implications at the semantic and syntactic levels.

At a semantic level, although there is still a high level of PH. type 1 in this group, there is a greater tendency to blame the exterior PHENOMENA for one's Distress than there was to give them credit for for one's Joy. This is particularly true of the PC which not only prefers external PHENOMENA generally, but also the more explicit and consciously assessed ones of types 11.

The ambivalence which suggests that there is a symbiotic relationship between SENSER and PHENOMENON is even more in evidence with Distress than with Joy, and confirms the desire to project one's interior emotion onto what is seen as an exterior cause. However, although more so than Joy, Distress is still more directly SENSER-orientated than other emotions.

The behaviour of the small number of SFoc verbs and below average SFoc nouns focuses attention on the SENSER. The high proportion of SFoc adjectives and participles also shows that the primary focus is still on the SENSER's emotional state or processes. Moreover, the behaviour of the SFoc adjectives and participles in a high proportion of zero copula situations, together with the unusual number of emotion adverbials, also indicate that the SENSER's emotional state is often described in conjunction with some other behaviour for which it serves as an explanation or excuse.

The higher proportion of PFoc verbs helps explain the greater proportion of Other PH. types in Distress than Joy. However, the -SE reflexive verbs here, of which over two-thirds require further complementation, clearly express the involvement of the Self in the emotional process of the SENSER, particularly in the PC.

9.5 Reactions to Events - Fortunes-of-others

The next groups contemplated by Ortony et al. are Reactions to Events as they affect the Fortunes of others. These emotions are carefully described theoretically, and are a good example of the efforts made by the authors to create a theory suitable for all possible cultural variations. However, it should be expected that a system designed by God or Nature, developed along evolutionary lines to promote Man's Self-preservation, Self-expression and other Self-orientated goals, should focus largely on the Self. The corpora suggest, moreover, that English and Portuguese speakers are possibly not very culturally conscious of the problems of others, or do not consider them the subject of emotional response.

Milan Kundera, in his novel *The Unbearable Lightness of Being* (1984: 21-2), points out that those languages which "form the word *compassion* by combining the prefix meaning 'with' (*com-*) and the root meaning *suffering* (Late Latin, *passio*)", differ from those which form it with a word meaning *feeling*. He argues that *compassion* and *pity* designate sentiments which have little to do with love, or real affection, because they imply that the SENSER looks upon the other as in some way inferior. On the other hand, with those languages in which 'feeling' is the meaning of *compassion*, to have *compassion* / *co-feeling* "means not only to be able to live with the other's misfortune but also to feel with him any emotion - joy, anxiety, happiness, pain. This kind of compassion therefore signifies the maximal capacity of affective imagination, the art of emotional telepathy. In the hierarchy of sentiments it is supreme".

Virginia Woolf also describes this type of 'co-feeling' as "community of feeling", in "To Lighthouse" in this way:

(9.6) All that would be revived again in the lives of Paul and Minta; " the Rayleys she tried the new name over; and she felt, with her hand on the nursery door, community of feeling with other people which emotion gives as if the walls of parti had become so thin that practically (the feeling was one of relief and happiness) it all one stream, and chairs, tables, maps, were hers, were theirs, it did not matter wh and Paul and Minta would carry it on when she was dead. VW

As we shall see, *compassion* and *compaixão*, in English and Portuguese fit into Ortony et al. Sorry For category, and Kundera is right when he says there is this element of feeling super to those for whom we feel these emotions, and it is the same with *pity* and *pena*. An interesting point is that Ortony et al. and Kundera, in their different ways, both draw attention to the notion that we can feel emotion for others, something which is not mentioned much in the psychological literature on Emotion. Ortony et al. are right in distinguishing between cognitive processes behind the 'empathy' which enables us to appreciate others' emotions, the actual emotion this then produces in us. I feel Kundera is right, too, in implying (positive) emotions for the fortunes-of-others are supreme in the "hierarchy of sentiment" although some might dismiss them as vicarious, or as merely reflecting the projection of oneself into the position of those in need of compassion or co-feeling. Such emotions, however, imply that the SENSER must not just be psychologically sensitive, but also consciously aware.

Ortony et al. themselves (ibid: 92-3) draw attention to the fact that it is unlikely that such emotions are really totally altruistic, and that "One's affective reaction ... depends in part on the presumed desirability of an event for another person and in part on the desirability from one's own perspective of the other person's experiencing that outcome". Of the categories proposed by Ortony et al., only Sorry For and Resentment are lexicalized in both languages; there being no satisfactory lexeme for the Happy For group in either language, only examples in the EC of the Gloating group, and no lexeme with which to form a Gloating group in Portuguese.

There is, therefore, one important lexical lesson to be drawn from this as well. Had Ortony et al. been speakers of a language that had a well-developed set of co-feeling lexemes, they might have expanded their Fortunes-of-Others class to include other varieties. However, since I have simplified my task and saved me the trouble of looking for probably non-existent lexemes by not doing so, let us now turn to the groups they do define.

9.6 The Happy For group

This group is not lexicalized in either English or Portuguese. However, Ortony et al. specify it as [DISPLEASED ABOUT AN EVENT PRESUMED TO BE DESIRABLE FOR SOMEONE ELSE], with the following variables as to the degree in which:

- a. the desirable event for the other person is desirable for oneself
- b. the event is presumed to be desirable for the other person
- c. the person deserved the event
- d. the other person is liked

and give as an example:

(9.7) Fred was happy for his friend Mary because she won a thousand dollars.

The notion is understandable to speakers of either language and it is perfectly possible to things like *I am so happy for you*, and to sincerely believe that the reasons for saying it perfectly altruistic. There are examples in the corpora in which the SENSER expresses happiness of this kind, but in most cases a full interpretation of the situation would include reference to the SENSER's own interests as well. I found two or three examples in the E other such examples can be found in the PC - which might answer the description given Ortony et al.. One example contemplates the more abstract possibility of feeling emotion because others feel them:

(9.8) and how she would feel with all their simple sorrows, and find pleasure in all their simple joys, remembering her own child-life, and the happy summer days. W

A clearly expressed example - although perhaps it is rather a suggestion of what he should feel than a statement of what he does feel - is in *Brideshead Revisited* when the Catholic priest after Lord Marchmain's deathbed acceptance of Catholicism, says:

(9.9) "You're not a Catholic, I think, Mr Ryder, but at least you'll be glad for the last to have the comfort of it." BH

Another, less directly expressed but understandable from the context, is in *Great Expectations* when Pip expresses pleasure in watching the starving convict eat the pie, although the pleasure is also associated with pity:

(9.10) Pitying his desolation, and watching him as he gradually settled down upon the pie, I made bold to say, "I am glad you enjoy it." "Did you speak?" "I said I was glad you enjoyed it." GE

There is no doubt that one needs a good grasp of the context before one can assess the degree to which the emotion expressed is truly altruistic.

9.7 The Resentment group

This group is small, both from the point of view of lexemes and actual quantity of examples. The lexemes found, however, fit fairly clearly into the group, which Ortony et al. describe as being [DISPLEASED ABOUT AN EVENT PRESUMED TO BE DESIRABLE FOR SOMEONE ELSE]. The variables they see as affecting the intensity of this emotion group are the degrees to which:

- a. the desirable event for the other person is undesirable for oneself
- b. the event is presumed to be desirable for the other person
- c. the person did not deserve the event
- d. the other person is liked

and the example they give is:

(9.11) The executive resented the large pay rise awarded to a colleague whom he considered incompetent.

9.7.1 The Resentment lexicon

Ortony et al.'s Resentment can be expressed in English by *envy*, *grudge*, and *resent*, and adjective/noun *jealous/y*. Portuguese has *invejar* and *ressentir-se*, and the adjective/noun *ciumento / ciúmes*. There is a rough correspondence between *envy* and *invejar*, and *ciúme* and *jealous*, but my everyday experience is that Portuguese speakers tend to be more careful separating the differences between *inveja* and *ciúme* than English speakers are with *envy jealousy*.

This lexical field is very close to Anger and there are several examples with lexemes *bitter* and *amargar* which border on this latter sense of *resent*. In the BC, one can actually see how the company kept by the main lexemes shows how close this field is to other *Jealous/y* combines with several Anger, Dislike, and Distress lexemes. *Envy*, on the other hand, apart from favouring its synonyms, also combines with *hate* and *fear*. The company kept by *resent* would seem to show that it includes an element of anger resulting from perceived unfairness of Fate, the Other, or the-powers-that-be, and the BC confirmed that nearly all the words co-occurring with *resent* being synonyms of *anger*. *Envy* and *invejar* include an element of desire, and with *jealousy* and *ciúmes* the SENSER also fears the loss non-realisation, of the relationship.

9.7.2 The semantics and syntax of Resentment

Ditransitivity and the PHENOMENON

Ortony et al. are right in drawing attention to the complexity of the PHENOMENON here, although another person is part of the PHENOMENON, there is a third element, which, in way or another, is related to the Other. This third element means that, whatever the syntactic form of the verb in the sentence in which these lexemes appear, the general semantic scheme of ditransitivity and implies some sort of psychological triangle. With *jealousy* and *ciúme*, triangle is usually made up of the SENSER, an Other with whom the SENSER has or wants a relationship, and a third person who is seen by the SENSER as threatening this actual potential relationship. The triangle with *envy* and *invejar* is between the SENSER, something s/he desires, and the Other who has this thing. *Grudge* has no easily expressed equivalent in Portuguese, but it falls somewhere between *resent* and *envy* in that it can refer to something positive happening to the Other, or to something possessed by the Other. *Resen* corresponds roughly to the past participle *ressentido*. However, the *resent* and *ressen* lexemes do not always fit neatly into this category because they can refer rather to the SENSER's own ill-fortune, only very tenuously compared to the good fortune of others, as in

- (9.12) But indeed she was not jealous, only, now and then, when she made herself look in her glass, a little resentful that she had grown old, perhaps, by her own fault. W
 (9.13) Acho que ela foi sempre assim, a viver de caprichos e ordens, mas deve ter azedado e ressentido porque enviuvou cedo. SU

Cioso is rather similar but seems rather to be directed towards some future or hypothetical competition between the possibly unlucky SENSER and the luckier Other. In practice, the ditransitivity is usually interpretable at a contextual rather than a syntactic level.

SFoc verbs

The Resentment verbs, mostly *envy* and *invejar*, are all SFoc, account for 28%(E) and 13% of the examples, and describe the most consciously processed form of emotion in this group. Not only is the SFoc verb used, but the complex nature of the PHENOMENON is more frequently explicit, and the PH. type 6 is usually recognized within the sentence, as in:

- (9.14) Daintry watched him with envy. He envied him in the first place for

position. Daintry also envied him his wife; she was so rich, so decorative, impeccably American. HF

(9.15) D. Diogo, com um ar entendido, sentindo mulher, invejou-lhe os anos, invejlhe o vigor. M

Grudge, too is ditransitive. *Resent* and *ressentir* are syntactically monotransitive, but there tri-dimensional aspect of the lexemes which is probably reflected in their tendency is to favour PH. type 9. This Other's behaviour is perceived by the SENSER as showing some kind of superiority to the SENSER which is insulting or prejudicial to the latter.

Although there were no examples of passivization with *envied* and *resented* in the EC, there were a few in the BC which imply multiple SENSERS, as in, *his presence at ceremony was resented by his political rivals*. The English past participles do not qualify objects which belong to the Other. However there are two examples of this behaviour in *invejado* in the PC, one of which is:

(9.16) Dispondo da legítima materna, estava esta no direito de ostentar as jóias n caras e os vestidos mais invejados. AQ

SFoc adjective/noun pairs

The adjectives in the adjective/noun pairs are SFoc, and form 17% of the examples in the corpus favouring *jealous* and *resentful*. In the PC, the adjectives, *ciumento* and *cioso* and participle, *ressentido*, account for 27%. The SFoc predicative adjectives usually describe a relation in much the same way as the verbs and, although occasionally they may describe character traits, no examples were found in the corpora. The attributive adjectives usually describe the SENSER or the SENSER's behaviour.

Although the only past participle, *ressentido*, does not necessarily require an explicit PHENOMENON in the sentence, it can be expressed, as in:

(9.17) Apesar de ressentido por semelhante injustiça, ergueu-se. BI

In these cases the PHENOMENON is not an agent, and Active versions of these sentences are impossible, as *ressentir* is either a SFoc -SE reflexive type - three of the four examples in the corpus - or a SFoc verb.

The nouns form the largest syntactic category with 55%(E) and 30%(P), and although very rarely are complemented by PHENOMENA, the tri-partite relationship is always implied. Portuguese seems to use either the singular or plural of *ciúmes* for no particular reason, but the 4 plural examples of *inveja* and the only plural form of *jealousy* referred to various SENSERS and their problems, as in:

(9.18) He had to inspire with his own confidence a lot of people who had hidden absurd reasons to hang back; he had to conciliate imbecile jealousies, and argue against all sorts of senseless mistrusts. LJ

As a noun, *grudge* is perceived as singular and as lasting over time, as can be seen in the expression *bearing a grudge*. *Ter* appears once with *inveja* and twice with *ciúmes* but not with *withestar com*. There are examples of nominalisation, as in:

(9.19) Dizer-vos o que era o mundo? Misturai no almofariz a inveja, o ódio, a fome, o amor, a força, o oiro, a mentira, o sangue, a sensualidade. AQ

but otherwise the reference is to a specific relation and, even with the noun, PHENOMENON is distinguishable at the level of the context and often at the level of sentence.

9.7.3 A Linguistic Profile of Resentment

These are not emotions which can be felt *without knowing why*, and they cannot be ca moods. One can, however, suggest that some people tend to have jealous character traits. Portuguese will use *ser* with *ciumento* and *invejoso* on these occasions, although there are examples in the PC. They can be said to be consciously processed in that the nature of PHENOMENON, which is fairly complex, is usually clearly understood. However, as can be seen in **TABLE 9.6**, in the EC there are 16% PHENOMENON 1 examples, nearly all of which occur when the Speaker is unsure why the SENSER is *resentful* or *grudging*. The examples in the PC are of a similar nature.

However, the almost total lack of PFoc elements - only the PC providing a few in the form of rather ambivalent examples of *invejável* - would seem to confirm that the PHENOMENON is internal to the SENSER and is rarely seen as external or deliberately causing the emotion. This is understandable if one considers that these are complex emotions, dependent on the SENSER's inner psychological processes. Although the PHENOMENON is essential to semantic understanding of these lexemes, and is always retrievable from the co-text or context, it is not seen as Agentive in any way. An unfaithful husband may behave in a way which causes his wife to be jealous, and a nouveau-riche may display his worldly goods in a way which may even be intended to cause envy, but this behaviour is not specifically lexicalised in English and Portuguese. It would seem that the behaviour of the unfaithful husband or nouveau-riche will produce jealousy or envy only if the SENSER is aware of the situation and psychologically affected. If the wife is also being unfaithful, or the observer of the nouveau-riche's display of wealth is even richer than he is, their respective feelings might be *relief* or *contempt*!

Jealous sometimes describes another emotion - as in phrases like *jealous dismay* - and this led other theorists to have problems in classifying this group of emotions. Johnson-Laird and Oatley noted it, and they classify *envy* and *jealousy* under the basic mode of Disgust. Ortengren et al.'s classification, identifying this group as having a specific valency, which allows for comparison of Fortunes-of-others and the effect this has on the SENSER, is supported by the group's syntactic and semantic ditransitivity. Their notion of variables affecting the emotion allows them to account for the other types of emotion associated with this group. However, since this group is numerically small, both in lexical items and in quantity of examples, one can only make strong hypotheses of this type once a rather bigger corpora had been consulted.

9.8 The Gloating group

Lexically speaking, this is a tiny area. Portuguese, *I am happy to say*, does not seem to have a word like *gloat*, and, even in English, only 39 examples were to be found for the group in BC, including 2 examples of the German *schadenfreude* quoted by Ortony et al.. This does mean that English and Portuguese speakers do not feel [PLEASED ABOUT AN EVENT PRESUMED TO BE UNDESIRABLE FOR SOMEONE ELSE], or that this emotion is affected by the degree to which:

- a. the undesirable event for the other person is desirable for oneself
- b. the event is presumed to be undesirable for the other person
- c. the other person deserved the event

- d. the other person is not liked

as in Ortony et al.'s example:

(9.20) Political opponents of Richard Nixon gloated over his ignominious departure from office.

which refers to a situation which can be seen in any newspaper reporting the public disgrace of politicians, or other important figures. It is not an attitude which is approved of socially, though. Not many theorists consider it as an emotion - Johnson-Laird and Oatley do include it in their list - but Ortony et al.'s classification requires its recognition as a parallel to the Sorry For category.

Only 8 examples were collected from only 3 books for the EC, and not all of these examples are without ambiguity. Waugh, for example, seems to regard *gloating* as describing a rather unpleasant, sexually orientated, observing of the object of desire, as in:

(9.21) Bridey can't take his eyes off her. He was gloating on her in the most revolting way all through luncheon.' BH

Although *gloat* can be used intransitively, it is usually used with *over* + the PHENOMENON which provokes this unpleasant reaction. It can occur with the Progressive aspect - and the noun form is *gloating* - which indicates a certain duration. It is also used to describe behaviour, being typically an emotion we attribute to others, rather than ourselves.

9.9 The Sorry For group

- a. Ortony et al. opt to describe as Sorry For the group of lexemes which describe being [DISPLEASED ABOUT AN EVENT PRESUMED TO BE UNDESIRABLE FOR SOMEONE ELSE]. This emotion is affected by the degree to which:
 - b. the undesirable event for the other is undesirable for oneself
 - c. the event is presumed to be undesirable for the other person
 - d. the other person did not deserve the event
 - e. the other person is liked

and their example is:

(9.22) Fred was sorry for his friend Mary because her husband was killed in a car crash.

Having said this, they point out that they are referring to the "empathic emotions in that they depend upon the person experiencing them empathizing with the other". Empathy, understanding of someone else's feeling is not an emotion in itself, but it accompanies an emotion, which has to be felt by the SENSER for the Other ^[12].

9.9.1 The Sorry For lexicon

The most central EC lexemes in the Sorry For group are *sympathy*, (42,3%), *pity* (36,5%), *sorry for* (9,5%) and, in the PC *ter pena* / *piedade de*, which jointly account for 52,3%.

lastimar (13,2%) and *compadecer* (11,9%).

One problem that exists for this group, in both English and Portuguese, is the existence of lexemes which also appear in the Disappointment group. *Sorry* usually appears + *for* in the Sorry For group, and with (THAT) clauses under Disappointment. *Pity*, which appears in this group in several forms, can also be found as an PFoc noun under Disappointment, in expressions such as *What a pity!* or *It is a pity.....*, and the BC showed these constructions account for about 44% of the total occurrences of *pity*. The same happens with *pena*, in expressions like *Que pena!* and *É pena que...* which appear under Remorse. *Self-pity*, which can be expressed in Portuguese as *ter pena de si próprio*, recognises the fact that this is an emotion in which the Other can be the Self, thus acknowledging lexically some sort of division of internal and external Self.

Most, but not all, examples of *sympathize* and its derivatives belong here [13]. It is important to realize that the English *sympathy* and the Portuguese *simpatia* are false cognates. *Sympathise*, *sympathetic* and *sympathetic*, all describe some kind of empathetic Sorry For feeling, or showing of this through one's behaviour. *Simpatia*, *simpatizar* and *simpático*, refer rather to the type of behaviour which allows us to like and appreciate each other.

Compassion/ate, which has no verb form, is also important (10,1%). The verbs *apiedar-se* and *compadecer-se* which are related to *piedade* and *compaixão* respectively, and *condoer* were found in the PC, as was the noun *comiseração*, similar to *commiseration*, for which 4 examples appeared in the EC. However, *commiseration* would seem to imply a showing of suffering or sympathising with, rather than actually feeling any emotion. The Portuguese *comiseração* would seem to be rather more related to the feeling.

The type of lexical cohesion examined in the BC shows that this group of lexemes, apart from combining with others from the group, also favours notions that, if not classifiable as emotive, describe the normal human attitudes and reactions associated with them. Thus, *sympathise* and *sympathy* combined with *smiling*, *realistic*, *positive*, *sentimental*, *interested*, *consideration*, *interest*, *attention*, *help*, and several other related words. There were also a couple of examples with *indignant* / *indignation* which shows anger at whatever action by a third party led the SENSER to feel for the Other person. *Compassion/ate* combined with *humane solidarity*, *justice*, *understanding*, *gentleness* and *tenderness*. *Pity*, which is positive, favoured Distress and Fear lexemes.

However, many of the situations in which we feel sorry for ourselves involve other emotive feelings, particularly of the Distress variety, and not all of us are clear-headed enough to realize we are suffering from self-pity - or are too proud to acknowledge it as such. On the other hand, although the lexemes in the Sorry For group fit quite neatly into their own group, there are doubtless examples in other groups, particularly those of Distress and Fear, which could be interpreted as belonging to this group if enough of the context is understood. For example, we say:

(9.22) John is sad because his mother is dying of cancer.

we need to know something about John if we are to interpret his feelings as suffering from feelings of sadness and pity for his mother, or whether his personality and situation favour an interpretation of sadness, self-pity and fear in relation to his own future without her. Since this type of analysis transgresses the frontiers of linguistics, I have tried to avoid making it explicit when I am fully aware of the whole situation and can draw my own, psychological conclusions. It is for this reason that none of these examples have been classified in the Sorry For group.

9.9.2 The syntax and semantics of Sorry For ^[14]

PHENOMENON types

As can be seen in [TABLE 9.7](#), Ortony et al.'s analysis of Resentment as concentrating on the Fortunes of Others is borne out by the 73,5%(E) and 51%(P) that have a straightforward Other, or PH. type 6, and a further 19,4%(E) and 32%(P) related to types 7-9, which implies fairly complex underlying cognitive processes. Some of the remaining few refer to the Self, 2,1%(E) and 8,2%(P).

High proportion of SFoc items

There is a higher than average overall proportion of SFoc items, about 86,8%(E) and 77,3% and the number of SFoc noun forms in both corpora, 51,9%(E) and 57,2%(P) indicates in the emotional processes. They are largely accounted for by *sympathy* (55,1%) and (31,6%), and there is a high proportion (40%) of *ter* + noun examples in the PC, with *te pena de/dó/piedade*. The EC produced only 3 examples of *have pity*. The nouns are largely uncountable, with a low level of complementation and adverbial noun phrases.

The EC has 14,3% SFoc verbs - most of them being *pity*, with a few of *sympathize*. Most the 7% of PC verbs, whether technically SFoc or PFoc, are -SE reflexive types, like *apiedar compadecer-se* and *condoer-se*, with the semantic ambiguity this entails. There is a high proportion of SFoc adjectives in the EC (16,4%), mostly represented by *sorry for*, the rest being *sympathetic*. The PC has only 10% adjectives here.

The PFoc elements in the EC were the *pity* adjectives - *pitiful*, *pitiable*, and *piteous*, and a small number of ambivalent examples of *sympathetic*, and *lastimável*, *confrangente*, and rather doubtful *penoso* in the PC.

9.9.3 A linguistic profile of Sorry For

As with Resentment, these emotions cannot be interpreted as moods. Neither, however, do they describe character traits, except, perhaps, for *sympathetic*, which might be thus applied to someone with an exceptional capacity for appreciating the problems of others. Despite the fact that the PHENOMENON is usually the Other and clearly defined, the syntactic evidence seems to favour the analysis that the SENSER, and particularly the SENSER's emotional processes, still take the main focus.

This is evident in the high number of SFoc items, but there is a difference between English and Portuguese in that the EC favours the SFoc verb and adjective - expressing direct personal involvement, while the *ter* + SFoc noun conveys an idea of possession of an emotional process, with the consequent distinction between it and the SENSER.

The Self-referring PHENOMENA, the reflexive verbs and the parallel past participle construction also support the idea that the Self - in this case, a conscious and understanding Self - is generating the emotion in some cases.

[1] The SFoc adjectives take complementation for 56,8%(E) of the examples as compared with an average of 47,2%(E), and 10,5%(P) of the examples as compared with an average of 2 (P).

The SFoc past participles take complementation for 59%(E) of the examples as compared with an average of 47%(E), and 8,2%(P) of the examples as compared with an average of 26,8%(P)

[2] The average percentages of SFoc verbs are 18,8%(E) and 14,8%(P).

[3] Anyone who doubts this point of view should try translating Miguel Esteves Cardoso article 'Ai, Solidão. solidão' - in *Os Meus Problemas* (1988). ed. Assírio e Alvim, Lisboa.

[4] The corpora averages for PFoc examples are 21,3%(E) and 26,5%(P).

[5] For example, *agony* - 1 PFoc and 17 SFoc examples; *shock* - 36 PFoc / 1 SFoc. *A Horror*(E) - 33% PFoc and *horror* (P)-54% PFoc; *Desgosto* and *melancolia* - 33% PFoc, *tristeza* 25%PFoc, and *miséria* 75%PFoc,

[6] In the PC, *sofrer* dominates these verbs so much that the data is more an analysis of verb than any other, but the syntactic pattern is similar to that of the EC.

[7] The percentages of SFoc nouns + complementation in the Distress group are 6,9%(E) 11,2%(P). The percentage for the corpora are 13,2%(E) and 15,9%(P)

[8] The average percentages for *be* + adjectives is 82,8%(E) and for *be* + past participles 74%(E)

[9] Complementation of adjectives is 21%(E)/8,5%(P) as compared with an average of 47,2%(E)/21%(P) and of past participles it is 26%(E)/21%(P) as compared with 47%(E) / 26,8%(P)

[10] The averages for Distress are:

Non-count = 11,1%(E) and 14%(P) compared with the averages 19,9%(E) and 20%(P)

Count = 43,7%(E) and 42%(P) compared with the averages 41,3%(E) and 41%(P)

Non sing/pl = 45,2%(E) and 44%(P) compared with the averages 39%(E) and 38%(P)

[11] The averages of PFoc verbs for the corpora are 5,2%(E) and 9,6%(P).

[12] *Empathy*, however, which bears a similar relation to the co-feeling described by Kundt is not a word which is to be found frequently in literary texts, even modern ones, and the only produced 22 of them, probably from a book on psychology.

[13] Only the non-emotional meanings of *sympathize* are translatable by the Portuguese cognate, *simpatizar*.

[14] The data for this section demonstrate the advantages of a large corpus when a small lexical area is being examined. In the EC, *pity* is probably overvalued because of Virginia Woolf's and Joseph Conrad's preoccupation with this word. These texts account for about 52% of the examples of *pity*, while representing about 23% of the corpus. Since *pity* favours the SFoc verb and noun forms, it has influenced these percentages accordingly. In any case, although both corpora show high percentages of noun forms, 51,9%(E) and 57,2%(P)

the EC has 14,3%(E) of SFoc verbs and 16,4%(E) of adjectives in this group.

CHAPTER 10

THE LINGUISTIC BEHAVIOUR

OF THE PROSPECT-BASED REACTIONS TO EVENTS LEXICON

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10.1 Prospect-based Reaction to Events

These emotion groups depend very largely on the semantic fields of Hope and Fear. If these are bona fide emotions would seem fairly obvious to the layman. Fear is an emotion which has served the evolutionary purpose of protecting us from danger. Hope is that positive reaction, "that springs eternal in the human breast", that serves to keep us from despair self-destruction, and Christians are taught to believe that Hope, like Faith, defies rationality

Hope, however, is not often found in the lists of emotions drawn up by psychologists. Arrington (1960) is one of the few that includes it in her list, but then her view of emotion recognition is a more conscious interpretation of the emotions than others. Otherwise, the emotion Ortony et al. call Hope has been subsumed under Expectancy (Panksepp, 1982), Anticipation (Plutchik, 1980) and, possibly, Interest (Izard, 1972). One reason for this is that some psychologists consider part of the emotional state as being 'action readiness', by which they mean that, once appraisal of the situation has occurred, the resultant emotional state prepares the individual to take appropriate action - to run away if s/he is frightened, or to throw her/his arms round person s/he loves. In this sense, Ortony et al.'s notion of Hope goes a little beyond this (pre-emotional phase when arousal has taken place, and is at the stage where something positive is anticipated. Whether or not it differentiates into a more specific emotion depends on the event that follows, and they provide for the emotions which result from these events with the Satisfaction, Fears-Confirmed, Relief and Disappointment groups.

10.2 The Hope Group

Ortony et al. describe the Hope group of emotions as referring to when one is [PLEASE ANTICIPATE THE PROSPECT OF A DESIRABLE EVENT], and the variables affecting its intensity are:

- a. the degree to which the event is desirable
- b. the likelihood of the event.

and the example they give is:

(10.1) As she thought about the possibility of being asked to the dance, the girl was filled with hope.

They think of Hope in conjunction with Fear, although they do not claim that “the ordinary language terms *hope* and *fear*” are antonyms. In fact, having discussed the various possibilities of *hope* and *hopefulness*, they end up by saying that “probably the expression that maps onto [their Hope emotion type] most accurately is that of anticipatory excitement”. This attitude fits in with the point of view of the psychologist which requires some form of physical reaction for an emotion to be definable as such. However, it in no way solves the problem posed by language.

10.2.1 The Hope lexicon

Hope, expect, wait for and esperar

The lexical width of meaning of *hope*, and the nearest Portuguese equivalent verb *esperar* only highlights the whole language problem that Ortony et al. are trying to avoid. This is particularly noticeable with the meaning of the verb *esperar* which covers a wide gradient and can be seen in the following examples and their translations:

(10.2a) Estarei à tua espera na linha 4 amanhã de manhã.

(10.2b) Espero a tua chegada no comboio às 12.30.

(10.2c) Espero vê-te amanhã.

(10.2d) Espero mesmo vê-te amanhã.

(10.2e) Vivo só das esperanças de te ver amanhã.

(10.2a) I shall be waiting for you on platform 4 tomorrow morning.

(10.2b) I am expecting you on the 12.30 train.

(10.2c) I expect / hope to see you tomorrow.

(10.2d) I do hope I shall see you tomorrow.

(10.2e) I live in hopes of seeing you tomorrow.

Ortony et al.'s notion of Hope refers to the last two examples, in each language, leaving (10.2a) in a doubtful position. *I hope to see you tomorrow* case focusses the Speaker's desire to see someone, and *I expect to see you tomorrow* the certainty based on information received or a polite order. In *Espero vê-te amanhã*, however, one may only establish a difference by using intonation.

In English there is a close relationship between *hope* and *expect*, and *expectant /cy* can reasonably be considered almost as much of an emotion as *hopeful*. However, although *expect/ation* has been included in other lexicons, I agree with Johnson-Laird and Oatley (1980) that it is better classified as "a cognitive attitude that may cause emotion", as in the example from a news bulletin:

(10.3) The Japanese foreign minister arrived in Washington with high hopes but low expectations about reaching a trade agreement.

***Esperar* and *Esperança* as Hope lexemes**

The noun *esperança* covers a far narrower scope than *esperar* and corresponds quite closely to the English noun *hope*. One could therefore arrive at decisions over the use of *esperar* vs. *Esperança* Hope lexeme by testing the verb in paraphrases that involved *esperança* and *expectação* (similar to *expectancy / expectation*). As an English speaker, one could also select the correct examples for *esperar* by choosing only those translatable by *hope*. However, to deny the existence of a notion of *esperança* in the examples with *esperar*, simply because English requires one to establish *expect* or *hope* in the situation, would be chauvinistic.

Esperar can be seen to run from the factual, through the intellectual to the emotional, and syntax does not help us decide which. I can imagine that it might be difficult for a monolingual Portuguese to decide which were the more 'emotional' examples. To illustrate how difficult choice is, here are two examples, starting with a look at the expression, *à espera*, and its translations:

(10.4) Que estúpidas horas Carlos ali arrastara, com a "Revista dos Dois Mundos" espera vã dos doentes, cheio ainda de fé nas alegrias do trabalho!.. M

(10.4) *How many hours had Carlos stupidly dragged out there with the Revista dos Mundos waiting in vain for patients and still believing in the joys of work!*

(10.5) Não é nada que não estivesse à espera, acho eu. BA

(10.5) "Surely you expected it?" Tr.

In (10.4), Carlos spent hours in his doctor's consulting room *waiting for* patients to appear. In the context of the novel, he also *hoped* they would come and, in the early days, even *expected*

it, but the physical fact of his being in the room requires the translation with *wait*. How using the test of nominalisation of *esperar*, one could convert *na espera vã dos doentes* to *esperança vã de doentes* (*the vain hope of patients arriving*). In (10.4), we have the answer to the policeman to the prisoner's surprised questioning of the information that she is to be transferred to the PIDE prison. Here there is no *waiting* situation, and the context would lead one to expect that she *hoped*, or had *hopes* or *esperanças*, that this might happen. The policeman is asking why, given her understanding of all that has happened, she didn't *expect* it.

Let us now turn to some examples of the verb *esperar*, in order to see how the context affects translation:

(10.6) - Então, sem avisar, Vilaça? - exclamava Afonso da Maia, chegando de braços abertos. - Nós só o esperávamos para a semana, criatura! M

(10.6) "Well, how is it you've come without warning, Vilaça?" exclaimed Afonso da Maia, coming up with open arms. "We didn't expect you until next week, old man." M Tr

(10.7) Não esperava nada, não desejava nada. Não sabia se a veria, talvez ela tivesse partido. M

(10.7) He hoped for nothing, he desired nothing. He did not know if he would see her perhaps she had already left. M Tr

(10.8) Só então, está certo, a sua filha se apresentará às autoridades. Espera desde que lhe sejam devidamente garantidos os direitos facultados pela lei. BA

(10.8) Once the facts are established, his daughter will come forward, and he trusts her legal rights will be safeguarded. BA Tr

In (10.6), Afonso da Maia is referring to the fact that Vilaça's visit had been planned for a later date, and that he was *expecting* rather than just *hoping* he would come. (10.7) was translated by *hope*, because the subject simply does not know enough about the situation to be able to *expect* anything. *Hope* is often used in formal wishes, but in (10.8) *trust* is considered more suitable, since *expect* would not be tactful when dealing with the Law, and *hope* would show signs of weakness.

Hope, expect, and the negative

Hope, in Ortony et al.'s example, obeys their criteria of being [PLEASED ABOUT THE PROSPECT OF A DESIRABLE EVENT]. However, one wonders how they would view:

(10.9) I hope she won't come tomorrow.

(10.9) Espero que ela não venha amanhã.

The event is presumably no longer desirable - or is it the prospect of the event that is no longer desirable? Or does one classify this under Fear which they see as [DISPLEASED ABOUT THE PROSPECT OF AN UNDESIRABLE EVENT], a description which might suit a different situation? If that is so, how does one go on to distinguish between these examples and:

(10.10a) I fear she will come tomorrow.

(10.10b) I fear she will not come tomorrow.

(10.10a) Receio que ela venha amanhã.

(10.10b) Receio que ela não venha amanhã.

Another point that is worth noticing is that it is not normal to use *hope* or *esperar* in negative, as in:

(10.11) ?I don't hope that she will come tomorrow.

(10.11) ?*Não espero que ela venha amanhã.*

except, perhaps, as marked semantically, for example, as an indignant response to accusatory:

(10.12) You hope she will come tomorrow, don't you?

(10.12) *Tu estás à espera que ela venha amanhã, não estás?*

However, if there is no information on which to base our statement, or information to contrary, it is normal to say:

(10.13a) I don't expect she will come tomorrow.

(10.13a) *Não estou à espera que ela venha amanhã.*

and not:

(10.13b) ?I expect she won't come tomorrow.

(10.13b) ?*Estou à espera que ela não venha amanhã.*

Expect, therefore, would seem to behave like other more intellectual verbs, like *think* *believe*, and few would attribute strong emotional meaning to it. Yet *hope*, even when used merely to express a polite wish, still maintains a grain of emotional meaning. Ortony et al. psychologists, will only be able to decide which examples to choose or discard by measuring the individual's blood pressure. The linguist may make an informed guess by looking at context, or the intonation, but it is safer to give all examples of *hope* the benefit of the doubt rather than argue about subjectively measured degrees of emotion.

The scope of the *hope* and *esperar* lexemes in this analysis

It should by now be clear that context is very important in the decisions taken here. I hope, (I do not necessarily expect!) that Portuguese readers will not object to my having reduced examples of *esperar* to those which pass the test with *esperança* or can be translated *expect* or *hope*. The verb *hope* is already well within the area of the conscious appraisal let us therefore agree that there is an area here, where the distinctions of meaning are necessarily very fuzzy, and that, as so often in language, rule-making is difficult. This means that there is one very dominant lexeme in both languages in the analysis of this group - *hope* with 70,1%(E), and *esperar*, with 71,4%(P).

The other Hope lexemes

The other Hope lexemes fit rather more easily into Ortony et al.'s group. The most important are *excite* with 21,4%(E) and *excitar* with 13,5%(P). At first these lexemes seemed to be more Generic in nature, but on examining the corpora, it became clear that they described Ortony et al.'s notion of 'anticipatory excitement', although they are possibly further back along the gradient towards the pre-emotional phase described as 'action readiness' than *hope* or *esperar*. *Anticipation*, *expectancy* and *look forward to*, in English, and *antecipação*

expectativa, in Portuguese, lexicalise Ortony et al.'s basic notion well. *Aspire* and *aspirar* similar, but are usually used in contexts on a grander and, therefore, less attainable level than the other lexemes. *Sanguine* is rarely used but it implies a rather rational and optimistic type of hope.

10.2.2 The semantics and syntax of Hope

The semantics and syntax of these examples also posed a series of problems about the classification made by Ortony et al.

PHENOMENON types

The analysis of PHENOMENON type in this group often varied according to the form of lexeme. As can be seen in [Table 10.1](#), although the overall choice of Ph. type 1 was 29,5% in the EC and 35,9% in the PC, the nouns accounted for 48,5%(E) and 57,3%(P) of examples. This is because they do not need a PHENOMENON in the same sentence, and often has to deduce it from the general context. The *excite / excitar* lexemes also showed 44%(E) and 63%(P) PH. type 1, so this factor was not peculiar to *hope / esperar*.

The EC showed more interest than the PC in hoping about the prospects of both the Self and the Other, 40%(E) as against 21,7%(P). There are 17,9%(E) and 13,8%(P) of the Other-orientated PH. types 2 - 5, usually with 'b' type clauses. Although Hope is not usually directed immediately at the Other, the two corpora differ quite markedly in the way in which they choose types 7-9 - 19,3%(E) and 5,3%(P). The PC would seem to prefer PH. types 10 - 11 with a total of 53,6%. The results for the EC show a total of 21,9% with these groups.

Few PFoc items

The first thing to be noticed about the syntax of Hope is the low proportions of PFoc lexemes. *Excite* is the only one in the EC with the familiar PFoc verb + SFoc past participle or PFoc present participle type adjective combination, and it provides all the PFoc examples. Similarly, *excitar* provides most of the PFoc examples in the PC, with the exception of a rather unusual example of the past participle, *esperado*, as in:

(10.14) Esperado como um Messias, perseguido como o velocino de ouro, começava a faltar-lhe a paciência. AQ

High proportion of SFoc nouns and verbs

Most of the rest of the lexemes, bar the SFoc past participles *excited* and *excitado*, are to be found among the SFoc nouns and verbs. In the EC the number of nouns, although well above the corpus average, still accounted for considerably fewer of all the examples, 31,4%, than of the verbs, 46,9%, whereas the PC yielded almost 49,3% nouns and 35,9% verbs, and vast majority of the noun forms belong to *hope* and *esperar*. The larger proportion of nouns in the PC may be due to the need for Portuguese to clarify the Hope scenario, using the noun *esperança*. The proportion of countable nouns is higher than the average, in the PC this is partly due to the frequent use of the plural *esperanças*, as in:

(10.15) O médico tirara-lhe todas as esperanças. A doença avançara de mais.. A

which has its counterpart in English, as in:

(10.16) I know that Brown hated Jim at first sight. Whatever hopes he might have vanished at once. LJ

and these examples seem to refer to a set of vague general instances of *hope*.

The idea of countability was not, however, limited to these plurals. By adding the examples which took a defining complement in the form of a noun phrase or a clause, we found that this group of nouns was exceptionally countable, with 45,1%(E) and 53,3%(P). All these examples suggest that they are rather parallel in nature to examples with the more intellectual *thought*.

The verbs, and the complementation they take, are perhaps the most interesting syntactic clue to the nature of *hope* and *esperar*, and of the difference between them. There are token intransitive examples for both lexemes, of the ellided variety which imply an understood PHENOMENON in the context, as in:

(10.17) He went indoors and for the first time he dared to hope. HF

or one of those which refer to the general human need to hope, as in:

(10.18) É esta a mais grandiosa história dos homens, a de tudo o que estremece, sou espera e tenta, sob a carapaça da sua consciência, Si

Esperar also has a small number of *esperar-se* examples, of the Subject-less *Espera-se...* type which in English would be rendered by the Passive *It is hoped...*

Most of the verbs are transitive but, whereas about 50%(P) of the *esperar* examples take a simple noun phrase, none of the *hope* ones do. These examples with *esperar* are those which may arguably be substitutable by a phrase with *esperança*, but which would largely be translated by *expect*, or perhaps *hope for*. Other than these, the PC verbs show a 12% proportion of examples complemented by 'b' type infinitive clauses and 26%(P) proportion of 'g' type QUE clauses.

In the EC, the examples with 'a' objects in this group, 6%(E), appear largely with *look forward to*. The *hope* verb can only take a simple noun phrase if it combines with the preposition *for* as in:

(10.19) I knew too much already to hope for the grace of a single uplifting touch, the favour of hinted madness, of shadowed horror. LJ

and these examples account for only 6,5%(E) of the verb examples. The *hope* verb requires clausal complementation and accounts for 60%(E) of the examples with 'g' type clauses as against a smaller one of 'f' ones, 12,5%(E), with a further 12,5%(E) of 'b' type clauses.

10.2.3 A Linguistic profile of Hope

Hope and *esperança* are seen as well defined basic concepts, with eight examples of nominalization being found in the EC and three in the PC. Then there was a large proportion of PH. type examples, but one cannot deduce from this that emotions in the Hope group are somewhat undirected, like a mood. There is always the idea that the SENSER hopes for his/her current situation or prospects to improve in the future. It is perhaps this type of situation which encouraged the consideration of Hope as an emotion.

The analysis of the rest of the corpora begs a lot of questions over both Ortony et al.'s psychological classification, and the more linguistic adaptation I have made. The Hope emotion group, according to them, focuses on "Fortunes of Self, prospect-based emotion". The lexical extension of the group did not contest this focus, but merely enlarged the semantic variation of emotional or intellectual responses to the prospect-based fortunes of Self. H

therefore, can one explain why the PHENOMENON may not only involve the Self but also Other, and a variety of other things?

It is possible that one could suggest a small new co-feeling category for Ortony et al. call perhaps, "Fortunes of Others, prospect-based" formed by those examples in which the O forms (part of) the PHENOMENON. This might even be possible in a psychological approach which depended on the analysis of whole situations. However, it would be difficult at a linguistic and contextual level to decide on which of these examples were truly altruistic, which reflected hoping about the Other's fortunes only insofar as they affected the Self. However, providing a wide enough view of Ortony et al.'s EVENTS is understood, the examples can be seen as 'prospect-based events'. The fact that the EC specifies the role of Self and Other more than the PC may be due to the greater specificity, and level of conscious appraisal, which is a feature of the clausal complementation more frequent in the EC.

Cultural differences as an explanation of usage

It should be noted that, despite all my attempts to collect examples in both corpora which occurred only within a certain semantic gradient, the results in this group have been rather uneven. For a start the EC contains a higher proportion of examples in this group in relation to the total of all the lexical groups considered, 4,4%, making it seventh in numerical importance and the PC accounts for only 2,5% of the total, which leaves it in the eleventh position in the PC. Besides this, there are the differences in PH. types mentioned above.

To opt for some big cultural difference which showed the PH. types of the EC as more interested in people and those of the PC in things, would be to speculate wildly. What we are looking at here, however, is a difference in the lexical-cultural way in which the *hope expect* and *hope > want* gradients, as well as the *hope > liking* gradient, are expressed.

As we have seen, a lot of the examples of *esperar* accepted for analysis were arguably translatable by *expect*. I would suggest, therefore, that there may be some Politeness Principle here which makes it more acceptable for Portuguese speakers to *esperar* something than *expect* it. However, the relatively larger numbers of Portuguese examples in the Desire-Liking groups may indicate different conventions for the use of all the relevant lexemes which they are used in social formulae.

10.3 The Fear group

One type of emotion whose status as such is accepted by virtually everyone is that of Fear. It can be defined by evolutionists as essential to survival in all animal species, and can be shown to produce both externally noticed and internally felt physical reactions by the Behavioural psychologists. Even the reductionists will accept it within their group of negative emotions.

The Fear group of emotions is described by Ortony et al. (ibid : 112) as referring to when one is [DISPLEASED ABOUT THE PROSPECT OF AN UNDESIRABLE EVENT], and the variables affecting their intensity are:

- a) the degree to which the event is undesirable
- b) the likelihood of the event.

and the example they use is:

- (10. 20) The employee, suspecting he was no longer needed, feared that he would be fired.

They thus see the sense of these lexemes as varying according to how likely the event quoting *dread* as an example from this group which presupposes that the event will occur (it 114). They also believe that there is some correlation between the intensity of the emotion the extent to which the event is perceived as inevitable.

The notion that Fear is directed towards the future, or is prospect based, is essential to analysis of this group. This way of viewing the situation also allows for one to re-interpret linguistically expressed *Mary's fear of snakes* as the EVENT to which Ortony et al. Although Mary's fear is linguistically directed at *snakes*, a psychologist might point out what she is really afraid of is what the snake might do to her in a hypothetical future.

10.3.1 The lexicon of Fear

Fear and *medo* are the lexemes which seem to satisfy both the psychologists and the linguists as the central words for expressing this emotion, and as noun forms they usually translate each other quite easily. According to the corpora, they are also the most popular in this group, *fear* accounting for 15,1%(E) and *medo* for 19,5%(P), as can be seen in Table 10.2. Other cognates which are central to Fear and are similar in meaning are the stronger lexemes like *terror*, *pánico* or *alarm* or *alarme*.

[Table 10.2](#) lists lexemes on a three level scale of weak > strong. However, there is a scale of immediacy which should be taken into account. The lexemes of the less immediate type describe the SENSER on a scale from being predisposed to Fear by nature, to being in a state of Fear of a certain duration in a given situation, and tend to be largely in group 1, with some, *anxious*, in group 2. The more immediate type usually refer to specific situations, as *alarm*, *frighten*, and *terrify*, and *alarmar*, *asustar*, *perturbar* and *preocupar*. As we shall see, the immediacy scale can explain certain syntactic patterns, but the interesting point is that the more central lexemes fall in the middle of the immediacy scale.

Among the weaker and less immediate lexemes, *shy* is very similar to *timid* and together they are close quantitatively to *tímido*, expressing character traits predisposing a person to fear and describing behaviour associated with fear. *Bashful* and *acanhado* are less popular synonyms and more usually applied to behaviour than character. *Nervous* and *nervoso*, stronger lexemes, can refer both to reactions to situations and character traits, sometimes of a rather pathological or abnormal nature. One can be naturally *pessimistic* about life in general or about a specific situation. It is possible to have negative intuitions about future events but none of these lexemes, except *foreboding* and *misgiving*, necessarily imply Fear. Several lexemes refer to a rather unspecified weaker feeling of Fear, such as *disquiet*, *ill-at-ease*, *insecure*, *uneasy*, and *inquieto*, this latter lexeme accounting for 7,6% of the PC group and being rather broader in scope than the EC lexemes. Others express a well-specified fear of PHENOMENON, as with *threatened*, *harrassed* and *daunted*, and *intimidado* or *acobardado*.

A substantial number of the weaker and medium strength lexemes imply involvement with PHENOMENON in a way which implies a certain duration of the situation and a considerable degree of conscious appreciation. In the EC, the most popular of these is *worry*, and others *apprehensive*, *care about*, *concerned*, *fret*, *perplexed*, *perturbed* and *preoccupied*. *Inquietarse*, *preocupar-se*, and *perturbar-se*, are of interest, and there are a few examples of *apreensivo* and *perplexo*. The problem with cognates here is due not so much to lack of similarity at the basic meaning of the words, but to the strength attributed to them. For example *preoccupied* is both infrequently used and weak, in that it usually means that the person is interested in some problem and fails to notice what is happening around him, but *preocupado* is used a lot in the stronger sense of *worry*. *Perturbed* is also used little, and tends to need a qualification from an intensifier like *very* to give it force, but *perturbado* contains a str

element of Distress as well as Fear.

There are quite a few more central medium strength lexemes in the EC, such as the pop *frightened*, and, to a lesser degree, *scared*, the more formal *trepidation*, the more informal *creeps*, *funk* and *jitters*, and that mixture of fear and respect, *awe*. The PC has *temer*, *rec* and others like *assustado*, *atemorizado* and *amedrontado*.. These lexemes fall in the middle terms of immediacy.

Some lexemes for Fear, like *afraid*, are not so simple as they at first appear. *Afraid* poses a problem because, although *afraid of* fits into this type, *afraid that* can usually only be considered within Fear if the tense of the subordinate clause refers to present or future possibility in relation to the tense of the main clause. When the subordinate clause refers to a past event, *afraid that* is usually classifiable as similar to *regret*, in the (Self-) Reproach group [1]. If one examines the following examples closely, one can see how this distinction can be made:

- (10.21 a) I am afraid they will be killed by the enemy.
- b) I am afraid that they may have been killed by the enemy.
- c) I am afraid they were killed by the enemy.

Whereas a) clearly expresses Fear and c) Regret, one may hesitate over the interpretation of b). This is because the subordinate clause seems to refer to something that has already happened. However, the *may* makes the 'pastness' of the event hypothetical and, therefore, the Speaker is expressing Fear that this hypothesis will be confirmed in the future.

Worry, too, poses problems of analysis, as it can be used both as an SFoc verb, as in *worried about him*, and as a PFoc verb, as in *His behaviour worried her*. *Anxious* can always be classified under Fear. Constructions with TO or (THAT) clauses are more often than not classifiable under Desire, as in *They are very anxious to have your co-operation in the publishing section which deals with Africa*. The Portuguese *ansioso por* behaves in a similar fashion, although, interestingly, at the level of nouns we have *ansiedade*, which, like *anxiety*, belongs to the Fear group, and *ânsia* which, usually belongs to the Desire group, but has a strong element of Distress.

Cowardice and *courage*, *covardia* and *coragem*, and their synonyms, despite the fact that some psychologists consider them emotions, were not included here because they indicate an outsider's moral judgement on someone else's behaviour in circumstances that might cause Fear, rather than direct reference to emotional processes. All the same, *craven* and *acobardado* crept into the corpora because of the strong element of Fear associated with them in context.

At the stronger end of the scale in Table 10.2, the EC includes items such as *frantic*, *frenzy* and *petrified* because, although not necessarily related to Fear, they appeared in appropriate contexts in the corpus. In the PC, the cognate, *frenesim*, did not appear in this sort of context whereas *petrificado* did. *Dread* and *pavor* stand out in the corpora as strong lexemes, but the inevitability of the event sometimes implicit in *dread* described by Ortony et al. does not seem to be implicit in *pavor*. The PC presents a wider variety of past participles of lexemes in this area than the EC.

The lexical company kept by lexemes in this group reveal clues as to how one can interpret them. *Afraid*, because of its unusual syntactic behaviour was found to reject any combination

in the BC, but most of the more central lexemes liked to appear with each other, or with stronger items from other negative groups like Distress and Anger. Occasionally they combined with a contrasting idea, as when *dread* appears with *delight* and *relief*, *fear* with *love* and *pleasure*, and *anxious* with *hopeful* and *admiration*. *Panic* likes association with possible causes, and *awe* occurs largely with *admiration*, *respect* and *wonder*. The weak lexemes like *shy*, tend to occur with others that are similar, but outside the Fear field, such as *sensitive*, *unassuming* and *reserved*, and *timid* with *diffident*, *soft-spoken* and *dependent*. *Uneasy*, with its notions of Fear and Distress, tends to combine with *tense*, *restless*, *suspicious* and several unrelated words whose relevance is only understandable in context.

10.3.2 The semantics and syntax of Fear

Examples of the semantic and syntactic behaviour of Fear are often quoted to demonstrate points about this area of our experience, so a careful look at what actually happens in a quantitative analysis is interesting.

The PHENOMENON types and Fear

Although this is an area where one would expect a PHENOMENON to be identifiable, the problem is that, in context, 32,1%(E) and 39,4%(P) take PH. type 1, as can be seen in [Table 10.3](#). PH. types 2-5 are fairly low in number, 18,8%(E) and 11,8%(P). This leaves 48,6% for types 6-11 for both corpora, but whereas the EC shows 30,9% for types 6-9 and 17,8% for types 10-11, the PC has only 25,3% for types 6-9 and 22,3% for types 10-11. However, there is a definite tendency for certain types of lexeme to favour certain PHENOMENA.

In the EC, the PH. type 1 is favoured by *apprehension*, *fear*, *frantic*, *nervous*, *shy*, *timid*, *uneasy*. There are a relatively high number of the usually poorly represented PH. type 2, many of them being the more obviously character describing lexemes of *nervous*, *shy* and *timid*. There are also examples of PH. type 2 which refer to a form of emotion focused directly on Self, or personality, with *fear* and *uneasy*, as in:

(10.22) And even for those who do not believe this truth there is fear all the same—
fear of themselves. LJ

(10.23) He was always uneasy about himself. VW

Afraid, *anxious*, *frighten*, *terror*, and *uneasy* are the only lexemes which show significant percentages of the PH. types 3-5. The PH. types 6-11 tend to dominate the lexemes *alarm*, *awe*, *care*, *concern*, *dread*, *fright*, *scared*, *terror*, *threatened*, and *worry*. The Other's behaviour, accounts for 30,9% of all the PHENOMENA, other objects for 15% and only 2,8% belong to type 11.

The evidence from the PC gives a similar picture. Type 1 is favoured by *ansioso*, *aprensivo*, *aterrado*, *enfado*, *inquieto*, *nervoso*, *perplexo*, and *tímido*. There are a few type 2 examples describing character traits with *medroso*, *nervoso* and *tímido*. Again few lexemes show much interest in types 3-5, except for *preocupação*, and *receio*. Types 6-11 are favoured by *assustado*, *aterrado*, *medo*, *pavor*, *perturbado*, *preocupado*, *recear*, *sobressalto*, *temer*, *terror*, although, as with the EC, there seems to be no particularly unusual tendency to favour specific PHENOMENA within the types.

High proportion of SFoc examples

The proportion of SFoc examples in this group are 5-6% above the corpora averages at 84.4%(E) and 78,7%(P), and the number of examples tagged for behaviour is slightly higher than

normal. Unlike the Joy and Distress groups, this group showed little tendency to use adjectives ambivalently, except with *fearful* and *fretful*.

There is one obvious difference between the two corpora in the SFoc data - the EC has an unusually high percentage of adjectives and the PC has a correspondingly high level of nouns. This is easily explainable as what is expressed in English by *afraid* can only usually be said in Portuguese with phrases like *ter medo*. The *afraid* adjective is unusual in that it is exclusively predicative in nature, and it should also be noted that the *ter* + noun structure is unusually frequent in this group, 17,9% of the noun examples against the corpus average of 6,9%.

The SFoc adjectives in the EC are dominated by the predicative *afraid*. However, the number and level of attributive adjectives in both corpora is also above average, with the less immediate adjectives *anxious*, *uneasy*, *nervous* and *shy* and *nervoso*, *inquieto*, *tímido*, *ansioso* and *perplexo* being the most important.

In the EC there are more SFoc nouns than the corpus average, with *fear* alone accounting for 35,6%, and the most important other nouns being *terror*, *anxiety*, *dread*, *panic*, *fretfulness*, *perplexity*, *apprehension* and *shyness*. There is a noticeable tendency towards countability in the non-singular / plural group, and noun complementation is above average, with few adverbial noun phrases. One noticeable difference here is the high percentage of BEHAVIOUR tagged examples, about 10% more than normal.

The percentage of SFoc nouns in the PC reaches 39,4%, 5% above average, and *medo* accounts for 41,5% of the examples, with *terror*, *receio*, *inquietação / inquietude*, *preocupação*, *ansiedade*, *timidez*, *alarme*, *perturbação*, *sobressalto* and *pavor* making up most of the rest. Unlike the EC, however, there is a 8% increase in non-countable examples at the expense of other two groups. Complementation is 15% higher than usual and the number of adverbial phrases is 7,7% more frequent.

The SFoc past participles are only slightly above the average number of examples for this group, although the lexical variety is fairly wide, particularly in the PC. The EC shows a clear preference for the more immediate type lexemes which favour specific PH. types, *frightened*, *worried*, and *scared* being the most popular, others being *concerned*, *alarmed*, *terrified*, *averted* and *threatened*. In the PC the examples are distributed more evenly among *perturbado*, *aterrado*, *preocupado*, *assustado*, *espavorecido*, *alarmado*, *atarantado*, *pavorado* and *acanhado*. The type of copula used in the EC is normal, but in the PC the immediacy of nature of the lexemes used is clear in that there are more zero copulas than usual, 69,1%, or examples of *ficar*, 12,2%, and *estar* and *ser* could only raise 6,5% between them. Some of the more doubtful copula-types appear here, with *abalar*, *acordar*, *fugir* and *vir*.

Complementation of SFoc adjectives and past participles is high for this group in the EC, reaching 75% with adjectives. This fits in with the need for *afraid* and other adjectives to have complementation, and with their tendency to favour explicit PH. types. This type of complementation is generally far rarer anyhow in the PC, but in this group it is still below average.

The SFoc verbs are about 8%(E) and 5%(P) less frequent in this group than the corpora averages, with 10,5%(E) and 9,3%(P). In the EC, 69,4% of these are transitive verbs, 19% take prepositional objects and 11,6% are intransitive. *Worry* provides 41,6% of the examples, with *fear*, *care*, *dread* and *fret* providing most of the rest. In the PC, 76,7% are transitive, 19,4% are verbs + -SE, and 3,9% are intransitive. *Temer-se* (44,6%) and *recear* (40,5%) are the most important verbs with a few examples of others like *preocupar-se*.

PFoc adjectives

There was a problem in deciding which of certain PFoc adjectives to include in the analysis because several of the apparent candidates have lost their original Fear-inspiring meaning. Words like *awful*, *dreadful* and *terrible*, and *medonho* and *terrível*, have become devalued in usage and are used more often as general intensifiers, particularly in their adverbial form. The examples that were collected were those in which an element of Fear was still detectable.

The PFoc adjectives were 2,5% lower than average in the EC and, as is normal, most of them were attributive and central in meaning. *Terrible* / *terrifying*, *frightful* / *frightening*, *alarm*, *dreadful* and *fearful* accounted for most of them. In the PC the average was 2,2% above average and 65% of them were due to *terrível*, with *medonho*, *temível* and *pavoroso* making most of the rest. The few examples of PFoc nouns, except for one or two examples of *threat*, were of the ambivalent kind, *alarm*, *anxiety* and *terror*, and *alarme* and *terror*.

PFoc verbs and SFoc past participles

Although slightly above the corpus average in the EC, the PFoc verbs are less than half as frequent as their corresponding SFoc participles, and *frighten*, *scare* and *threaten* account for most of them. In the PC, the situation is a little different with the SFoc past participles covering 11,2% of the group and the PFoc verbs 8%. This difference in balance is probably explicable by the tendency of Portuguese to prefer the PFoc -SE verb, often used with no further Object, to the copula + past participle construction.

10.3.3 A Linguistic profile of Fear

Although Fear is so acceptable as an emotion, the lexical group can be seen to be less homogenous than some of the others. For example, if one were to eliminate the examples with the *anxious/shy* type lexemes and the examples of *fear* and *medo* which favour the PH. type 1, the balance would swing heavily towards the evaluation of this group as one in which the cognitive processes display a high degree of conscious appraisal, however rapidly and apparently subconsciously it may occur. This may be why so much argument has gone on around Jarvis's example as to whether the man sees the tiger, runs away and then realises he felt fear, or whether he sees the tiger, appraises the situation, and is prompted by fear to run away.

James' interpretation presumes that the self-defence mechanism is merely intuitive and requires no reasoning powers. However, now that the fear of tigers would be described as being acquired culturally and not genetically, it can be seen as the result of complex cognitive processes. After all, if the man does not have some cognitively stored information about tigers, *qua* tiger, how will he know whether to run, or in which direction? If fear is to fulfil its practical and evolutionarily necessary role of protecting a person from danger, PHENOMENON must be identified easily and quickly, and the greater and more immediate the danger, the stronger the emotion and the more essential the correct recognition of PHENOMENON.

The only problem that arises when considering the type of situation exemplified by the tiger where quick identification of the dangerous object is urgently necessary, is whether Ortony et al.'s definition of Fear as the reaction to an undesirable EVENT is still cognitively defensible, or whether the notion of 'object' is a better analysis in these cases. One can argue, as I did with *Mary's fear of snakes* above, that the cognitive scenario involves a projection from the immediate object to the prospect of the event in which the object behaves dangerously. However, as Penrose points out, the time span necessary for such complex reasoning to take place before possibly life-saving action is taken does not comply with the known laws of physics of perception. If one wants to analyse the situation in terms of perception and cognition, the question is whether the brain stores a simple image of a tiger, strongly marked for danger, which is easily and rapidly accessed, or whether it stores information of a n

propositional and complex type, the processing of which would probably not allow the man to escape in time. We cannot answer this sort of question at present, so while we wait for Penrose to prove his theory of correct quantum gravity, we must either accept some sort of physical explanation, or opt for identifying the PHENOMENON in such cases as an OBJECT rather than an EVENT.

However, the situations in life which need such rapid identification of danger do not occur very much frequency outside a *Rambo* type film, so the notion of EVENT is still applicable to many cases of fear. As we move away from the more immediate types of fear, one can view situations involved as requiring greater or lesser action readiness, and the analysis by those who see an emotion like Fear as the function which prepares us to solve problems that arise in life, becomes more relevant for a broader analysis of this field. Therefore, however, undirected *shyness*, *anxiety* or even *fear* may seem, they still essentially perform the function of preparing us to take positive future action even if it is against some ill-defined unpleasant prospect in the future.

The linguistic analysis made here would seem to reflect certain aspects of a wider analysis of the biological function of Fear. However, it is possible to see why at least English-speaking psychologists theorize about fear in the way they do. Although they are not used with great frequency, the wide variety of lexemes of the PFoc verb + SFoc past participle type probably encourages people to generalise from these about the nature of Emotion and Fear in particular. However, although most of the few examples marked DELIBERATE, signifying that PHENOMENON is a deliberate and intentional action by an Other, are to be found with the PFoc verbs in Fear, the point that both psychologists and linguists usually miss is that, even in this lexical group, they are very rare.

10.4 The Satisfaction group

Ortony et al. define as the Satisfaction group that in which the SENSER is [PLEASED ABOUT THE CONFIRMATION OF THE PROSPECT OF A DESIRABLE EVENT], and the variables they suggest as affecting its intensity are:

- a. the intensity of the attendant hope situation
- b. the effort expended in trying to attain the event
- c. the degree to which the event is realized

The example they give to illustrate this type is:

(10.24) When she realized that she was indeed being asked to go to the dance by the boy of her dreams, the girl was gratified.

However, they readily admit that this group is hard to realize lexically in English because, the Fears-Confirmed group it pairs with, these emotions “may not be experientially very salient because they are often masked by other emotions” (ibid : 119). In the example they have given, *gratified* could easily be substituted by *pleased* or *happy* without much change in meaning of the situation, although the resulting examples would belong to the Appreciation and Joy groups respectively.

Satisfaction is closely related to both the Joy and Appreciation groups. The definition for the Joy group is a simplified form of that given here, being simply [PLEASED ABOUT A DESIRABLE EVENT], and does not describe the greater complexity conveyed either by psychological or lexical concepts of Satisfaction discussed here. Johnson-Laird and Oatley

(1989) consider *satisfy* to be “Causative: to *please* someone by an action that meets their *desires*”, so one could then interpret the SFoc past participle as [PLEASED BY SOMEONE'S ACTION WHICH MEETS ONE'S DESIRES]. This definition would bring *satisfied* very close to Ortony et al.'s Appreciation definition as [APPROVING OF SOMEONE ELSE'S PRAISEWORTHY ACTION], although it lacks the almost moral connotations of *approve* and *praiseworthy*. As we shall see below, there is a distinct discrepancy between Ortony et al.'s psychological interpretation and appropriation of the lexeme *satisfaction* and that given in dictionaries. I suppose I could have extracted only the relevant examples for this group, some of the more explicit examples from the Joy and Appreciation groups that fitted the complex type of situation envisaged, but this work would have led to a result that would have conformed more to psychological and textual than more strictly linguistic criteria.

Given the complexity of the lexemes involved and undesirability of relegating them to another group, therefore, the analysis of *satisfy* and the other lexemes contemplated here has often been carried out with a view to examining the lexemes involved, and the rather limited emotive content associated with them, rather than the psychological situation described by Ortony et al.

10.4.1 The lexicon of Satisfaction

After much deliberation, only *satisfy* and a few examples of *gratify* were examined for this group, the past participle versions of *gratified* being included in the Gratification group, which in turn was assimilated into the Pride group, given its similarity and the sense of the lexeme in context. If one consults the dictionaries on *satisfy*, one will find that there is a general consensus that *satisfaction*, when it describes human emotions, involves a feeling of happiness or pleasure from something one is doing or has done oneself, or which someone else has done for you. It is here that one can find the reason why *satisfaction*, the lexeme, does not map onto Ortony et al.'s Satisfaction, the emotion. The lexical definition refers to something desirable that has happened already, whereas the psychological definition refers to the “prospect of a desirable event” in the future, real or hypothetical.

A similar analysis to that given for *satisfy* / *satisfaction* can be given for *satisfazer* / *satisfazer*. *Saciar* is a very doubtful contestant for this classification, but I decided to include it to give some comparison with *satisfazer* which it resembles lexically, if not within Ortony et al.'s classification. The English cognate *satiare* is slightly different in meaning, being more physical in connotation, and did not appear in the EC. In fact, the aspects of the lexical *satiare* and *satisfazer* which are common to *gratify* and *saciar* show the shortcomings of the narrow Ortony et al. give to this group.

10.4.2 The semantics and syntax of Satisfaction

The type of PHENOMENA that can be found with the examples in this group are fairly predictable, as can be seen in [Table 10.4](#). There is a fair percentage of PH. type 1 examples, most of which would seem to occur with past participles which refer to situations in the context which suggest a multiple type 1. There are a few type 2 examples of being *satisfied* with *oneself*. Otherwise the 33,3%(E) and 41,2%(P) examples belong to types 3-5, the distribution being fairly even in the PC, but focusing on type 5 in the EC. The EC shows 47,8% in types 9-11, and the PC shows 41,2%. Although the corpora differ on whether they focus more on the Other's behaviour, the fact remains that a high percentage of both corpora belong to the more explicit types 9-11 and type 5.

The syntax of this group is fairly similar in certain respects in both corpora. The division between SFoc/PFoc is very close and both show a fairly normal level of BEHAVIOUR examples. The SFoc examples show strong preferences for the past participle form and both corpora also have a fair number of SFoc. There are no SFoc verbs. The EC showed a preference for the P

adjectives, but the PC more than made up for this with its PFoc verbs, and each show a small percentage of nouns. The PFoc verbs in the EC included 3 examples of the reflexive construction with *satisfy*, and 7 examples in the PC with *satisfazer-se*.

Validity of Ortony et al's classification

Although examination of the examples and their general context would suggest that they answer the criteria of [BEING PLEASED] about an EVENT and sometimes an OBJECT there seem to be hardly any examples which fit Ortony et al.'s future biased 'prospect', as none of them refer to the past or immediate present. The examples seem to show a fairly high degree of conscious appraisal of the PHENOMENON, despite the lack of SFoc verbs. This is probably because there would seem to be a definite cause-effect relationship between the P verb and the SFoc past participle.

Satisfaction would seem to be associated with emotion, but it does not easily fit into either category provided for it by Ortony et al., or any of the others except, if we stretch a point, Appreciation. This analysis is included here, but I feel that Ortony et al. need to modify their use of lexical tokens and the title they give to the group if they wish to include it in the category they define for it. The need for a re-assessment is also borne out by the fact that lexemes in the next group, which would parallel them, are also non-existent in both languages.

10.5 The Fears-confirmed group

The Fears-confirmed emotions are specified as being those in which the SENSER [DISPLEASED ABOUT THE CONFIRMATION OF THE PROSPECT OF AN UNDESIRABLE EVENT] and the related variables are:

- a. the intensity of the attendant Fear emotion
- b. the effort expended in trying to prevent the event
- c. the degree to which the event is realized.

and the example they give to explain this is:

(10.25) The employee's fears were confirmed when he learned that he was indeed going to be fired.

However they make no attempt to lexicalise this notion in English and nothing is forthcoming in Portuguese. No doubt we could find examples of this type of situation at the level of the text, but the process would not involve normal linguistic analysis.

10.6 The Relief group

The emotions in this group are described by Ortony et al. as being [PLEASED ABOUT THE DISCONFIRMATION OF THE PROSPECT OF AN UNDESIRABLE EVENT], and the variables affecting their intensity are:

- a. the intensity of the attendant fear emotion
- b. the effort expended in trying to prevent the event
- c. the degree to which the event is realized

and the example they give is:

(10.26) The employee was relieved to learn that he was not going to be fired.

For reasons that will be explained below, I decided to extend Ortony et al.'s definition to include examples that could more appropriately be defined as [LESS DISPLEASED ABC THE DISCONFIRMATION OF THE PROSPECT OF AN UNDESIRABLE EVENT].

10.6.1 The lexicon of Relief

One of the difficulties with deciding on which lexemes to include in this group was that whereas *relief* alone produced a large proportion of the EC examples, the PC was poorly represented by *alívio*. In similar contextual situations and in translations of *relief* and its synonyms, the notion was sometimes represented by *calmar*, *tranquilizar* and *sossegar*. The latter lexemes seem to use the PFoc verb and SFoc past participle far more frequently than their cognates, *calm* and *tranquil*, which prefer the more ambivalent adjective form, and, although we have the phrasal verb *calm down*, *tranquilize* is usually only used in a medical sense. Using all the examples of these lexemes was impractical, so I decided to opt for the rather imperfect decision to omit the more marginal *calmar* and *tranquilizar* and their cognates, and to include *sossegar* which seemed to conform more closely to the Relief scenario.

All of the lexemes analysed here can function as PFoc verbs, and the overall emphasis is on the causative function of the lexemes. Strictly speaking, only *relief* and *reassure*, and *alívio* and *sossegar* can be usually interpreted as a direct reaction to the removal of Fear. *Apaciguar*, *mollify* and *pacify*, and *apaziguar* and *aplacar* are more related to the cessation of Anger, *comfort*, *console* and *soothe*, and *confortar*, *consolar*, and *descansar* to the removal of Distress. However, since these emotions are related, I decided to opt for this rather broad analysis.

Relief dominates the EC group, with 43,7% of the total, followed by *comfort* (22,7%), *reassure* and *soothe* with 10,9% each, *console* (8%) and the rest with only 3,8% between them. *Alívio*, although central, accounts for only 23,1%, and *sossegar* (32,1%) and *consolar* (26%) are more popular, *confortar* has 9% and the remaining 5 lexemes account for 9% between them.

10.6.2 The semantics and syntax and general profile of Relief

The PH. type 1 appears only in 5,1% of the examples in the EC, as can be seen in [Table 1](#). However, there are 20,6% in the PC, thanks to *sossegar*, and in contexts where the reasons for Relief are multiple. 26,6%(E) and 20,3%(P) of the examples are in the type 3-5 groups, the majority in both cases belong to the 6-10 groups, 68,4%(E) and 59,2%(P), with a large proportion of type 9 cases.

This is one area in which the SFoc/PFoc balance is actually weighted heavily towards the P side in the EC, and a little less so in the PC. There are no SFoc verbs in the EC but *sossegar* appears in the unusual forms of an intransitive verb and as an imperative in the PC. However, on these occasions, the meaning is similar to *calm down*, so the examples are very marginal and unrepresentative of the group.

The nouns, both SFoc and PFoc, form one of the most numerous groups. All the PC nouns are ambivalent on a 51/49 SFoc/PFoc ratio, although only *comfort* and *relief* are like this in the EC, *comfort* being nearly all PFoc and *relief* more SFoc.

The PFoc verbs and adjectives correspond lexically to the SFoc past participles although, un-

most other groups, the verbs are more numerous than the latter. *Relief* is the only one of lexemes which does not fall into this pattern, its past participles being nearly three times as numerous as the verbs and adjectives.

The group as a whole seems to focus on the PHENOMENON and this is well-defined frequently the S of the PFoc verb. The central lexeme in the EC, *relief*, would seem to be an exception in preferring the SFoc syntactic feature, but the type of PHENOMENON that occurs with it is usually well-defined. The other lexemes tend to focus on the PHENOMENON rather than the SENSER, but although the PHENOMENA are defined in terms of the process of feeling Relief still up to the SENSER.

Although this is an emotion which can be related to a welcome decrease in physical tension which can be noted in facial expression, there is no doubt that the cognitive processes involved are quite complex and require the type of scenario described by Ortony et al. above.

10.7 The Disappointment group

This group, which is smaller than Relief, is described by Ortony et al. as being [DISPLEASANT ABOUT THE DISCONFIRMATION OF THE PROSPECT OF A DESIRABLE EVENT], the variables which affect its intensity are :

- a. the intensity of the attendant Hope emotion
- b. the effort expended in trying to attain the event
- c. the degree to which the event is realized.

The example they give to demonstrate their scenario is:

(10.27) The girl was disappointed when she realized that she would not be asked to dance at all.

10.7.1 The lexicon of Disappointment

The lexemes from this group include several easily defined ones like *disappoint* itself, *disappointed*, and more marginally, *discontented*, *disenchanted* and *dissatisfied* in the EC. The PC favours *desanimar*, *desapontar* with smaller numbers of *desalento*, *desiludir* and *insatisfeito*. The interesting point, for the EC, is that certain lexemes that function in other groups also have examples which belong to this group. *Afraid*, *pity* and *regret*, also associated with the Fear, Sorry for and Remorse groups, all have examples which had to be grouped under Disappointment. *Lamentar* and a few examples of *pena*, were considered for this group, but the reference in context was too often not specific enough and so they were classified in the Remorse group.

Although *disappoint* (28,2%) is the most popular lexeme in the EC, *afraid* (27,7%) accounts for nearly as many, *pity* (13,6%), and the rest for smaller percentages. In the PC, the most popular are *desiludido* (26,8%), and *desanimado* (25,4%). *Desapontado* (18,3%) is also frequent.

10.7.2 The semantics and syntax of Disappointment

There are difficulties with assessing this group. It is small for both corpora, particularly the PC. This was largely due to decisions on whether to include examples here or under Remorse. Whereas Ortony et al. make the distinction between 'prospects of events' in this group,

EVENTS, which are usually interpreted as people's (past) actions, in the Remorse group several lexemes seem to be able to fulfil both scenarios. Whether or not they were classified as Disappointment or Remorse, therefore, depended on what they actually did in the context of the corpora.

PHENOMENON types

The types of Phenomenon vary considerably between the corpora, with PH. type 1 producing only 13% for the EC but 50,7% for the PC, as can be seen in [Table 10.6](#). Although the balance is partly redressed by an 18% proportion of types 3-5 in the EC, with only 2,8% in the PC, this still leaves the EC with 64% of the examples orientated towards the exterior, and the PC with only 46,5%.

High proportion of SFoc examples

Unlike Relief, which describes the opposite type of scenario, this group is largely SFoc although the corpora differ in their SFoc / PFoc ratios. The examples marked BEHAVIOUR are fairly low for both corpora. Therefore, the PH types reflect the syntactic trends. The EC is more PFoc than usual, has more clearly defined PHENOMENA, and a high proportion of complementation with both nouns and past participles. On the other hand, the PC is less clear about its PHENOMENA and is much more focused on the SENSER and emotional processes, as can be seen by the high proportion of SFoc nouns.

The EC has a high number of SFoc adjectives because of *afraid*, and over half of the past participles are *disappointed*, making a total of 56%. The PC has fewer examples in this area, all of them past participles from several lexemes. Both corpora have a fair number of SFoc nouns coming from most lexemes, and the only noun which shows signs of being ambivalent is *disappointment*.

The syntactic distribution of the PFoc lexemes differs for reasons linked to the nature of the lexemes themselves. Whereas the EC examples are largely noun forms from *pity* of the *It is a pity that...* type, the PC ones are mostly a rather sparse number of the PFoc verbs *desapontar* and *desiludir*.

10.7.3 A Linguistic profile of Disappointment

The imbalance between the two corpora makes it difficult to get a clear profile of the language patterns, but this might well be corrected if bigger corpora were consulted. However, one cannot ignore the fact that *disappoint*, with its more specific PHENOMENON, is much more popular than *desapontar*, and my experience would suggest that this would be reflective of normal everyday usage. On the other hand, the less specifically PHENOMENON-oriented verbs *desanimar* and *desiludir* account for 52% of the examples, whereas their nearest counterparts in the EC, *disenchant* and *disillusion*, only give us 2,9%. Therefore, perhaps the specificity of this emotion is, for some pragmatic reason, less important in Portuguese than in English.

[1] Note that the distinction that is made on a linguistic level here is supported by Ortony et al.'s suggestion that Fear is about 'prospects', i.e. which belong to the present or the future, whereas (Self)Reproach is about "disapproving of... actions" which, normally, belong to the present or past.

CHAPTER 11

THE LINGUISTIC BEHAVIOUR OF THE REACTIONS TO AGENTS LEXICON

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11.1 Reactions to Agents - Evaluative emotions

With the previous section, there was sometimes a problem in seeing how Ortony et al.'s definition of EVENT could be interpreted with what appeared to be at least an OBJECT, if not an AGENT, type PHENOMENON, from a linguistic point of view. In this section the emphasis is on AGENT type PHENOMENA. They make distinctions between those which refer to one's own actions, where the AGENT is the Self, and those referring to other people's. The variables which affect the intensity of the emotions are fairly complex, and one can say that these emotions are usually consciously processed.

Although I attempted to collect examples for all 8 of Ortony et al.'s groups - Pride, Self-Reproach, Appreciation, Reproach, Gratitude, Anger, Gratification and Remorse - I decided to amalgamate Pride with Gratification and Self-Reproach with Remorse. This was partly because the groups were almost too small to analyse on their own, but largely because the examples with the lexemes involved did not map on to the emotion types described by Ortony et al. very satisfactorily. Although at a contextual and psychological level one could make the distinction, the extra variable required for Gratification and Remorse was not always obvious at a more linguistic level.

It was fairly easy to allocate the examples for Anger and Gratitude into their respective groups as the lexemes and the psychological types matched quite well.

11.2 The Pride / Gratification group

The definition for this group is that these emotions result from [APPROVING OF ONE'S OWN PRAISEWORTHY ACTION], with the Gratification examples including the extra notion of [BEING PLEASED ABOUT THE RELATED DESIRABLE EVENT]. The variables which affect these emotions are:

- a. the degree of judged praiseworthiness
- b. the strength of the cognitive unit with actual agent
- c. deviations of the agent's action from person / role-based expectations (i.e. unexpectedness)
- d. (for Gratification examples only) the degree to which the event is desirable.

and the examples given are:

(11.1) (Pride) The woman was proud of saving the life of a drowning child.

(11.2) (Gratification) The man was gratified by his daughter's achievements.

11.2.1 The lexicon of Pride / Gratification

The lexicons for both corpora are small but specific. The central lexemes, *pride* and *orgulho* take the lion's share in both cases, 72,1%(E) and 50,4%(P), the second place going to the near-cognates *vain* and *vaidoso* with 13,6%(E) and 17%(P). The EC has a few other lexemes with *arrogant*, *conceited*, *gratified* and *puffed up*, but the PC has a wider variety

and the examples are more equitably distributed among *altivo*, *arrogante*, *desvanecido*, *soberbo*, *úfano* and a few of *enfatuado*.

Pride and *orgulho* have both positive and negative connotations, the more positive ones being related to dignity and honour, the negative ones being either pride seen as unjustified, or as detrimental to the Christian ideal of humility. These emotions are disapproved of in both English and Portuguese cultures, and it is rarely acceptable to be overtly proud of one's own achievements, although a certain indulgence is granted, for example, to parents whose pride is projected into those of their children.

The central lexemes and the cognates are fairly similar in meaning, and have mixed positive and negative connotations. *Gratified* is probably the least negative in the EC, possibly because it is associated with the performance of others, as in the example given by Ortony et al. or those in the corpus. It seems to indicate a mixture of Gratitude to someone for some action, mixed with Pride in oneself that the person should have felt it necessary to do this action. *Úfano* would seem to have a similar connotation. *Altivo* has the more positive connotations of *proud* and has a distinct connection to *dignified*. The rest all have largely negative connotations, but the choice of which to use, either in the mother tongue or for translation, is a question of taste rather than actual meaning.

The main lexemes often combine with each other or other emotions in a way which indicates both the negative and positive senses of the words. Thus *pride* combines with *shame*, *fear* and *anger*, and also with *pleasure*, *joy* and *passion*. The adjective *proud* seems to favour adjectives describing the type of behaviour associated with this feeling, like *fastidious*, *greedy* and *disdainful*. The more negative connotations of lexemes like *arrogant* and *conceited* can be seen by the way in which they combine with other negative notions like *patronizing*, *self-centred*, *loudmouthed* and *cruel*.

11.2.2 The semantics and syntax of *Pride* / *Gratification*

Phenomenon types

As can be seen in [Table 11.1](#), there is almost an obligation within these lexemes to point to the Self as the PHENOMENON. 79,4%(E) and 67,7%(P) belong to PH. types 2-5, and a further 4,3%(E) and 12,9%(P) were type 10 which are often objects belonging to the Self. A lot of examples can be seen as type 3, or referring to *Pride* in one's situation, social or economic, even if this is not specifically referred to. In the PC, there are about 8,5%, which, despite the pointers inherent in the lexemes, have to take a type 1 interpretation, either because the emotion noun is plural and, therefore, the PHENOMENA are multiple, or the reference is to something unknown.

The few examples, 12,1%(E) and 4,6%(P), which take types 6-9, are nearer the Gratification scenario, most of them with *pride* and *orgulho*, as in:

(11.3) His pride in his son and in his son's possessions was continually increasing and now he had something to show me. GG

An SFoc group

This group is very definitely a SFoc one, with only two examples of PFoc lexemes in the EC, and a few ambivalent adjectives and nouns in the PC. These examples in the PC tend to show the emotion as projected into some object connected to the SENSER, as in, *o seu altivo chapéu*, or as attributed to an inanimate object, as in *altivas montanhas*. There are one or two verbs as well, of the rather ambiguous type which have a transitive usage, but

are normally used with the -SE pronoun, like *envaidecer* and *enfatuár*.

The SFoc adjective *proud* accounts for 39,3% out of the total for adjectives and past participles, and *orgulhoso* accounts for 36,6%. There is a fairly high number of attributive adjectives in both corpora, almost half of them tagged for behaviour, but the emphasis is on copulas + adjectives. In the EC, *be* is used in most cases, but in the PC the zero copula is much less frequent than usual, only 52,2%, and, although *estar*, *ficar* and *ser* account for 21,7% of the rest, a wide variety of copulas make up the remaining 26,1%.

Pride provides most of the 31,9% nouns in the EC, and the PC has 49,1% nouns. Both corpora show a preference for the middle type of noun, and both noun complementation and the adverbial noun phrases are below average. The SFoc verbs are few, and are of the -SE reflexive type in the PC, with *orgulhar-se*, and one example of *pride oneself* in the EC.

11.2.3 A Linguistic profile of Pride/Gratification

Apart from *gratification*, the lexemes in the Pride group seem to map quite successfully on to the Pride or Gratification scenarios proposed by Ortony et al. When one looks at the distribution of the PHENOMENON types, it is easy to understand the reasons for combining the two groups - examples of each group are covered by the same lexemes, and those which could be considered as Gratification, because they focus the achievements of Others, are very few. Besides, Pride in other people and their achievements is usually partly due to the reflected glory the Self receives as a parent, relation or promoter of the person involved. Simple *pride*, however, is well-defined both lexically and by the syntactic and semantic patterns it favours.

Although this is a strongly SFoc area, the SENSER's emotional state is most important, and the syntax matches the Self-orientated type of PHENOMENON described above. Complementation is possible, but as the PHENOMENON can be seen as some action by, or some object belonging to the SENSER, it is not often used. The few verbs are nearly all overtly reflexive, whether they are classified as SFoc or PFoc, and there are very few clear-cut PFoc verbs or SFoc participles.

This is not an immediate and transitory emotion designed to solve some problem in life, nor is it a mood with an undefinable PHENOMENON. It is very often seen by the Speaker as an almost permanent attitude to life at an unconscious level, only becoming active when the SENSER's position is threatened. In this sense, it could be seen as causing a form of action-readiness. If the subsequent action is seen as related to *honour* and *dignity*, the SENSER is evaluated positively, but if it is associated with unjustifiably aggressive behaviour, the evaluation is negative. On other, more positive, occasions, *pride* and *orgulho* are seen as more temporary reactions to the SENSER's, or the SENSER's protégé's achievements, and then it can be seen as PHENOMENON-centred form of emotion close to Joy.

11.3 The Self-Reproach / Remorse group

The combination of the Self-Reproach and Remorse groups was done for much the same reasons as with Pride / Gratification. Ortony et al. define these groups as [DISAPPROVING OF ONE'S OWN BLAMEWORTHY ACTION], and Remorse also entails [BEING DISPLEASED ABOUT THE RELATED UNDESIRABLE EVENT]. The variables are:

- a. the degree of judged blameworthiness

- b. the strength of the cognitive unit with actual agent
- c. deviations of the agent's action from person/role based expectations
- d. (for Remorse only) the degree to which the event is undesirable

and the examples they give are:

(11.5) (Self-Reproach) The spy was ashamed of having betrayed his country.

(11.6) (Remorse) The spy felt remorse at the danger he had done in betraying his country.

Unlike the previous Pride / Gratification group, these groups do not have negative cultural connotations. Since one is [DISAPPROVING OF ONE'S OWN BLAMEWORTHY ACTION] and, with Remorse, is also [DISPLEASED ABOUT THE RELATED UNDESIRABLE EVENT], others can sympathise with such feelings. They are, however, quantitatively minor emotions, whose importance has changed over the centuries, and many would say that *shame* and *vergonha* are fast becoming devalued in modern society.

11.3.1 The lexicon of Self-Reproach / Remorse

In the EC, neither *self-reproach* with 1,3% of the examples nor *remorse* with 3,1% are popular lexemes. The most popular lexeme here is *sorry* with 35,7%, is often used in circumstances of apology, both sincere and merely polite. *Afraid* (12,6%) and *regret* (11,3%) have a similar usage, and none of these lexemes are very strong in context, so that it is easy to point to examples which are nearer polite formulae than indicative of real emotion, as in *I regret to inform you that your library book should have been returned three weeks ago*. *Ashamed* and *shame* are stronger lexemes and accounted for 22,9% of the EC group but otherwise, apart from *guilt*, with 9,5%, the other lexemes, *contrite*, *mortify*, *penitent* / *repent*, and *rue* are rarely used.

The central PC lexeme, *vergonha*, is also the most popular, with 34,8%, which may indicate a greater preoccupation here with the stronger feeling expressed by *shame* in the EC. The lexemes in the PC which may have both sincere and more polite connotations of the *sorry* and *regret* type are *lamentar* (17,9%), *arrepender* (11,4%) and *ter pena* (8,1%). Despite expectations to the contrary, *pudor* is reasonably popular, with 7,1%, and so is the more central *remorso*, with 7,6%. The other lexemes, *amargar*, *atриção*, *contrição*, *mortificação*, *pejo*, and *pesar*, however, produced few examples.

Although lexemes like *ashamed* do not seem to combine frequently with others, when they do it is with other negative emotion words, such as *unhappy*, *afraid*, or words in their own group like *guilty*. *Shame* combines with rather more examples but they are of a similar semantic type, like, *despair*, *dismay* and *fear*, or *self-criticism*, *embarrassment* and *guilt*.

11.3.2 The semantics and syntax of Self-Reproach/Remorse

PHENOMENON types

This group complements the previous one in certain ways, and it is essentially a Self-focused area, as can be seen in [Table 11.2](#). This is particularly evident in the EC where 75,8% of the examples are in the PH. type 2-5 band with a further 12,1% related to types 10-11. However, 11,8% of the examples describe an emotion like *shame* in relation to

some other person or their behaviour, usually insofar as it reflects on the SENSER's own personal prestige, as when Pip suffers from Joe's social awkwardness in front of Estella in *Great Expectations*:

(11.7) I am afraid I was ashamed of the dear good fellow - I know I was ashamed of him - when I saw that Estella stood at the back of Miss Havisham's chair, and that her eyes laughed mischievously. GE

The PC differs somewhat here, with only 55,8% being directly related to the Self in the type 2-5 band, 13,6% being felt on behalf of the Other, and 19% being felt for types 10 and 11. A further 9,9% are in the type 1 group because lexemes like *pudor* and *vergonha* seem to refer to multiple and ill-defined PHENOMENA.

Largely SFoc group

The high proportion of SFoc adjectives in the EC are largely accounted for by *afraid*, *sorry* and *ashamed*, three more of these predicative only adjectives which often seem to be translatable by a *ter* + noun structure in Portuguese, in this case, by *ter pena* and *ter vergonha*. There are a high proportion of nouns and these *ter* structures in the PC, 25,2% of all the examples with nouns, but few PC SFoc adjectives. The behaviour of the lexemes involved leads to very pronounced degree of uncountability in both corpora, but whereas the complementation of the noun is almost nil in the EC, it is high in the PC, nearly 25%. For similar reasons, the adverbial noun phrases are low in the EC, about 10%, and high in the PC, over 20%.

There are also 7,8%(P) SFoc verb + -SE examples, with *arrepender-se* and 9,6% SFoc transitive examples with *lamentar*, which also translate the SFoc adjective structures in the EC. Although *regret* appears quite often as a SFoc verb, it is the only lexeme that really functions like this in the EC except for a few examples of *repent*.

More PFoc items in PC

The most obvious difference between the EC and the PC here would seem to be the way the PFoc items are much rarer in the EC, 6,1%(E) as against 22,7%(P). Most of the examples come from the PFoc adjectives *shameful* and the PFoc use of the noun *shame*, as in *It is a shame...* The PC shows 22,7% as being PFoc but this is partly affected by 8,3% of nouns which are ambivalent, and can act as either SFoc or PFoc, most of the *É pena...* or *É uma vergonha...* type. 5,6% belong to the ambiguo -SE type verbs, most of them being *envergonhar-se*.

11.3.3 A Linguistic profile of Self-Reproach/Remorse

The distinction between Self-Reproach and Remorse in Ortony et al.'s sense is not easy to make. In a way one could say that pure Self-Reproach, in which one simply regrets having done something for no other reason than that it is wrong, is a highly moral feeling, and that it is more human for people to feel Ortony et al.'s Remorse, and wish they had not done something because of the consequences. Psychological dishonesty, however, probably contributes to the fact that linguistic evidence seems to favour a Self-Reproach interpretation in most cases, despite the fact that the factor that could give a Remorse interpretation can often be detected at the level of the full context. Examples with PH. type 11 are the most explicit ones of the Remorse situation, but they only occur with *afraid* and *sorry that* in the EC, and with *lamentar* and *vergonha* in the PC. The lexeme *remorse* and its cognate *remorso* only occur with PH. type 5 and, although explicit about the importance of the SENSER's action, the examples do not elaborate on [BEING DISPLEASED ABOUT

THE RELATED UNDESIRABLE EVENT].

One cannot ignore the semantics involved in the PFoc differences in the two corpora. Although the extra examples in the PC can be partly explained by the ambiguity of the noun and -SE verb examples, both the syntax and the PHENOMENON types would seem to point to a greater tendency of the PC to focus on what causes the emotion, even if it is the SENSER. The need to refer to it as *pena* or *vergonha* with 8% of the total examples, is considerably more than the 2,3% with *shame*. However, even the PFoc examples in the PC are few, and it should not be forgotten that a total of 13,1%(P) of the PFoc and SFoc verbs are of the -SE reflexive variety and therefore automatically focus the SENSER, a situation to be found with only 2 examples of *reproach oneself* in the EC.

The predicative adjectives of the EC and the *ter* + noun and reflexive verbs of the PC, and the almost total absence of PFoc verbs and SFoc past participles, focus the SENSER's state or internal emotional processes, whether these are seen as states of 'being' or 'possession', or self-caused processes. The evidence for the PC, though, seems to point to that separation between the SENSER and the process which is only possible in Portuguese.

Unlike the more permanent interpretation of the Pride / Gratification emotions as underlying attitudes which are activated when necessary, these emotions are related to specific situations and instances. They are essentially consciously processed and imply a degree of either active moral judgement, or passive cultural conditioning, according to one's viewpoint. They cannot be considered as moods, and can only be assessed for action readiness if the context allows for some reparation to be made. Although certain gestures or behaviour are associated with these emotions, only about 4% of the examples are tagged for behaviour in both corpora which indicates that these emotions are consciously processed over time, and neither lead to nor need immediate physical expression.

11.4 The Appreciation group

The definition Ortony et al. give for this group is that of [APPROVING OF SOMEONE ELSE'S PRAISEWORTHY ACTION], and the variables are:

- a. the degree of judged praiseworthiness
- b. deviations of the agent's action from person/role based expectations (i.e. unexpectedness)

and the example given is:

(11.8) The physicist's colleagues admired him for his Nobel-prize winning work.

Although the only difference between Appreciation and Gratitude, which belongs to the Reactive Emotions is that Gratitude also means one is [PLEASED ABOUT THE RELATED DESIRABLE EVENT], the examples for Gratitude, although few, fit quite neatly into their own group and will be considered separately. Appreciation covers a fairly wide selection of lexemes and, although it may seem very close to Liking, the distinction is there. One may admire or respect someone for doing something you approve of, without actually liking them - for example, many people admired Margaret Thatcher when she was Prime Minister, but not all of them liked her. Similarly, if one is amused or fascinated by someone, it is probable than one likes or will like them, but not essential. One could, in fact, debate the point of whether the Appreciation of someone or something precedes the process of liking them.

11.4.1 The lexicon of Appreciation

Although there are a large number of lexemes for each corpus, 30 for the EC and 25 for the PC, 9 of the EC lexemes account for 78,3% of the examples and 11 in the PC for 81,7%. *Enjoy* (14,6%), *admire* (12,4%), *please* (10,1%), *charm* (9,2%), *amuse* (9%) and *respect* (8,2%) are the most numerous in the EC, with *gozar* (12,4%), *respeitar* (12,2%), *encantar* (11,3%), and *deliciar-se* (7%) in the PC. The lexemes can be divided into those which favour PFoc or SFoc verbs and, before any further analysis is made, this gives a roughly 40/60 ratio for the EC and 50/50 for the PC, the lexemes dividing up fairly equally between the types. The SFoc lexemes, which lexemes divide roughly on a weak > strong basis and express degrees of approval go from the more neutral *approve* and *appreciate*, through the rather stronger *admire*, to *esteem*, *respect*, *reverence* and *veneration*. The Portuguese cognates are similar in usage and content. The PFoc ones cover most ways of causing Appreciation, from the weaker *beguile* to the strong *obsess*, or from *agradar* to *maravilhar*. Apart from this division into SFoc and PFoc which favours a separation of the approval and causes of approval, one can distinguish a small but well-represented number of lexemes, particularly *divertir-se* and *enjoy oneself*, which are strongly connected with ideas of Joy.

There are a number of cognates in both languages in this area and most of the meanings match quite well, although they may vary in popularity, as is the case with the rarely used and rather old-fashioned *divert* in the EC, compared with the popular *divertir-se* in the PC which often translates *enjoy* and *amuse*. *Admire* and *admirar* are similar but the English cognate does not usually contain the element of Surprise that carries over from a use of the same lexeme in situations which are more appropriately translated by *surprise*. *Marvel at* is used as a SFoc verb, whereas *maravilhar-se* can act in a PFoc fashion without the -SE. *Deliciar-se* does not appear to have an immediate cognate, but its PFoc adjective *delicioso* seems similar to *delicious*. However, unlike the English word, *delicioso* is not restricted to the physical effects of tasting food, and can be used to express opinions of experiences perceived by the other senses as well. Similarly, whereas *seduce* is not included in the EC, as the few examples found were restricted to morally reprehensible sexual conduct, *seduzir* has a wider and less pejorative application and was included in the PC.

Other lexemes without cognates are *charm*, which usually matches *encantar*, and *please* and *pleasing* [1] are similar to *agradar* and *agradável* as PFoc verb and adjective. However, *pleased*, which is used frequently, and has been included in this section because it fits into Ortony et al.'s scenario, is actually less easy to translate systematically with other lexemes in this area. I have often noticed having difficulty myself with conveying exactly what I mean by it in Portuguese, and usually have to resort to the resultative *ficar contente* from the Joy group, or to a stronger Liking interpretation with *gostar* [2]. I would attribute this partly to the fact that *pleased* is on the rather porous frontier between these different emotions, but also to the fact that the other SFoc Portuguese participles are either too specific in meaning, like *lisonjeado*, or too strong, like *encantado*, to serve as suitable translations. It should also be noted that the rather neutral *agradar*, which is a good translation for the PFoc uses of *please*, does not like to be SFoc.

The company kept by these lexemes would suggest that they like to keep each other company, but that they also like to be seen with positive emotions as well. Occasionally one can find a contrasting situation with a negative emotion, and there are a few in which the accompanying word refers to the behaviour that is considered suitable. Thus, *admiration* combined with several Liking words like *affection*, and also with *amazement* and its synonyms [3], and negative notions like *envy*. *Appreciate* is less emotional and goes with *understand*. *Enjoy* focuses on activities that produce enjoyment, like *read* and

laugh. *Respect* attracts several Liking lexemes, as well as the behaviour associated with it, like *silence*. *Wonder* shows its connection with a slight element of Fear by appearing with *awe*. On the PFoc side, *amused* likes its co-lexemes in the group, but also appears with negative ideas like *irritated*. *Charm*, which is essentially PFoc, prefers to associate with *beauty* and *enthusiasm* as well as *love* and several others. *Fascinated* shows its slightly morbid side by combining with *horrified*, and *pleased* combines with a fairly wide variety, including *touched*, *happy*, *alarmed* and *proud*.

11.4.2 The semantics and syntax of Appreciation

PHENOMENON types

The distribution of PH. types shows that this emotion takes an exterior PHENOMENON in most cases, 81,3(E) and 87%(P) of all examples, as can be seen in [Table 11.3](#). 11,4%(E) and 9,6%(P) show appreciation of types 2-5, and an even smaller proportion choose PH. type 1.

The tendency to identify an exterior PHENOMENON with lexemes like *admire*, *appreciate*, *approve*, *charm*, *marvel*, *respect*, *revere*, and *wonder* in the EC, and *admirar*, *agradar*, *apreciar*, *deslumbrar*, *estimar*, *lisonjear*, *respeitar*, and *seduzir* is almost total, over 90%. The lexemes which differ substantially are *absorbed* (39%), *complacency* (21%), *enjoy* (54%), and *pleased* (63%) in the EC, and *alento* (45%), *complacência* (33%), *divertir-se* (62%), *gozar* (78%) and *prezar* (46%). Some of these can be seen as lexically Self orientated, as with *complacency*; others, like *enjoy oneself* and *divertir-se*, are overtly reflexive, referring to the SENSER's process of enjoyment rather than to the PHENOMENON; others refer to PH. types 3-5, and a few are of the rare type 2, referring to appreciation of oneself.

SFoc verbs and participles frequent

The ratio of SFoc/PFoc lexeme types does not necessarily mean that the different parts of those lexemes will necessarily favour one position or another. *Please*, for example, despite the PFoc qualities of the main verb form, prefers to appear as a SFoc participle. However, the surprisingly similar overall SFoc/PFoc picture is less PFoc than the lexeme ratios of 60%/40%(E) and 50%/50%(P) for the emotion type would seem to suggest.

The SFoc verbs are considerably more numerous in this group than the average for all the groups, with 26,7%(E) and 24,5%(P). The most popular ones in the EC are *admire* and *enjoy (oneself)* and *gozar* is the most numerous in the PC. A small proportion of the verbs in the PC take the -SE pronoun, mostly with *gozar* and *deliciar*.

There are few SFoc adjectives, but the SFoc participles are quite numerous. There are a few from nearly every example with an PFoc verb, but *pleased* is by far the most numerous, with *absorbed*, *amused*, *fascinated* and *flattered* accounting for most of the rest. In the PC they are more evenly distributed, the most popular being *absorvido*, *alentado*, *deslumbrado*, *divertido*, *encantado*, *fascinado*, *lisonjeado*, *maravilhado* and *seduzido*. About 40% of these predicative participles take some form of complementation which identifies the PHENOMENON and, in the PC, the copula *ficar* is unusually prominent.

The SFoc nouns are fewer than the overall average. In the EC, *admiration* and *wonder* are the most popular, with *gozo* and particularly *respeito* being popular in the PC. Degrees of both obvious countability and non-countability are low, and the middle classification takes more than usual in both corpora. Complementation of the noun was higher in the PC but

lower in the EC, and prepositional adverbial clauses were a little above average in both corpora.

PFoc adjectives and verbs frequent

The PFoc adjectives accounted for over half of all the PFoc examples in both corpora. They focus the quality which merits appreciation and are most numerous with *admirable*, *amusing*, *charming* and *respectable*, in the EC, and *admirável*, *agradável*, *delicioso*, *encantador*, *maravilhoso* and *respeitável*, in the PC. There are several PFoc verbs but the most numerous are *absorb*, *amuse*, *fascinate*, *flatter* and *please*, in the EC, and *absorver*, *agradar*, *cativar*, *deslumbrar*, *divertir-se*, *encantar*, *fascinar*, *maravilhar* and *seduzir* in the PC. The PFoc nouns are more restricted lexically. *Charm* dominates in the EC, with other examples of *enchantment* and the ambivalent *wonder*. There are also several examples of *spell* which is rather marginal because of its association with *magic* and because, being singular, its syntax is different from the usual emotion nouns. However, *spell-bound* and *spell-binding* are more often used in typically emotional situations than a more obvious candidate for the lexicon of this group like *fascinate*. *Encanto* accounts for the over two thirds of the examples of PFoc nouns in the PC, and must be translated by a wider variety of English Appreciation lexemes than its apparent cognate *enchantment*. *Delícia*, *divertimento*, *respeito* and *sedução* make up most of the remaining examples.

11.4.3 A Linguistic profile of Appreciation

Although apparently less basic than the affective emotions that promote reproduction and the family structure, there is no doubt that these emotions have served an evolutionary purpose in the establishment and maintenance of social and even religious structures. The complex cognitive processes which lead to them not only involve certain aspects of natural selection, but also a lifetime of social conditioning, and there is a strong link between these lexemes and those of the Liking group, both syntactically and semantically.

The PHENOMENON is usually identified quite clearly, but the diversity of the lexicon and its accompanying syntax tends to allow for differences of focus. This group naturally favours the SFoc form with nouns and verbs and focuses the relationship between SENSER and PHENOMENON. However, when there is a need for these lexemes to sometimes focus the PHENOMENON, this is done by the PFoc adjectives nearly all of which use the -ABLE or -ÁVEL suffix which tends to convey the notion of [WORTHY OF BEING] *admired* etc.

The PFoc group of lexemes, like *charm* and *flatter*, focuses on the qualities of the usually explicit PHENOMENON. They naturally tend to appear as PFoc verbs, or adjectives with the -ING suffix which are on the gradient between the Progressive form of the PFoc verb and the adjective proper. The Portuguese adjectives in this field use the NTE suffix, as with *cativante* and *fascinante*, but also have *encantador*, *delicioso* and *maravilhoso*. The EC adjectives therefore sometimes provide for a rather more dynamic scenario than the PC ones, despite the fact that the Progressive aspect is rarely used with this emotion group.

The more ambivalent nouns, like *wonder* and *marvel*, which focus the SENSER's appraisal, produce PFoc adjectives like *wonderful* and *marvellous*. The sub-group which is closely related to the Joy group, but which has both PFoc and SFoc lexemes, is less preoccupied with the PHENOMENON, and more interested in the SENSER. Most of the PH. types 1-5 occur with *amusement*, *enjoy*, *pleased*, *divertir* and *gozar*.

11. 5 The Reproach group

This emotion group is defined by Ortony et al. as [DISAPPROVING OF SOMEONE ELSE'S BLAMEWORTHY ACTION], and the variables are:

- a. the degree of judged blameworthiness
- b. deviations of the agent's action from person/role based expectations (i.e. unexpectedness).

The example they use is:

(11.9) Many people despised the spy for having betrayed his country

Ortony et al. chose the word *reproach* to represent this group, probably to balance the group they call Self-Reproach. However, I would prefer the more central and more popular *contempt*. This group can be seen as antonymic to the previous one, although the fact that it is a small group leads one to wonder why this is so, if negative emotions are more frequently reported than positive ones. One can only suggest that lack of the weaker forms of Appreciation is possibly simply absence of emotion, and lack of the stronger forms probably produces stronger emotions which may fall into this group, or quite probably develop into the emotions in the Distress, Fear or Dislike groups.

11.5.1 The lexicon of the Reproach group

The lexicon for this group would seem to be richer for the EC than the PC, with 8 possibilities in the EC and only 3 in the PC. The EC also produced a larger proportion of examples, 2,1% of all examples in the EC and only 1,2% of the PC. The main lexemes in the EC were *contempt* (31,3%), *despise* (17,4%), *scorn* (15,9%), and *reproach* (12,9%) with *deplora*, *disapprove* and *disdain* registering between 6,5% and 9%. The lack of lexemes and examples in the PC was probably due to the fact that, being a small area, only a larger corpus could do it justice. These are lexemes which appear in very specific situations and if those situations fail to appear in the texts used, the examples will not be forthcoming. For example, *deplorar* was not recorded, except as 2 doubtful examples of *deplorável*. The words that did occur were *desdém* (42,4%), *desprezo* (44,4%), and *escárnio* (13,2%).

Disdain and *desdém* would seem to be cognates, but the Portuguese word is much more popular and functions as noun, adjective and verb, whereas *disdain* is less popular and uses its noun form almost exclusively. Most of the examples are tagged for behaviour and the facial expression associated with it is usually a deliberate expression of disapproval. *Despise* functions only as a SFoc verb and an PFoc adjective, but its near-cognate, *desprezar*, can be found in all forms. Unlike *desprezar* though, *despise* refers to the internal process and is not associated with behaviour. *Scorn* and *escárnio* have a certain amount in common, both lexically and syntactically, and both can be expressed through facial expression or speech. *Contempt* is a marginally stronger lexeme and is associated with more abrupt and expressive body language. It can be translated by any of the Portuguese lexemes, according to context, syntax and personal taste. *Reproach*, which Ortony et al. chose as a label for this group, can function with the SFoc adjective and noun forms to express feeling, but the tendency of these forms to express behaviour, and of the verb form to refer to action rather than emotion, as in:

(11.10) I'm not going to reproach you,' she said. 'God knows it's not for me to reproach anyone. Any failure in my children is my failure. BH

makes this lexeme a doubtful element in this group.

Of these lexemes, only *contempt* shows a tendency to keep the company of other words. It likes its own synonyms, but seems to prefer strong forms of neighbouring negative emotions like *loathing* and *fury* or the type of behaviour associated with it, like *condescension* [4] and *ridicule*.

11.5.2 The semantics and syntax of the Reproach group

PHENOMENON types

Given the scenario for this emotion, it is not surprising that most of the PH. types should be in the 6-10 band, 94,1%(E) and 98,6%(P), and that 85%(E) and 77,1%(P) should belong to the Other orientated 6-9 band, as can be seen in [Table 11.4](#). The few exceptions to this rule are the type 1 examples with *contempt* or *desdém*, and a few type 2 examples with *contempt*.

SFoc nouns, adjectives and verbs

Although the lexical profile of this group differed in the two corpora, the syntactic patterns were quite remarkably similar. The SFoc/PFoc ratios were very similar, and both had a remarkably high number of examples tagged for BEHAVIOUR. The most salient SFoc items are the nouns. The group favours non-countability, but, although the complementation of the nouns and the adverbial noun phrases, describing behaviour, is high in the EC, only complementation is higher in the PC. The SFoc adjectives, most also tagged for behaviour, is another noticeable feature of both corpora. The SFoc verbs are also important and they are nearly all normal transitives, except for overtly reflexive examples with *despise*, *desprezar*, and one of Aquilino Ribeiro's more tortuous constructions with *desdenhar-se*:

(11.11) O Malhadinhas, longo monólogo, tendo em vista o seu alçado, é menos um registo do som que um registo psicológico. Tanto assim que se desdenhou da corruptela prosódica, fonte abundante e fácil de pitoresco. AQ

PFoc adjectives and past participles

The PFoc examples in both corpora are adjectives and past participles, with a couple of adverbs in the EC. The adjectives were *contemptible*, *deplorable*, and *despicable*, and *desprezível*, which all use the -ABLE and -ÁVEL suffixes which imply [DESERVING OF BEING] *despised* etc. The interesting point is that there should be such a relatively high number of PFoc past participles in this group. However, *being despised* or *ser despedido* would seem to be a social state which favours multiple SENSERS.

11.5.3 A Linguistic profile of Reproach

As with Appreciation, this is an emotion which is generated by social reasons. If questioned, the SENSER, even if only his/her behaviour has been described, would probably be able to explain exactly why he feels *contempt*. The strong tendency to refer to behaviour has favoured the high level of SFoc adjectives and nouns, as well as that of adverbs in the EC. However, despite the focus on behaviour, there is still a higher than average use of SFoc verbs which reflect a conscious appraisal and identification of the SENSER's sentiments.

11.6 The Gratitude group

This is a small group which Ortony et al. define as [APPROVING OF SOMEONE ELSE'S PRAISEWORTHY ACTION AND BEING PLEASED ABOUT THE RELATED DESIRABLE EVENT]. The variables which affect the emotion are:

1. the degree of judged praiseworthiness
2. deviations of the agent's action from person/role based expectations
3. the degree to which the event is desirable

and the example they give is:

(11.12) The woman was grateful to the stranger for saving the life of her child.

11.6.1 The lexicon of Gratitude

Although small, this group is well-defined, with 2 lexemes, *grateful* and *thankful*, in the EC, and 3, *agradecido*, *grato* and *reconhecido*, in the EC. *Grateful* and *grato* have related nouns, *gratitude* and *gratidão*, but no verbs are associated with them. However, with *thankful*, the verb *thank* and the noun *thanks* are used to describe the action taken when one is *thankful*, and are not in themselves related to the emotion. The noun form which matches *thankful* is *thankfulness*. The morphology of the English lexemes take the suffix -FUL which does not have an equivalent in Portuguese, although the expression *cheio de + noun* conveys a similar idea and was recorded for the corpus examples when it appeared.

The way the lexemes are realized morphologically differ, and there is also a certain divorce between the participles *agradecido* and *reconhecido*, and the verbs associated with them. *Agradecer* refers to the action resulting from emotion, and *reconhecer* can refer both to this action and to the mental process preceding the whole situation because it also covers the meaning of *recognise*, but neither of them refer to the emotion. Therefore, *agradecido* and *reconhecido* appear to be past participles that have acquired a more specialized meaning. The nouns *agradecimento* and *reconhecimento* fulfil a rather more ambiguous function between the action and the emotion, and one not only does something *em agradecimento de qualquer coisa*, but one can feel *cheio de agradecimento*.

Unlike the other emotions in this section, there is little overlapping between Gratitude and other emotions, except, perhaps, and by association, with Joy. In the BC, *thankful* did not accept combination with any other lexeme, but *grateful* appeared with a few words like *happy* and *sincere*.

Grateful is the more central of the two lexemes involved and it is certainly the most popular, with 87,8% of the examples. *Grato*, too, is the most numerous, with 55,4%, *agradecido* coming in second place with 28,9%. However, this does not make *grateful* and *grato* equivalent, for reasons which will be discussed below. In fact, in daily conversation, one would probably hear either of the other two Portuguese lexemes more frequently.

11.6.2 The semantics and syntax of Gratitude

PHENOMENON types

As can be seen in [Table 11.5](#), there are no PH. type 1 examples in this group because the PHENOMENON is always expressed in the context. A predictably high number are in the type 6-9 band, 83%(E) and 82%(P), and a further 7,3%(E) and 7,2%(P) belong to types 10-

11. The few examples in the types 2-5 band are from *thankful* and *grato*.

This emotion is clearly dependent on the Other's [PRAISEWORTHY ACTION] but the corpora differ in that the EC is 95% SFoc but the PC is only 77,1% so. There is also a difference in the way behaviour is associated with this emotion - the EC only has 8,5% of the examples tagged for BEHAVIOUR, the PC 21,7%.

SFoc items predominant

The four PFoc examples in the EC are attributive uses of *grateful* with objects into which the emotion has been projected. In the PC the situation is similar with *grato*, used both attributively and predicatively, but with the same function. Both *grateful* and *grato* also function as SFoc adjectives, the only difference being that this use of *grateful* is ten times more frequent than the PFoc one, whereas *grato* functions both ways with almost equal frequency. *Thankful*, however, is only SFoc. Despite the lack of an exactly corresponding SFoc verb, *agradecido* and *reconhecido* were classified as past participles, although they are arguably close to being adjectives, and appear both attributively and predicatively. In all cases, however, there is a high level of complementation identifying the PHENOMENON. It should also be noted that the zero copula is rare, particularly for the PC.

In the EC nearly all the SFoc nouns are with *gratitude*, including two examples of nominals. All three of the PC lexemes have several examples of the SFoc noun. Complementation of the nouns is low and countability is non-existent in the EC and rare in the PC. The EC also has 4 examples of the adverb *gratefully*.

11.6.3 A Linguistic profile of Gratitude

This group demonstrates a nice balance between the active recognition of the usually exterior PHENOMENON, and the focus on the SENSER. The SFoc noun often refers to BEHAVIOUR but also to the emotion itself as a sort of relation between SENSER and PHENOMENON. The usually predicative adjectival / participle construction is the most explicit, and refers to the SENSER's consciously recognized emotional state, while referring to the PHENOMENON in the complementation. If one remembers that this emotional state can subsequently be followed by the appropriate social action expressed by *thank* or *agradecer*, it is easy to see the emotion as a sort of action readiness which precedes it.

11.7 The Anger group

This fairly large group is defined by Ortony et al. as [DISAPPROVING OF SOMONE ELSE'S BLAMEWORTHY ACTION AND BEING DISPLEASED ABOUT THE RELATED UNDESIRABLE EVENT], the variables are:

- a. the degree of judged blameworthiness
- b. deviations of the agent's action from person/role based expectations
- c. the degree to which the event is undesirable

and the example they give is:

(11.13) The woman was angry with her husband for forgetting to buy the groceries.

Anger is an important emotion, both qualitatively and quantitatively, for much the same reasons as Fear is. It is generally recognized by all theorists, because it is observable in physical behaviour and measurable in terms of blood pressure and other internal reactions, and because it has the evolutionary function of preparing the person to take action against whatever is seen as undesirable.

11.7.1 The lexicon of Anger

The lexicon for Anger is quite large, with 46 lexemes in the EC and 44 for the PC. *Anger* takes the biggest proportion of either corpora with 16,9% of the EC examples, and *impatient* comes in second place with 9,8%. After that come 7 lexemes with 4 > 7% (*annoyed*, *bad temper*, *bitter*, *furious*, *indignant*, *irate*, *irritated* and *tired of*), 2 lexemes with 2 > 4%, another 7 with 1 > 2 % and 22 with under 1%, or only 7,6% of the total. The most important lexeme in the PC is *furioso* with 8,6%, followed by *impaciente* with 7,2%, 4 lexemes with 4 > 7% (*amargurar-se*, *cólera*, *fartar-se* and *ofender-se*), 13 with 2 > 4%, 7 with 1 > 2% and 15 with under 1%, or only 8,5% of the total. This means that, although the EC boasts a slightly higher number of lexemes, it only uses 11 of them more than 2% of the time, whereas the PC uses 18 in this way, which shows that, as in other groups, the PC actively uses a wider variety of lexemes than the EC.

Separating the lexemes on a 1 > 3 weak to strong basis proved rather difficult because the meaning of quite a few lexemes will depend a lot on the situation in which the lexeme is found, and on questions of taste and personal usage. Elements such as an intensifier like 'very', or certain types of emphatic intonation in context, would be enough to promote a particular example of a lexeme to a higher group, so the information in [Table 11.6](#) is very relative. The strongest lexemes were the easiest to allocate, however, and it is here again that the PC had the greater proportion of examples.

Translation of these lexemes is not always easy, as differing cultural situations and personal tastes tend to influence decisions a lot. For example, when comparing two different Portuguese translations of Lewis Carroll's *Alice in Wonderland*, I found that the original *angry* was translated systematically by one translator as *furioso*, and by the other as *irritado*. An English speaker may exclaim and express a weaker or stronger level of Anger by saying *How irritating / annoying / infuriating!* but the choice of adjective will be influenced not just by the degree of emotion felt. *Infuriating*, when used by a normally calm man will be strong, but it will lose some of its force when used by the type of middle-class woman who tends to use exaggerated language in relatively trivial circumstances. Some of the lexemes are rarely used precisely because they are restricted by connotation to certain types of people. For example, whereas *irritable* is fairly neutral situationally, *fractious* tends to be used with small children, *irascible* with older men, and *testy* of older people, particularly men.

The most interesting difference, however, was not related to the weak > strong groups but to the further division of the lexemes into three more syntactically differentiated groups: those that included a PFoc verb, those that included a SFoc verb, and those which were restricted to adjectives and/or nouns. The number of those with PFoc verbs and those with SFoc verb types were decidedly higher in the PC, the former being 71,1%(P) against 59,3%(E) and the latter 8,2%(P) against only 3,1%(E). The EC had far more adjective / noun lexemes, 37%(E) against 20,1%(P).

The different forms of the lexemes in the two corpora also helps to complicate matters. Some of the more popular cognates match reasonably well, such as *irritate / irritar*, *offend / ofender*, and *impatient / impaciente*, but other apparent cognates like *indignant* and *indignar* will cause syntactic problems because the former is only used as an adjective /

noun pair, and the latter as a verb / noun pair. Others vary as to popularity - *exasperate* is relatively common in the EC, but *exasperar* is rare in the PC. In any case, several factors have to be taken into consideration in translation, and Table 11.6 can only help to indicate different levels of emotional strength and relative popularity.

In the BC, Anger lexemes liked keeping frequent company with a wide variety of other words, including members of their group, a large number of negative emotions from the Fear, Distress, and Dislike groups, and the occasional contrasting emotion, such as *amusement* and *pride*. This was true of *angry*, and *annoyance* was found with a few examples of negative emotions, and also some of Surprise, and *exasperated* occurred with its synonyms and Distress lexemes. *Irritation* was found with its synonyms, but otherwise preferred the weak to moderate examples of the negative emotions, and words describing associated reasons for the emotion, like *surprised*, *confused*, *sleepy*, *fatigue*, and contrasting emotions like *amused*. *Outraged* and *impatient* appeared largely with synonyms, and *indignant* often paired with Surprise and Fear words.

11.7.2 The semantics and syntax of Anger

The PHENOMENON types and Anger

The data on the PH. types are surprisingly similar, as can be seen in [Table 11.7](#). The overall percentages for the group show a fairly high proportion taking type 1, 8,3%(E) and 13,2% for types 2-5, and 67,2%(E) and 64,4%(P) for types 6-11. The main difference emerges from a more detailed breakdown which shows that the EC favours types 6-9, with 60,9%, with only 6,3% for 10-11, whereas, in the PC, types 6-9 account for only 51%, and types 10-11 for 13,4%.

The different lexemes vary considerably in their choice of PH. types. In the EC, type 1 appears with several, but is only noticeably high with *bitter* (32%), *sulk* (78%), *sullen* (100%), and *temper* (94%). A few examples of the type 2-5 band appears with most lexemes, but none of them show a significantly high level except *tired of* (30%). There are several lexemes, however, which show high percentages in the 6-10 band, especially *anger* (79,4%), *annoy* (88%), *exasperate* (85%), *fury* (72,5%), *impatient* (79%), *indignant* (98%), *offend* (96%), *outrage* (100%), *rage* (72%), *sick of* (77%), and *vex* (100%).

In the PC, the only lexemes which show an above average number of type 1 are *amuar* (69%), *azedo* (44%), *impaciente* (42%), *rancor* (33%), *raiva* (31%) and *revolta* (48%). As with the EC, several lexemes took a few of types 2-5, but only *contrariado* (20%), *fartar-se* (67%), and *incomodar-se* (39%) were noticeably higher than the average. Several lexemes showed high levels in the type 6-11 band, in particular, *afrontar* (100%), *chatear* (100%), *cólera* (90%), *desagradar* (87%), *despeito* (88%), *indignar* (91%), *maçar* (75%), *ofender* (100%), *vexar* (84%) and *zangar* (91%).

SFoc / PFoc differences and ambivalence

This is one area in which the corpora differ quite considerably syntactically. First, the SFoc/PFoc ratio is different, and then, although the BEHAVIOUR tagged examples are high for both corpora, it is more so for the EC. If one considers the differences in lexeme types described above, this is to be expected. There are a few lexemes which show the SFoc/PFoc ambivalence, already found for other groups like Joy. The examples were found largely with the adjectives *bitter*, *morose*, *amargo*, *azedo* and *rancoroso*, and the nouns *annoyance*, *bitterness*, *amargura*, *contrariedade* and *enfado*, with the SFoc ones accounting for between a half and two thirds of each lexical form.

SFoc lexemes - differences between corpora

The division of SFoc lexemes shows some differences between the corpora, as can be seen in [Table 11.7](#). The SFoc adjectives in the EC are largely represented by *angry* (about 30%), with *bitter*, *cross*, *furious*, *hot*, *impatient*, *indignant*, *irritable*, *sick of*, *sulky* and *sullen* taking 4-8% each. In the PC, *farto*, *furioso* and *impaciente* account for 75% of the examples, the only other adjectives of any significance being *amargo* and *azedo*. The most frequent SFoc past participles are *annoyed*, *exasperated*, *offended* and *tired of*, with a few for *irritated*. In the PC, though, the participles are well-distributed among all the relevant lexemes, the most popular being *amuado*, *contrariado*, *enfasiado*, *indignado*, *irritado* and *vexado*. The copulas with adjectives and participles in the EC include 11 examples of the resultative *become* and *get*, about a quarter of the total for the whole corpus. The number of zero copulas in the PC is a little lower, with *estar* appearing more frequently than usual but *ficar* less so, although an unusual variety of copula type verbs appear relatively frequently with the SFoc past participles.

The SFoc nouns in the EC appear with several lexemes, but especially with *bad temper* (23%), *anger* (18%), and *indignation*, *rage*, *impatience* and *irritation*, (7-9% each). In the PC the main nouns are *cólera* (16,5%), *fúria* (10,6%), *impaciencia* (8%), *rancor*, *raiva*, *despeito* and *amargura* (6-7% each), and *azedume*, *enfado*, *contrariedade*, *ira* and *revolta* (2-5% each). Countability in both corpora is down by 3,8%(E) and 6,2%(P), and complementation of the noun is lower by about 10% in both corpora. However the use of nouns in adverbial phrases is a little above average in both cases, reflecting the high BEHAVIOUR levels for this group.

High proportion of SFoc adverbs

The BEHAVIOUR element is also important in explaining the outstanding difference with the SFoc adverbs, with the EC reaching the very high level of 17,9%(E), or nearly 30% of the total SFoc adverbs in the corpus. The SFoc adverbs in the EC are largely accounted for by *impatiently* (30%), *angrily* (20%), *indignantly* (13%) and *bitterly* (11%). Although such adverbs are rare in the PC, *furiosamente* and *amargamente* are relatively frequent.

Few SFoc verbs

The tiny number of SFoc verbs in the EC are represented by *sulk*, but the PC offers us *amuar*, *arrenegar*, *embezerrar* and *embirrar*, and the interesting, but ambivalent verb *aborrecer*. Apart from one very unusual example of *aborrecer* + QUE clause, *Ela aborrecia que lhe escrevessem postais, fosse até a mais banal das recomendações.*, though, the examples are all either intransitive or take prepositional complements.

PFoc examples

Apart from the ambivalent adjectives discussed above, the PFoc adjectives tend to be of the type that are formed with -ING, as with *annoying* and *exasperating*, in the EC, and with -ÁVEL, as in *desagradável*, or -IVO, as in *ofensivo*, in the PC.

Some of the PFoc nouns are also of the ambivalent kind, and the few remaining ones in the EC are *affront*, *goad*, *offence* and *outrage*. The PC examples, *afronta*, *chatice*, *incómodo*, *maçada*, *ofensa*, *ultraje* and *vexame*. are more numerous. There are few PFoc verbs in the EC, and these are largely *annoy*, *irritate* and *offend*.. The PC ones are *aborrecer*, *azedar*, *desagradar*, *enfurecer*, *fartar*, *impacientar*, *incomodar*, *indignar*, *irritar* and *ofender*, and about 40% of these verb forms are used with the reflexive -SE.

11.7.3 A Linguistic profile of Anger

This is an interesting group to analyse because of the differences that arise. One of the most significant points, however, is that there seems to be considerable agreement between the corpora over PHENOMENON types as this shows that, whatever the options offered by the lexicon and its associated syntax, there must be some underlying common psychological factor as to the reasons for the Anger emotion.

One might have expected that Anger has to be directed at something, but the PH. type analysis shows that a high proportion are of type 1. This is because certain lexemes, like *bitter*, *sulk*, *sullen* and *bad temper*, would seem to be due to multiple and unspecified phenomena rather than one specific one. The same can be said of *amuar*, *azedo* and *impaciente*, as well as *rancor*, *raiva* and *revolta*, which seem to translate EC lexemes like *anger*, *fury*, *rancour* and *rage*, but are less Phenomenon, and more Senser focused than the EC lexemes. However, as with other groups, the stronger the lexeme, the more likely it is that a PHENOMENON will be clearly identified.

There is also an obvious connection between the PFoc verbs and clear identification of the PHENOMENON. Although the verbs are not always used in the PFoc or SFoc way one might predict by examining only their basic forms, the higher number of PC verbs and participles meant the EC contained nearly 20% more SFoc lexemes than the PC. The use of verbs, of either type, would seem to focus both participants and the relationship between them. This is true of the normal transitive PFoc verbs and the examples in the EC are quite straightforward in this way, and are evident also in a slightly higher number of SFoc participles. The only SFoc verbs, *sulk* and *rage*, are typically intransitive and refer as much to a form of behaviour as to the emotional process behind it. This is echoed in the PC where those verbs classified as SFoc are either intransitive or, in the case of *zangar-se*, take the -SE particle. The interesting point is that 40% of those verbs which can be classified as PFoc actually appear with the -SE particle, and to distinguish between these examples and the so-called SFoc ones with -SE is often rather hair-splitting, since both can and do appear either with no further complementation, or with a prepositional object, as in *aborreceu-se (com X)* and *zangou-se (com X)*. The intransitive and reflexive-type behaviour of these verbs, therefore, would seem to point to an interest in the SENSER's emotional processes or behaviour, and only less immediately in the PHENOMENON.

The copula + adjective/past participle forms show that there is a considerable amount of interest in the SENSER's state and emotional processes, particularly in the EC. The EC has a relatively higher number of resultative copulas than the PC, but the PC has a high number of both the *estar* and other copula-type verbs. Since the PC has so many -SE type verbs describing the *becoming angry* process, these probably absorb the need for resultative or *ficar* copulas. The low percentage of complementation also indicates less interest in the PHENOMENON in these examples.

The frequent use of nouns in this group is also a sign of focus on the emotional process, and the low level of countability and lack of complementation confirm the more general tendency. The frequent appearance of nouns in adverbial phrases indicates interest in the associated behaviour. The large number of -LY adverbs in the EC partly fulfil the same function as the adverbial noun phrase, more common in the PC.

The overall linguistic picture of the Anger group confirms it as a more central emotion. It focuses on internal emotional processes and on external behaviour but, at the same times allows for the identification of the PHENOMENON, which must be psychologically acknowledged, particularly with the stronger and more central lexemes.

[1] The different forms of the verb *please* are classified in this group, but the noun *pleasure* and its corresponding adjective *pleasant* were classified as a separate lexeme in the Joy group. The difference is not always easy to justify, but it would seem to be more suitable to leave *pleasure* / *pleasant* with its simple scenario, in Joy, and to include the verb *please*, with its implicit cause - effect relationship in this section, where the psychological scenario is more complex and explicit than it is in Joy.

[2] *Ficar* acts here as a resultative copula and *contente* is similar to *content* or *happy*. *Gostar* means *like*.

[3] Perhaps this juxtaposition of *amazement* and *astonishment* is the one way in which the *admire* + *surprise* mixture in the Portuguese *admirar*, can come through in English.

[4] *Condescend* is a false friend to the Portuguese *condescender*. Although they share the element of the Subject of the verb being superior hierarchically to the Others involved, this action is seen to more positive, unlike the English cognate which implies a strong element of *arrogance*.

CHAPTER 12

THE LINGUISTIC BEHAVIOUR OF THE REACTIONS TO OBJECTS LEXICON

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12.1 Reactions to Objects - the Attraction emotions

Although *love* and *hate* are among the first words which spring to the mind of the average layman when one talks of Emotion, this is not the case with certain theorists, particularly Behaviourist psychologists. There seems to be a general preference to attribute what we call *love* and *hate* to some more observable PHENOMENON. Plutchik (1962 > 1982), for example, whose classification is fairly comprehensive, prefers the more neutral *acceptance* to *liking* or *loving*, and the facially observable *disgust* to *hate*. Johnson-Laird and Oatley (1989) classify *like* and *love* as relations in which happiness is experienced in relation to the OBJECT, and *hate* is the experience of disgust towards the OBJECT. Although James himself (1884) and Watson (1930) classified Love as one of the 4/3 basic emotions they propose, it only re-surfaces as a respectable emotion after Behaviourism, with theorists like Arnold (1960) who were beginning to move in a Cognitivist direction. For example, Fridja (1987) does not include love or hate among his 'emotions proper' because they involve object evaluation. In this respect Ortony et al. follow Fridja's lead, describing these as Attraction emotions, based on the appealingness of the OBJECTS.

'Dispositional' and 'momentary' liking and disliking

The Attraction emotions, which Ortony et al. see as reactions to OBJECTS, are seen as a structurally simple group consisting of one positive and one negative emotion type - the liking and disliking emotions. However, they hasten to point out that, "in reality, these emotions are among the most complex of human reactions". They distinguish between 'dispositional' liking or disliking as, for example, a disposition to like vodka, and 'momentary' liking or disliking, as liking an instance of vodka. Only the latter fits strictly into their definition of an emotion, because it is transitory. The former are described as mental representations, or schema, which form our attitudes and tastes, and subsequently affect our reactions to specific instances of the objects.

The reasons for either the dispositional or momentary liking or disliking are rarely easy to formulate clearly, and some may even be innate, as a tendency to like sweet things and dislike bitter ones appears to be, although a taste for Campari can be acquired culturally. The more complex the object of our liking or disliking, however, the more likely we are to be able to provide an explanation, but the fact remains that many different factors may contribute to the mental representation we have of something, and this complex schema also underlies our momentary experiences of liking and disliking.

In the analysis I shall make here of the Liking and Disliking lexicons, it would be quite impractical to distinguish between the dispositional and momentary examples in the corpora, with the purpose of eliminating all examples that appeared to belong to the former. Therefore, all the examples of Liking and Disliking I could find in the corpora will be analysed, although it is obviously useful to bear in mind the distinction made by Ortony et al. when analysing certain points in more detail.

Liking, Disliking and the negative

One linguistic problem which arises when collecting the examples for these groups is that of the value of the negative with emotion verbs. This problem was examined for other groups, and one of the most interesting points that emerged was that the negative very rarely appears. It would seem that we do not often feel the need to mention an emotion merely to negate it. When negation is used, though, the result is simply to deny the existence of the emotion, as in *I am not afraid of ghosts*, or *He is not angry with you*. However, with the Liking and Disliking groups there is a certain polarisation which allows the verbs *like* and *gostar de* to be used in the negative. In many cases one may deduce from this negative use of *like* that Disliking exists instead. However, this is not necessarily so. We can say *I don't like Mary* and mean *I dislike Mary*, but one can also say it and then add *I love her*, or *I am simply indifferent to her*.

More than one interpretation is quite possible with several of the examples found, and this poses the problem of separating the more from the less negative examples. Because of the element of subjectivity implicit in such a judgement, I decided in the end to consider the negative examples within the *like* and *gostar de* lexemes. Even if all the negative examples had been considered in the Disliking group, an unrealistic solution, this fact would not have made a very significant difference to the overall data. It would have decreased the number of SFoc verbs in the Liking group by 2,4%(E) / 2,2%(P) and increased the number in the Disliking group by 7,8%(E) 11,8%(P). This means that the Disliking group suffers in comparison with Liking, but when the two groups are considered as a pair in relation to the other groups, the difference becomes less important.

12.2 The Liking group

Ortony et al. describe the Liking emotion as [LIKING AN APPEALING OBJECT], and the variables involved are:

- a. The degree to which the object is appealing
- b. the degree of familiarity with the object

The example they give is:

(12.1) Mary was filled with affection as she gazed at her newborn infant.

The first variable they choose would seem obvious to most people, but the second one

might pose some problems. What they are trying to cope with here is the fact, recognized by psychologists, that familiarity with the object is one of the few measurable variables that can be analysed fairly satisfactorily out of many less well understood ones. For example, as any mother knows, children react negatively to being presented suddenly with new types of food, but as they become familiar with the sight and smell of them, their reactions sometimes change. At a less basic level, one could point to the normally negative reaction by the general public to avant-garde forms of art (I am not considering here the type of person who has internalized the schema which says that 'new'/ 'unfamiliar' = 'good' as far as art is concerned). In order to be acceptable, it has to have some quality which appeals to something already understood, no matter how deep in the subconscious.

12.2.1 The lexicon of Liking

The EC is dominated by *like* and *love*. As can be seen in [Table 12.1](#) the nearest competitor is *affection*, followed by *fond of*, *tender*, *prefer*, *devoted*, *favour*, *fancy* and *adore*, the remaining 12 lexemes having a total of 3,5% between them. The situation is not quite so extreme in the PC, although *amar* and *gostar de* are the most popular. After these more important lexemes come *enternecer*, *paixão*, *preferir*, *adorar*, *simpatia*, *afecto*, *atração*, *carinho* and *devoção*, with a further 6 lexemes with a total of 1,2%. Yet again we find that the PC has a wider vocabulary at a medium level of usage.

An uninformed look at the basic uses of *like* and *love*, *amar* and *gostar de* would lead one to think that *like* was the same as *gostar de* and *amar* the same as *love*. However, although *like* and *gostar de* can be used in similar situations, *amar* is much more restricted in usage than *love*. The history of my personal interest in the linguistics of Emotion, and in the relativity of languages in general, dates from my realization of this point. Whereas in English one can *love* virtually anything one feels affection for, from God to your parents, your sweetheart, your child, and from there to your dog, your car and a cup of coffee, the verb *amar* is strictly reserved for God and, on serious occasions only, for the people nearest to you. To use it frequently or indiscriminately is to risk appearing embarrassingly sentimental, or as suffering from over-exposure to soap operas. In literary works a little more licence is given, as in the description of Afonso da Maia:

(12.2) Não, não era Meneses, nem Albuquerque; apenas um antepassado bonacheirão que amava os seus livros, o conchego da sua poltrona, o seu whist ao canto do fogão. M

and this describes a serious, honourable affection for things; sometimes it can describe a somewhat idealized love, as in:

(12.3)- Que pena que isto não pertença a um artista! - murmurou o maestro. - Só um artista saberia amar estas flores, estas árvores, estes rumores. . .

Carlos sorriu. Os artistas, dizia ele, só amam na Natureza os efeitos de linha e cor; M

or love of some more abstract notion, not always positive:

(12.4) Mas Quina amava o mundo, as suas manifestações de poder, de grandeza e superficiais europeís; amava, se não a multidão, os que venciam, o espalhato e a exterioridade. Si

In more everyday language, however, *gostar de* would be normal in these situations.

When someone wants to declare affection on a day-to-day basis in Portuguese, s/he is more likely to use *Gosto de ti* than *Amo-te*. This is not just because the stronger lexeme might be embarrassing. In English it is possible to say, *I love him, but I don't like him*, meaning that one has a strong, probably sexual, attraction for, or strong family ties with someone, while being unable to find any sensible reason for approving of their personality. Conversely, the implication of *Gosto de ti* is that you feel a strong, and well-founded, affection for the person, rather different from the much more reserved *I like you*. Another interesting distinction that can be made is between the use of the Imperfeito *o João amava a Maria*, and that of the Pretérito in *o João amou a Maria* - the former can be translated as a simple statement about the fact in the past that *John loved Mary*, but the latter is best translated as *John made love to Mary*.

The use of *I love you* in English on an interpersonal basis is also restricted, but not to the same extent as *Amo-te*, and it has been de-valued in the last few decades by the *love-you* hippy phenomenon, and the type of situation in which most pop stars, like Michael Jackson, greet his/her fans on stage with *I love you*. Besides these distinctions, there is that made by the expressions *I am in love with you* and *estou apaixonado por ti* which definitely refer to romantic or sexual love and a more transitory situation.

The noun *amor*, however, is not quite so restricted, and one might well hear *Ela tem um grande amor aos animais*, and there are no problems in talking about something like *amor da liberdade* or *amor à vida*. Conversely the noun *love* is, in practice, more restricted than the verb. However, whether it is in the novels which form the corpora, the soap operas we watch on television, articles in women's magazines, songs, or general conversation, there is little getting away from the fact that what some would describe as romantic love occupies our attention far more than any other form of love, be it religious, parental, or filial, or for ideals, animals or things, in English or Portuguese.

Liking is the noun form of *like*, although the plural *likes*, can be found. Again it is translatable by *gosto*, but *gosto* is often more similar to *taste*, in the sense of *he has good / bad taste*, (*Tem bom / mau gosto*) or *pleasure* as in *it was a pleasure to watch him* (*dava gosto ver-lo*). These uses draw attention to the close link between the Liking group and both *pleasure* and the processes of perception.

Given the restrictions on *amar*, one would expect it to be less frequent than *gostar de*, particularly since *love* is less frequent than *like*, but the reverse is true. One could try and explain this by saying that romance is more popular in the PC than the EC, but that would probably be difficult to prove. It is more likely that the other lexemes, which occur in 45% of the PC examples, as opposed to 30% of the EC ones, were chosen instead.

Table 12.1 shows yet again that the PC favours the usage of the stronger type of lexeme. It was not always easy to allocate the different lexemes to 3 different categories. To place *gostar* in level 2 because it is sometimes stronger than *like*, or *amar* in level 3 because it is stronger at times than *love*, would be to distort the evidence beyond comparison. *Prefer* does not really express weak or strong emotion, just liking one thing more than another. Others like *cherish*, *care for* and *carinho* express the treatment of the loved one as much as the emotion, and *affection*, *afeição*, *tenderness* and *enternecimento* also have a behaviour component, which is evident in the fact that most of the few examples tagged for behaviour are of these lexemes. *Patriotism* was included as a very specific kind of love, but no examples of its Portuguese cognate were found in the PC.

There are quite a few cognates in the two groups, some of them false friends. *amorous* does not match *amoroso*, the former being SFoc and describing a rather sexual feeling, or the consequent behaviour, and the latter is more frequently used as an PFoc adjective to

describe the PHENOMENON's attractive qualities. *Simpatia* is a form of mutual liking, and not related to *sympathy*, which is in the Sorry For group. The examples of *paixão* nearly all gave a Liking interpretation, whereas most of the examples of *passion* were more suitably classified as Generic. Not all examples of *favour* were included - only those which reached a high enough level of emotion to do so, and *favorecer* did not provide such examples. *Infatuated*, with its connotation of misguided and unreasoning passion, does not match *enfatuado* which seems, at least in context, to refer rather to stupid pride in oneself.

The EC examples which are difficult to transfer into Portuguese are *fancy*, which is usually felt to be a little superficial and definitely transitory, *fond of* and *keen on* - which might be translated rather neutrally by *gostar muito de* - and *crush*, which usually refers to adolescent passions. The PC lexemes which draw attention to a difference in semantic focus are *enamorar* and *apaixonar*. Although they roughly correspond to the English expression *fall in love*, these Portuguese lexemes and the frequent use of *paixão*, draw attention to the distinction made by the PC at both a lexical and pragmatic level between romantic love and sexual attraction / passion.

Querer is usually translatable by *want*, but it is also sometimes used in a way which can only be interpreted as *love*, and these examples were classified separately for this group. *Querido* is used a lot in the way English would use *dear* or *darling* as terms of endearment, but neither the Portuguese nor the English examples of these words have been included in the corpora. *Querido* can be used as an PFoc adjective / past participle to express the lovability of an object in modern conversational Portuguese, but examples were not recorded in the PC.

The company kept by these lexemes showed that, in general, they liked to appear with other members of the group. *Like*, perhaps because of its rather neutral meaning, did not combine with other lexemes. Neither did *fond of* because its statute as a predicative only adjective makes combination difficult. *Love* attracted very few companions for such a popular lexeme, and these were either other items from the group, or more general words suggesting topics, like *sex*, *life*, *art*, *marriage* and *money*. *Adore*, being one of the stronger lexemes, combined with other strong emotion words like *amazement* and *despair*. *Affection/ate*, which describes both emotion and the behaviour related with it tends to combine with lexemes like *cheerful*, *loyalty*, *respect*, *tolerance* and *kindness* which express similar notions of behaviour. A similar situation exists with *care*, which combined with *attention* and *devotion*, and *cherish*, which liked *comfort*, *understanding* and *nurture*. However, *tenderness*, also associated with behaviour, preferred notions like *joy*, *respect* and *understanding*.

12.2.2 The semantics and syntax of Liking

PHENOMENON types

As can be seen in [Table 12.2](#), the PH. type 1 is very rare in this group and generally refers to general notions of Liking which are not quite nominals. The examples of type 2 are either Self-directed emotions or describe personality traits like being *affectionate*. As one would expect, a large proportion of the examples, 58,7%(E) and 62,6%(P) take types 6-9, and most of these are simple type 6 examples. Type 10 non-personal objects take fairly large percentage, with only a tiny proportion in the highly explicit type 11 category. The remaining 20,7%(E) and 11,8%(P) take SENSER-referring PH. types, largely type 5.

81,6% of types 3-5 in the EC are to be found under *like*, but only 3,5% for *love*, *prefer* taking 4,9%, *fond of* 2,5% and the remaining few being distributed generally among the

other lexemes. Similarly, *gostar de* takes 74,8% of these examples in the PC, *preferir* 15,7%, and *amar* only 3,3%.

There is also a tendency for the same verbs to favour type 10 more than others. *Like* accounts for 60%, *love* for 13,5%, *prefer* for 6,5%, and *fond of* 4,9%, the others being distributed fairly evenly throughout the remaining lexemes. In the PC, the distribution is more generalized, but *gostar de* still takes 39,1%, *amar* (4,6%), *preferir* (12,9%), with several going to *enternecer* (7,4%) *atrair* (6,3%) and *adorar* (4,6%). The few examples of type 11 are restricted to *like*, *prefer*, *gostar de*, *preferir* and *querer*.

SFoc / PFoc differences

The corpora show a difference at the SFoc / PFoc levels with the EC having more SFoc items. On the other hand, the PC has more BEHAVIOUR tagged examples. The SFoc items show a small number of adjectives and participles in both corpora, adding up to 7,9% (E) and 6,4%(P), and the usual tendency of the EC to favour the verbs instead of nouns. The adjectives which do appear are *adoring*, *affectionate*, *amorous*, *fond of*, *keen on*, *loving*, *patriotic* and *tender*, in the EC, and *afectivo*, *carinhoso* and *terno*, in the PC. *Fond of* and *keen on*, which together account for over 80% of the predictive adjectives, always take complementation. The past participles are *attached*, *attracted* and *devoted*, in the EC, and *afectado*, *apaixonado*, *atraído* and *babado*. In the EC 88% of all the adjectives and participles take complementation, which is an exceptionally high percentage. The same is true of only 23% of those in the PC, about average for this corpus.

SFoc nouns and nominals

60% of the SFoc nouns in the EC belong to *love*, the rest largely coming from *affection* (10,6%), *tenderness* (7,7%), *fancy* (5%), and a few others like *liking* and *devotion*. In the PC, *amor* takes 45%, with *paixão* (17,8%), *enternecimento* (10,6%), *afeição* (6,8%), *gosto* (6,6%), *simpatia* (5,8%) and a few examples of others like *carinho*, *apego*, *adoração* and *devoção* making up the rest. In both corpora the number of countable nouns is about average, with a higher than usual proportion in the middle group. Complementation is higher and adverbial noun phrases are fewer for both corpora.

The fascination people have for defining *love* or *amor* is borne out by the fact that 26 examples of Nominals exist for *love*, a third of all examples in the EC, and 40 examples for *amor*, or half of all examples in the PC. Several of the examples, particularly in the PC, are true Nominals, and are used as terms of address.

SFoc verbs

The SFoc verbs in the EC are largely represented by *like* with 69,4% and *love* with 21,3%, the remaining few belonging mostly to *adore*, *care*, *cherish* and *prefer*. *Gostar* takes 56,6% and *amar* 22%, with the rest being *preferir* (10%), *adorar* (5%), *querer* (3,6%) and a few of *acarinhar*, *afeicoar-se* and *simpatizar*. The interesting point with these verbs, however, lies in the different types of complementation of the more important verbs.

Although 56,5% of the examples of the verb *like* take normal transitive objects, a further 36,6% prefer clausal complementation, 29% alone being followed by infinitive clauses of which the SENSER is also the Subject. *Love*, on the other hand, much prefers a simple object to a clausal one, the ratio being 93% / 5,5%, with the remaining 1,5% being the rather unusual intransitive examples already discussed. With *gostar de*, there are 57,4% prepositional objects, *gostar de* being a verb + prepositional particle, with 39,1% taking clausal prepositional objects and a small number (2,4%) in which *gostar* acts without the

particle DE and takes a QUE clause. Most of the examples with *amar*, (76,1%), are of the normal transitive kind with 16,4% intransitive examples and a few reciprocal examples with -SE. The other verbs are nearly all of the normal transitive kind, even when, as with *care*, they function with a particle + prepositional object.

PFoc examples

The PFoc items in the EC are small in number but interesting. *Attract* accounts for about 40% of the examples, and about 15% are examples of the ambivalent *tender* and *affectionate*, and adjectives like *adorable* and *likeable*. The interesting point is, though, that over 30% are PFoc past participles, and they make up over 50% of such examples in the whole corpus. Most of them are those examples of *be loved* in which the PHENOMENON is usually singular and the SENSERS are multiple.

The PC took the examples of PFoc adjectives from a wider range of lexemes, with *adorável*, *amável*, *apaixonante*, *atraente*, *gostoso*, *preferível* and *simpático* and the ambivalent *eternecido*. It also has several past participle examples of *adorado*, *amado*, *apaixonado* and *preferido*, although their presence in this group was not so marked as in the EC and altogether they accounted for only 30,7% of the examples in the PC.

The PFoc verbs are only in evidence in the EC with *attract* and *favour*, and the 2 examples of the latter are examples of the ambivalence of this lexeme. In the PC, which has a higher percentage of these verbs, we have ordinary transitive examples with *atrair* and *enternecer*, and a few examples with -SE with *apaixonar*, *apegar*, *babar*, *enamorar*, and *enternecer*. The PFoc nouns are restricted to *attraction* and *favour* in the EC, but in the PC they include ambivalent examples of *amor*, *enterneciamento*, *paixão* and *preferência*, as well as *atracção*.

12.2.3 A Linguistic profile of Liking

When people talk about Emotion as a subject, or want to illustrate their points about Emotion words, they often use *love* as a typical word in this area. As one can see, however, the syntax and semantics of the Liking in general, and *love* in particular, is hardly representative of the overall picture of the language of Emotion lexemes, although the ways in which they diverge from the norm are interesting. There are also clues to different cultural values to be found in the lexicalisation of this emotion group.

The low level of behaviour tags indicates the reason why Liking does not fit into the classifications by those who require facial expression and gestures to be determining factors in the classification of Emotion. However, it is difficult to disassociate these emotions from strongly felt interior physical feelings, particularly when one is referring to romantic or sexual love. There have been endless arguments about whether sexual love is really an emotion, or mere physical necessity geared to the reproduction of the species, and whether romantic love is merely a 'dressed-up' version of sexual appetite or has some higher, more spiritual function.

Different cultures distinguish between the more physical and more spiritual forms of love in different ways. As we have seen, the Greeks considered sexual love as merely a biological function like hunger and thirst. Rougemont (1936) argued that the development of romantic love was peculiar to Western culture and literature, and developed in early Medieval times through the troubadours' celebration of stories of the kind typified by Rougemont as the 'Tristan myth'. Some Western anthropologists used to assume, rather naively, that romantic love did not exist in certain non-Western cultures, largely basing this theory on the idea that societies that believed in arranged marriages could not believe in romantic love. Recent

research, however, seems to indicate that these societies certainly recognize romantic love, but do not see it as essential to marriage, because it is considered too transitory a basis on which to build a social contract of life-long duration. With divorce soaring, and the break-up of the family being one of the most worrying social and economic problems of modern Western civilization, the attitude of modern Western anthropologists towards those societies which still favour arranged marriages does not seem to be so condemnatory as it used to be.

The division between sexual and romantic love is reflected up to a point in the lexical differentiation between the verb *to love* and the phrase *to be in love* in English, and rather more so in the Portuguese distinctions between *gostar de*, *amar*, and *apaixonar-se*, referred to above, as well as the difference between *amor* and *paixão*^[1] which exists in English, but which is not so frequently made, at least in the EC.

The Liking group is close to Appreciation, and it was often difficult to decide when to include the examples of certain lexemes in one group or the other. The Appreciation lexemes seemed to include the greater degree of reference to and reasoning about the situation described by Ortony et al., whereas the Liking ones simply describe the, possibly consequent, emotion. This led to *please* being classified under Appreciation, despite the battle that has raged for so long over the relationship between *please* and *like*. On the other hand, *attract* and *attract* simply refer to the tendency of the PHENOMENON to cause a Liking emotion and do not seem to point to any wider interpretation. The relationship of the Liking group to Joy and to the senses of taste was shown up by uses of *gosto*.

The low proportion of PFoc examples were largely restricted to *attract* in the EC, the rest being either words which acted ambivalently, or the unusual past participle construction, particularly with *loved*. The PC, with its larger proportion of PFoc lexemes showed a wider use of lexemes here, and a certain amount of ambivalence among the nouns, and reflexiveness in the verbs, was to be found, all of which factors point to the symbiotic relationship between the SENSER and PHENOMENON.

The high percentage of SFoc verbs, 41,5%(E) and 21,7%(P) above the corpora averages, is an important factor in this group. Together with the high proportion of other word forms which took complementation, this shows that this group is exceptionally explicit about the nature of the PHENOMENON. The tendency of the PC to prefer nouns is more pronounced here than usual, and the EC compensates by using the verb form, and not the more neutral copula + adjective / participle form. However, these figures are influenced considerably by the relative uses of *love* and *amar / amor*, and perhaps the shyness over using the verb form, *amar*, accentuated the usual tendency of the PC to favour the nouns.

The data on the PH. types confirm the fact that the PHENOMENON is nearly always explicit, and the different syntactic behaviour of the PC does not seem to have hindered its identification. The fact that most lexemes seem to prefer types 6 and 10 above all, shows that these emotions tend to focus directly on an object, human or otherwise, rather than on more complex notions like their situation or behaviour. There is, therefore, a certain simplicity about these examples which define both a SENSER and a PHENOMENON, and the focus is partly on the relationship between them, and partly on the SENSER's emotional processes. The affirmative with the active voice of *I love you* or *I like you*, or nouns with determiners or possessive forms, like *the love of liberty* or *John's love for Mary*, are definitely in the realm of conscious understanding and even affirmation of the emotional process.

Earlier I speculated about the possibility that certain verbs of Emotion might be considered as quasi-modals. It is significant that so many of the examples with *like* and *gostar de*, and a few of *love*, *prefer* and *preferir*, should take the type of clausal complementation, usually

with an infinitive clause, that is similar to that following modals. These examples also produce most of the PH. types 2-5 referring to the SENSER's situation, emotions, perceptions and actions, and this too would seem to show a quasi-modal type pattern. Although I do not argue for any strong hypothesis, I believe that these examples should be considered separately from the others, and that their function, which expresses a sort of volition towards being, feeling, perceiving or doing something, should be compared to that of other modal-type verbs.

12.3 The Disliking group

This emotion, which is often seen as antonymic to the previous one, is defined by Ortony et al. as [DISLIKING AN UNAPPEALING OBJECT], and the variables involved are:

- a. the degree to which the object is unappealing
- b. the degree of familiarity with the object

and the example they give is:

(12. 5) John disliked the concert so much that he left in the middle.

12.3.1 The lexicon of Disliking

The division of this lexicon on a 3 level weak > strong basis in [Table 12.3](#) shows that both the EC and the PC show a marked preference for the strongest lexemes. This would continue to be true even if one were to add the examples of *not like* and *não gostar* to the examples in level 1. Both corpora have one dominant lexeme, *hate* (39,9%) and *odiar* (33,2%). In the EC we then have *object to* (11,5%), *dislike* (7,7%), *not bear* (6,3%), *disgust* (4,6%), *abominate* (3,6%), *revulsion* (3,4%), *detest* (3,1%) and a further 13 lexemes with smaller numbers of examples, totalling 20,6%. The PC shows the more evenly spread usage found in other areas, with *enojar* (15,3%) *detestar* (9,5%), *abominar* (6,9%), *repugnar* (6,3%), *repulsar* (5,2%), *hóstil* (4,9%), *aversão* (4,3%), *antipatia* (3,8%) and a further 7 lexemes which account for a total of 10,3%. The lexemes in the corpora can be further divided into those which contain an SFoc verb, a PFoc verb or form noun/adjective pairs. Such a division highlights a noticeable difference between the corpora. The SFoc lexeme types account for over three quarters of the EC examples but only about a half of the PC ones.

The central lexemes in the corpora are fairly similar in meaning, as are the cognates *detest* and *detestar*, although the latter seems more popular in the corpora. The English cognate of *odiar*, a noun/adjective combination of *odium* / *odious* is rarely used and when it is, it usually appears as an PFoc adjective. *Dislike* is fairly popular in the EC as a SFoc verb but has no real equivalent beyond *não gostar* in the PC, although the noun form can be rendered by *antipatia*^[2]. *Desgostar* is a PFoc verb. *Abominate* and *abominar* resemble each other in their lexical meaning and in their syntactic behaviour, favouring PFoc adjectival forms. *Object to* is the second most popular EC lexeme but is difficult to translate into Portuguese, possibilities being the more intellectual *contestar*, *não gostar*, or some more PFoc lexeme like *irritar*, from the neighbouring Anger group.

One popular way of expressing Disliking in the EC is with the expression *not bear* which can be translated in Portuguese by *não suportar*. However, *não suportar* has other uses and no truly appropriate examples appeared in the PC. English also has *loathe* to express strong Disliking, but it is usually translated by *detestar*.

The PFoc type lexemes are over twice as numerous for the PC and *enojar* is the second most popular lexeme in the corpus. It is translatable by *disgust* and *nauseate*, and all three lexemes have a strong connection to the more physical sensations experienced with the stronger forms of Disliking. The cognates like *repel* and *repelir* both function as PFoc verbs and, in the EC, we also have certain examples of *revolt*, particularly in the forms *revolting* and *revulsion*, which fit into the Disliking scenario in a way which *revoltar* does not. *Repugnar* and *repulsar* classify as PFoc verbs but their EC cognates, *repugance* and *repulsion*, only function as noun /adjective pairs.

The remaining noun/adjective pairs include the cognates *aversion* / *aversão*, and *animosity* / *animosidade*. *Asco* is a strong form of Disliking best expressed as strong *disgust* or *loathing*. *Distaste* is a weak form of Disliking which does not match the meaning of *desgosto*, sometimes more readily classified under the Distress group. *Antagonism*, and particularly *hostility*, and their cognates are somewhat marginal as they tend to reflect the behaviour resultant from previously experienced Disliking, rather than the emotion itself.

The lexemes in this group also seem to like to appear with each other and with other negative emotions. *Hate* also can occur with *love*, and with words like *war*, *rebellion* and *violence*.

12.3.2 The semantics and syntax of Disliking

The PHENOMENON types and Disliking

As we can see in [Table 12.4](#), Disliking has a higher number of identified exterior PHENOMENA than the Liking group, with 82%(E) and 88,8%(P) coming in the 6-11 band. Those in the Other focused 6-9 group account for very similar percentages of the corpora 54,1%(E) and 53,5%(P), but whereas the PC seems to focus more on the Other *per se*, the EC shows a greater interest in the Other's action. There is also a greater interest of the PC in type 10.

Type 1 examples are rare and, as with Liking, tend to be examples which are not quite Nominals and there are also a few real Nominals with *hate* and *ódio*. The type 2 examples are normally of the reflexive *hate oneself* type. The EC shows a greater interest in the type 3-5 band, 16,6%(E) as against 10,1%(P), and this interest is spread fairly evenly among the three types in the EC but is concentrated on type 5 in the PC. The only lexemes that show a marked deviation from the general norm here are *not bear* and *repugnar* with 54% and 30% in the 3-5 band.

Differences in SFoc/PFoc ratios between corpora

There is quite a difference between the corpora as far as SFoc/PFoc ratios are concerned, with the EC favouring SFoc examples. The same imbalance was noted with the Liking group, although it was not so pronounced. The number of examples tagged for behaviour is higher than with the Liking group, but still low, most of them appearing with *disgust* in the EC and with *nojo*, *hóstil* and *ódio* in the PC.

SFoc verbs dominate EC, SFoc nouns the PC

The SFoc adjectives and participles were few, with the EC only having examples with *averse to*, *disgusted*, *repelled* and *revolted*, and the PC with *hóstil*, *enojado*, *mareado* and *repelido*. The EC also produced one example of the SFoc adverb *disgustedly* and two of *venomously*.

The usual tendency of the SFoc verbs to dominate in the EC and the nouns in the PC is very obvious here. In the EC, *hate* accounts for 58,7% of the SFoc verbs, with *not bear* (12,6%), *dislike* and *object to* (11,2%) making up most of the rest, and *odiar* (49,3%) and *detestar* (37,3%) dominate the PC. 78,4% of the EC examples are transitive verbs with simple 'a' type objects, with a further 9% taking clausal objects. *Object to* accounts for most of the 6,7% which take prepositional objects as well as the 4,8% intransitive examples, and there are three examples of reflexive verbs. In the PC 89,3% are transitive with 'a' type objects, the remaining few being fairly equally divided between intransitive examples and those with prepositional objects.

The SFoc nouns are more evenly spread among several different lexemes, but *hate* still accounts for 30%, *objection* 20%, and *revulsion* and *disgust* 9% each. In the PC, *ódio* takes 36%, *nojo* 20%, and *aversão* and *repulsa* 10% each. Countability is above average in the EC but below average in the PC, although in both corpora it is the middle group which show the greatest gain. Complementation is higher than average, particularly in the PC where it reaches 26,6%, but the percentage of adverbial noun phrases is lower in both corpora.

PFoc items largely adjectives

The PFoc lexemes in both corpora are largely PFoc adjectives. In the EC they appear mostly with *odious*, *abominable*, *distasteful*, *detestable*, *disgusting*, *abhorrent* and *revolting*, and in the PC with *odioso*, *abominável*, *antipático*, *nojento*, *ascoroso*, *repelente*, *repugnante* and *detestável*. The PFoc noun forms are very few, being largely represented by *abomination* in the EC, as well as *loathesomeness* and *repulsiveness*, and with one example of *abominação* in the PC, and 3 ambivalent examples of *nojo* and *repugnância*. The PFoc verbs are sparsely represented by *alienate*, *antagonize*, *nauseate* and *repel*, in the EC, and more numerous by *repugnar* and *enojar* in the PC. The central lexemes produce the only PFoc past participle examples, with *detested*, *detestado* and *odiado*, and these examples are similar in nature to those for *loved* in the Liking group.

12.3.3 A Linguistic profile of Disliking

This group has fewer of the lexical subtleties to be found in the Liking group. The objective of reporting such an emotion is to describe the definitely negative reaction felt, and even the physical sensations associated with them. The concentration of examples in the strongest lexical group shows that the interest is in expressing this emotion quite clearly. Apart from the *not bear* / *abide* examples, which are only used negatively, the other lexemes are notable for the absence of negation associated with them, and this confirms the general tendency of the Emotion lexemes to simply fail to report the absence of emotion.

The greater syntactic tendency to favour PFoc adjectives with Disliking matches the preoccupation with the exterior PHENOMENON, although this PHENOMENON has a strictly non-Agentive role, as can be seen by the low number of PFoc verbs and their corresponding SFoc participles. However, the SFoc nouns and verbs still account for most of the examples. The relationship between SENSER and PHENOMENON, and the conscious emotional and mental process on the part of the SENSER, are definitely affirmed, as can be seen from the high number of SFoc verbs, especially in the EC. The high percentage of complementation of SFoc nouns in the PC is also indicative of the same type of process.

Although the EC examples of Disliking show a certain interest in the PH. type 3-5 group, and the syntax shows too small a number of "b" type clauses on which to advance any

hypothesis of there being any quasi-modal status for verbs in this area. The few examples which might qualify were classified as the negative of *like* inside the Liking group.

The Disliking group focuses more on the exterior PHENOMENON than the Liking group, rather as the Distress group does when compared with Joy. This would seem to demonstrate a psychological, and evolutionarily necessary, tendency to favour the definite identification of PHENOMENA which affect us negatively. However, apart from this point, the differences between the corpora in the way the different types are distributed is similar to those with the Liking group, and this shows that there is a certain similarity which helps to make these two groups a complementary pair.

[1] It is interesting to notice that *courting*, describing the type of behaviour associated with romantic *love*, leading possibly to marriage, is now considered old-fashioned in English, although there are phrases like *going steady* in popular usage which do duty for the same type of phenomenon. Its equivalent in Portuguese, *namorar*, however, is still going strong and its sense has changed less than one might expect in modern life.

[2] The English cognate, *antipathy*, did not appear in the EC, and the examples that appear in the BC suggest a weak, rather intellectualized form of Dislike.

CHAPTER 13

THE LINGUISTIC BEHAVIOUR OF OTHER CATEGORIES OF EMOTION LEXICONS

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13.1 Other Categories

There are three other categories which cannot be ignored in any discussion of Emotion, although they are not included in Ortony et al.'s scheme. One is the class of lexemes which refer to emotion generically, and other two are Surprise and Desire. The data on these groups is considered separately from that on the specific groups, so the results do not affect the general analysis of Emotion.

13.2 The Generic lexemes of Emotion

The generic lexemes of Emotion in English and Portuguese were described and compared in Chapter 2 with a view to explaining why *emotion*, or *emoção*, and not *feeling* or *sentimento*, has been chosen by psychologists to define this area of study. The use of these lexemes is not usually considered in normal lexical analyses of Emotion, but, since they belong to the metalanguage of Emotion, most authorities will attempt a definition of them at some stage.

Although these lexemes are generic when considered in isolation, in context they often combine with further specification of the emotion involved. For example, *feel* and *sentir* are complemented by adjectives, nouns and other parts of speech, as well as clauses, many of which specify the emotional content of the situation described. *Sense*

of, *feeling of*, and *sentimento de* are also often complemented by specific Emotion nouns. These examples are considered here, because, although this complementation varies considerably, the generic word remains generic.

However, certain generic type lexemes can, in context, be recognized as belonging to more specific Emotion types despite the lack of complementation by an Emotion word. This is the case with *temper*, for example, which is usually qualified by *bad* or *good*, and therefore belongs to either the Anger or Joy groups. When the examples in question are truly specific, and occur in sufficiently high numbers, they have been classified under the respective group in the EC and PC.

However, the main problem is that so many examples from the main lexemes, *feel* and *sentir-se* combine with non-emotional meanings, or with expressions which have an underlying emotional connotation, as in:

(13.1) 'I feel precisely one hundred years old,' said Sebastian. BH

where Sebastian uses this expression to convey an idea of physical and emotional depression. *Feel* also combines with a fair proportion of comparative constructions to describe situations that are emotional in content, as in:

(13.2) I felt like Lear on the heath, like the Duchess of Malfi bayed by madmen. BH

where a comparison is made to indicate severe distress.

Rather than take too many individual decisions over which examples to include, I decided to exclude some less central examples- like the obviously physical examples of *sensation* and *sensação* - but did not cut any of the examples with the main lexemes *feel* and *sentir*. These lexemes were so central, and presented so many ambiguities, that it seemed a better idea to collect them all and then try and extricate the more salient facts.

13.2.1 The lexicon of Generic lexemes for Emotion

Emotion itself is not a particularly popular word in either language, accounting for 6,6%(E) of the examples recorded for this group in the EC, with 5,9%(P) for *emoção* in the PC. However, the meaning of *emotion* / *emoção* is stable in that it refers largely to generic, undefined, or undefinable emotional circumstances, or to mixed emotions. Although, given a large enough context, one may not need to be a psychologist to deduce the type of emotion felt, *emotion* is often used because the SENSER, or the Speaker, is uncertain how to interpret the general emotional situation.

The most popular lexeme in the EC is *feel*, 51,5%, and, in the PC, it is *sentir-se*, with 55,7%. Their more central meanings are fairly similar, but they differ as to their more peripheral meanings, and, consequently, as to the type of complementation used. *Feel* has a high proportion of more consciously recognized examples, as can be seen by the large number that are complemented by either (THAT) or comparative clauses, 37,5%, whereas similar structures with *sentir-se* are much less frequent, 10,9%. The Portuguese translation of many of the English (THAT) clauses would more easily accept *achar* (similar to *think/find*) than *sentir* as an introductory verb.

In the physical sense, *feel* is usually restricted to perception through touch, and visceral, or internal, reactions. However, *sentir-se* also covers areas which would

normally be translated into English by *hear*, *smell* and, sometimes, *see*. Although Portuguese has perfectly valid specific lexemes for these situations - *ouvir*, *cheirar* and *ver* - , it uses *sentir* to express an almost pre-conscious perception of certain events, as can be seen in the following example:

(13.3) O volume daquele som, que se comunicava com o de milhões de pequenos crótalos de prata que ao mesmo tempo se chocavam entre si pelo efeito da própria vibração, enchia todo o vale, ocupava todo o espaço, como um sólido. Sentia-se, *sem se ouvir*. Si 200 (My italics)

A similar meaning can be expressed by the English *sense*, but the examples are relatively rare.

If one is translating the more psychological uses of the noun *feeling* one will probably use *sentimento*. It is the second most popular item in the PC group, accounting for 11%, and it only specifies the emotion in the syntax of 10% of the examples, a percentage just slightly lower than that for specified examples of *feeling*, 14,6%, and even at the pragmatic level, only about a third of the examples for both lexemes specify the PHENOMENON in the context. The specific examples include emotional situations like *um sentimento fundo, de irreprimível repulsa*, but there are more complex examples such as *sentimento de justiça*. One usage, as a 'social formula', is the phrase *os meus sentimentos* for funerals, similar in meaning to the English *condolences*. The English cognate, *sentiment*, is infrequently used in modern English, and tends to be rather formal, as in:

(13.4) He preserved from collectivisation some discernible part of his personality ; he could not be drawn at moments of sentiment to talk of his girl, his family or his children. SPY

The adjective *sentimental*, in both languages, is more restricted in meaning than the noun and is usually used to describe situations of affection. However, in English, its use often implies a negative assessment of the SENSER's behaviour as showing weakness of character or even silliness.

The next most popular noun in this group in English, *sense*, which often refers to the functions of perception, as qualified by *sight*, *smell* or *feeling*. It can be used generically, particularly in the plural, but all but 13,4%(E) of the 112 examples were complemented by specific nouns. However, although some of these nouns were Emotion words like *joy* and *gratitude*, others were more intellectually orientated, as with *beauty*, *decency* and *innocence*. *Sense* may be used as a SFoc verb, with a meaning comparable to a more psychological or intuitive interpretation of *feel*, as in:

(13.5) At that moment Karl seemed to hear some sound, sense danger; he glanced over his shoulder, began to pedal furiously, bending low over the handlebars. SPY

but the EC produced only 3 examples.

In Portuguese, the noun *sentido*, usually in the plural, is used to refer to the functions of perception which, in English are called the *senses*. However, that is as near as it gets to the semantic field of Emotion, being more frequently translatable by *sense*, when this word implies 'meaning' or 'direction'. As a past participle of *sentir-se*, it can be found on rare occasions, as in;

(13.6) Rezava um acto de contrição mesmo, mesmo sentido. SU 48.

Sensação largely appears in examples where *sensation*, or the more physical interpretation of *feeling*, would be an appropriate translation. However, it can also be used with more psychological examples, such as *sensação de perigo/tristeza*, which in English would be rendered with *sense* or *feeling*.

Passion and *paixão* can both be used generically, but they more often appear in contexts where their meaning is specific, and care should be taken when translating them. The 28 examples of *passion* in the EC divided themselves fairly equally between the generic sense, and the meanings of the Love or Desire and Anger groups, but out of the 141 examples found for *paixão*, 83% had to be classified as strong lexemes in the Liking group, and the remainder were generic. When used generically, both words can appear either in juxtaposition with *emotion/emoção*, or in expressions like *paixões humanas* or *the passions of this earth* which are arguably antiquated versions of the more modern uses of *emotion*.

The less central items in this group have been included to show how emotion is related to mood and temperament. Also, when translating, these peripheral concepts can be confused because of their superficial resemblance as cognates, so it is as well to distinguish between them. For example, *disposition* and *disposição* appear to be cognates but, *disposição* or *disposto* are far more frequently used than *disposition* and *disposed*. This is probably partly because the English lexemes are considered a little old-fashioned, and partly because temper and (*good / bad*) *tempered* would be more suitable modern translations of *disposição* and *disposto* in many cases. The few examples of *disposed* could be translated by *disposto*, but *disposition* would be better rendered by *temperamento*. *Disposição*, on the other hand, is best translated by *mood*.

Mood is used to refer to a person's current state of mind, as it is affected by the emotions, but only a third of the examples were used in a truly generic sense. A few examples, when the context is analysed, refer to positive situations of a less emotional kind, such as *this mood of old friendship* and *autumnal mood*. However, more examples refer to negative situations, as in *her moods of irritable depression* and *a mood of vehement self-reproach*, and the adjective *moody* and its corresponding adverb, *moodily* are used only in negative situations

Humour, in its generic sense, is positively orientated, often qualified by *good*, and the adjectival form is *good-humoured*. The Portuguese *humor*, however, is wider in meaning, covering generic, negative and positive situations, and being equally easily qualified by *bom* or *mau*. For this reason the negative situations are better interpreted by *mood* or *temper* in English.

Both *humour* and *humor* can refer to situations describable as *amusement*, and the link between the two words, particularly in the case of *humour*, is interesting. One could argue that *being amused*, or finding something funny, involves a spontaneous, and sometimes uncontrollable, reaction which is classifiable in the Joy group of Emotion. Perhaps the reason why *amusement* is not normally considered an Emotion lexeme is because the situation it describes would seem to arise from cognitive factors traceable to the situational, social and cultural background of the person involved. However, if, as some believe, emotion involves more cognitive appraisal than was previously supposed, then one could argue a case for reactions caused by this meaning of *humour/humor* to be classified as quasi-emotional, or at least as a causative factor of Joy.

As one moves away from the more central lexemes one comes to those like *sensibility*,

sensitivity and *nerves* in English, and their cognates in Portuguese. Some of these cognates, however, are false. *Sensibility* is restricted to the more psychological capacity to feel Emotion, but the adjective *sensible*, in modern English, is related not to *sensibility* but to *sense* as in *good sense* or *reason*. *Sensitivity* and *sensitive*, on the other hand, cover everything from a capacity for understanding or emotional feeling, through physical feeling, to the behaviour of exceptionally well-tuned machinery.

The modern English *sensible* is usually translatable by *sensato* in Portuguese, but *sensibilidade* and *sensível* have the wider applications of *sensitivity* and *sensitive*. *Sensitividade* and *sensitivo* would seem to be restricted to the more physical senses and rarely used directly of a person. *Nerves* and *nervos* both refer to a general predisposition to irritation, anger or fear, but the singular form in English, *nerve*, seems to be related to *courage*. The adjectives *nervous* and *nervoso* were considered in the context of the Fear group.

Although rather peripheral to Emotion, these lexemes are interesting insofar as they focus both the physical and psychological tendencies of the SENSER to be affected by events which cause emotion. These lexical items show how, for several centuries, folk wisdom has reflected in language the belief that the *senses* / *sentidos* and the *nerves* / *nervos*, whatever the current interpretation of these terms, form a sort of interface between the physical and psychological areas of our perception.

13.2.2 The semantics and syntax of the Generic lexicon

Difficulties in classifying the Generic examples according to PHENOMENON type

Attempts were made to analyse this group using the PHENOMENON types proposed, but they proved rather fruitless, for various reasons. Some of the lexemes, being generic in nature, had been used in the first place to avoid specification of the emotional situation, as in:

(13.7) "You shut up!" she shouted, in a blast upon the mottled majesty of the old lady. The old woman's breast heaved with heaven knows what emotions. VG

or because the Speaker was unsure how to interpret what was happening to the SENSER. At other times generic words combine with an Emotion word, as if to emphasise and specify it, as in:

(13.8) He told me he was experiencing a feeling of unutterable relief, of vengeful elation. LJ

One could find a PHENOMENON for both of these examples in the context, but examples such as:

(13.9) The excuse was so palpably untrue that Castle felt sorry for Daintry. HF

in which the emotion and the PHENOMENON are both clearly stated are not as frequent as one might suppose. Apart from the fact that notions other than emotion were often involved, the reason why it was difficult to assess the underlying PHENOMENON of the more emotional ones was because of the complexity of the physical, emotional and cognitive factors at work, and two or more processes could often be distinguished as PHENOMENA. For instance if one says *I feel miserable*, this may be induced by several factors, i.e. *I am cold and wet* (SENSER's physical state > PH. type 3), *My boyfriend has left me* (affective problem caused by other's behaviour > PH. type 9) and

I realize that I have three miles to walk in the rain (intellectually assessed factor in my world > PH. type 11). And this is a simplistic diagnosis, as most emotions can be seen as due to our psychologists' constellations of stimuli, and this, in effect, tended to lead to a lot of examples being classified as PH. type 1.

The syntax

The principal syntactic feature to be noticed in this group is the special behaviour of the verbs *feel* and *sentir-se*. Besides being the most popular lexemes, they are significant because they do not behave like normal SFoc verbs. They can be used as copula type verbs in SPC structures, and as transitive verbs in SPO structures, and *sentir-se* behaves in other interesting ways.

A problem of copulas and reflexives

Both *feel* and *sentir-se* act as copula-type verbs which can be complemented by nouns, adjectives, past participles and adverbs, as in:

- | | | |
|------------|----------------------------|---------------------------------|
| (13.10) a) | He <u>felt</u> a fraud. | OR <i>Sentiu-se um intruso.</i> |
| b) | He <u>felt</u> happy. | OR <i>Sentiu-se feliz.</i> |
| c) | He <u>felt</u> humiliated. | OR <i>Sentiu-se humilhado.</i> |
| d) | He <u>felt</u> at ease. | OR <i>Sentiu-se à vontade.</i> |

In this sense they obviously focus the Subject because both the syntactic subject and the syntactic complement refer to the Subject. Nearly 40% of the examples for *feel* were of this type, but the same was true of only about 28% for *sentir-se*. Most of these examples took adjective / participle complementation, the EC producing practically no examples of noun complements, and the PC only 14 examples, some of which are arguably adjectival because the noun has no determiner, as in *Ele se sentia homem*. 26% of the examples with *feel* took an adjectival complement, but the past participle complement, with 12,5%, was the most popular with *sentir-se*.

When *feel* and *sentir-se* behave like copulas, it is arguable that, since it is the complement which defines the more generic meaning of the copula, the copula itself is little more than a space-filler. When we say *He is happy*, for example, the verb *be* merely marks a general idea of state, and with *He feels happy* we have a rather more specific notion of Emotion which is also considered a state by such as Quirk et al (1985). There seems to be little to dispute here as far as the majority of examples with *feel* is concerned. It would seem sensible, also, to accept the analysis of *sentir-se* as a copula which, like other verbs described by Vilela (1992 : 77-9), has simply incorporated the reflexive -SE as a lexical, rather than syntactic, part of the verb and is an inherent reflexive. However, I should like to argue that, for *sentir-se*, one can find a semantic gradient between a structure which expresses a simple psychological state, for which the above syntactic explanations are perfectly adequate, and a more process-like, reflexive structure which might account for certain uses of *sentir-se* and several examples of *feel* + -SELF.

If we wish to paraphrase *John is happy*, it is difficult to see how we can do so unless we use Wierzbicka's system [1]. However, if we want to paraphrase *John feels happy*, we can easily say *John feels he [John] is happy* with only a minimal shift in meaning to the idea that John can contemplate his Self, or whichever term one prefers, as being happy. This shift can also be expressed in Portuguese, and it is significant that one has to drop the -SE of *Ele sente-se feliz* to produce *Ele sente que [ele] está feliz*. In this case, the extended sentence is an SPO sentence, the (THAT) or QUE clause acting as

Od. Although the EC produced only one example of feel + -SELF with an adjective:

(13.11) His year of anarchy had filled a deep, interior need of his, the escape from reality, and as he found himself increasingly hemmed in, where he once felt himself free, he became at times listless and morose, even with me. BH

it did produce several examples with past participle constructions, as in:

(13.12) Herbert had felt himself obliged to confide the state of the case to me. GE

(13.13) The family feels itself highly honoured. VG

and:

(13.14) 'No one,' I affirmed, feeling myself swayed by some strange excitement. LJ

a few with adverbials, as in:

(13.15) I felt myself in comparative security. GE

(13.16) He was standing by the table.... feeling himself out of things. VW

and others with -ING clause complementation, as in:

(13.17) Leamas felt himself being picked up by the shoulders.. SPY

(13.28) He took off from the last dry spot, felt himself flying through the air, felt himself without any shock, planted upright in an extremely soft and muddy mudbank. LJ

In the examples with adjectives, participles and adverbials, the -SELF pronoun can be omitted without changing the syntax of the sentence, but it is essential with the -ING clause structures.

The Portuguese corpus also produced a few examples in which *sentir-se* was complemented by an infinitive clause, as in:

(13.19) Ele acudiu, apoderando-se das suas mãos, sentindo-se triunfar. M

(13.20) ... e Elias sente-se gelar diante tanto fatalismo. BA

The English -ING participle clause, described in detail in Quirk et al. (1985:16.42/53/83), does not have an equivalent -NDO construction in Portuguese, but is usually translatable by an infinitive clause. One can therefore suggest, for the present situation, that the English -ING clause after *feel* + -SELF, and the Portuguese infinitive clause after *sentir-se*, are parallel structures. Therefore, one can further suggest that the -SELF / -SE particles are performing some kind of syntactic function as S in relation to the subordinate clause ^[2]. It can, therefore, be interpreted as semantically reflexive because it refers to the S of the sentence which also happens to be the S of the main clause.

One could simply dismiss the examples with the optional -SELF as examples of emphatic usage, or explain them away as vestigial from some older structure, or even

argue that they are signs of an emerging Self consciousness. If there were no structure in Portuguese, and other languages, with a -SE pronoun to point to, one could, no doubt, enjoy speculating. However, the fact that the -SE pronoun exists does allow one to postulate a psychological and semantic degree of reflexivity for the *feel* + -SELF and *sentir-se* examples, even if they cannot be considered true syntactic reflexives. In other words, these examples with *sentir* can be seen as somewhere on the gradient described for *irritar* and *zangar-se*, as discussed in Chapter 7. This interpretation could still use the term of 'reflexivos inerentes', or inherent reflexives, to distinguish these situations from the *wash oneself* or *lavar-se*, or true reflexives. However, instead of using it as a syntactic term to explain the lexical nature of the -SE, one could use it as a semantic term to explain the psychological process inherent in the use of -SE. If, like Halliday (1985 : 111) and the Cognitive psychologists, one would prefer to consider Emotion a cognitive process rather than a passive state, this interpretation is semantically sound.

The examples in English lend themselves to interpretation as SPOC structures, similar to the non-reflexive one below:

(13.21) And here she was, she reflected, feeling life rather sinister again, making Minta marry Paul Rayley; VW

Although not very frequent in either corpus, these examples, and parallel ones in the PC, like:

[13.22) Cada vez amava mais o que é pobre e o que é fraco. Em Santa Olávia, as crianças corriam para ele, dos portais, sentindo-o acariciador e paciente. M 1

allow one to draw a comparison between these structures and the reflexive ones.

As we saw in Chapter 6, the SPOC and SPOA structures are related to the simpler SPO structure on a gradient, and the question, in the PC, is whether to grade SENTIR-SE as a lexically extended copula and call all these sentences either SPC or SPA sentences, or whether they qualify as SPOA and SPOC sentences, structurally related to the SPO of the extended sentence type *John feels he is happy*. Although admitting that there is a gradient of acceptability here, I have opted for the SPOC / SPOA analysis.

Sentir as intransitive, and Feel and Sentir-se and the Passive

One can use *feel* and *sentir* to indicate the simple idea of physically feeling, or sensing, without any PHENOMENON being implied. Examples of this are unusual and the EC produced none for *feel*. The PC produced a few infinitives of this kind and one or two examples like:

(13.23) - Fora de nós não há pequenos nem grandes: há ilusões.
 - Ilusões que sentem e falam.
 - Ilusões, antes, com quem sentimos e falamos. AQ

The Portuguese Passive -SE construction, translatable in this case by either *One could feel X*, or *X + was felt*, accounts for 4,5% of the examples with *sentir*, most of them referring to physical PHENOMENA. It is interesting that the few examples like this in English either appeared as passives with the PHENOMENON acting as S, as in :

(13.23) I was about to ask him what he meant when a sort of preparatory tremor passed over his whole person, as a faint ripple may be seen upon stagnant water even before the wind is felt. LJ

or as normal SPC copular structures with the PHENOMENON acting as S, as in:

(13.24) The air felt cold upon the river, but it was a bright day, and the sunshine was very cheering. GE

There are very few examples on which to base any definitive ideas on this subject in English, and I see no reason to contest the Passive interpretation of the Portuguese -SE structure in these cases.«

Feel and Sentir-se as transitive verbs

The most popular structure in the PC was *sentir*, without -SE, followed by a simple noun as direct object. The more physically orientated examples accounted for 13% of the examples and the more psychological ones about for 44%, making a total of 57%. However, *feel* produced a total of only 22%, 9,5% physical and 12,5% psychological. In both languages these objects were often Emotion nouns, and the more physical examples frequently referred to the body or its parts.

The nouns used are often of a directly emotional nature, such as *distress*, *jealousy* and *pity*, or *alegria*, *desgosto* and *gratidão*. However, there were others of a more intellectual variety, particularly with *feel* where examples such as *injustice* and a *sense of responsibility* were fairly easy to find. *Sentir* provided few such examples, and these, too, had an emotional interpretation, such as *a sua importância no mundo* and *uma fraterna tolerância*. *Sentir*, on the other hand, seemed to favour nouns which referred to the causative aspect of the PHENOMENON, such as *a ameaça duma ruptura*, and the notion of how the SENSER contributes to his/her own emotional situation, as with *a sua incompetência*, an example paralleled by *my deficiencies* with *feel*, although this is a rare use for *feel*.

The generic nouns

One of the most noticeable features of the nouns in this group is the fact that they are often overtly countable. This is more noticeable in the EC, which has the lower percentage of countable nouns with the specific lexemes, 13,6%(E) as against 20,8%(P), because the relative situation is reversed with 54,1%(E) and 41%(P). The non-plural/singular group accounts for similar percentages, 38,8%(E) and 37,4%(P), very similar to the overall average found for both corpora with the specific lexemes. This leaves the non-countable group of generic lexemes with 8,5%(E) and 20,2%(P). Thus, although both corpora show a tendency to count the generic lexemes more than the specific ones, the difference between the EC and the PC is marked by the reversal of positions over countability with generic in relation to specific lexemes. Moreover, those examples with definite articles and possessive pronouns favour analysis as instances or relations, rather than a mass interpretation, when examined in context.

The singular usage obviously occurs with expression like *a feeling / sense of X*, or *um sentimento / uma sensação de X*, so expressions like this, using a definite article instead of an indefinite one, can be fairly safely interpreted as singular too. The plural usage is particularly marked by its Nominal type reference, referring to either the concept in general, or to someone's range of emotional capacities. This is particularly true of the use of *feelings*, of which only 37,6% were specified in the co-text. Some of these were specified by Emotion words like *pity* or *relief*, others by more physically connotated adjectives like *warm* and *sexual*. Both *emotions* and *emoções*, behaved in a similarly general way, and so did *senses* and *sentidos*, and *sentiments* and *sentimentos*. The non-countable examples tended to occur in BEHAVIOUR situations, in expressions like *his*

eyes, glazed with *emotion* or *aquele ar de sentimento e de poesia*.

The generic adjectives, participle and adverbs

The first thing to notice about the adjectives, participles and adverbs is that, even added all together, they account for few of the examples in the generic groups, 11,4%(E) and 10,4%(P), and most of them are associated with the less central lexemes. The adjectives and adverbs in the EC largely refer to behaviour with *passionate/ly*, and a large proportion of those in the PC is taken up with *disposto*. Otherwise the examples with *moved / touched* and *comovido* match each other, and there are others with *sensitive* and *sensível*. In both corpora, *sentimental* has a largely PFoc meaning.

13.2.3 A Linguistic profile of the Generic lexicon

Perhaps the most significant point to be made about these lexemes is that, although they primarily fit into the category of Emotion, they also cover all the mental processes of perception, cognition and affection described by Halliday (1985 : 111), and the states described by Quirk et al. (1985 : 4.29) as intellectual, and of emotion/attitude, perception and bodily sensation. This is particularly true of *feel* and *sentir*, as we have seen. Both appear to be complemented by lexemes of physical, emotional and intellectual types, although to varying degrees, and *feel* was often complemented by (THAT) clauses, in a way which could be substituted by *think*, except that *feel* would suggest intuitiveness, and *think* reason.

The same problem, of course, also applied to the specific Emotion lexemes, but to a lesser degree. This was partly because the generic lexemes usually require further definition by the specific ones, and thus function at one remove from the actual emotion. Linguistically the specific lexemes allow one to distinguish the immediate PHENOMENA more easily and definitely.

There is another interesting point, which may represent a compensating mechanism between the languages, but also suggests that the EC shows a tendency to favour the distancing, or indefinite, factor of the generic lexeme more than the PC. The number of specific examples extracted from the corpora shows the PC with a higher incidence of specific emotion words, 1,47%(P) of all words in the texts, as against 1,24%(E), a variation of 0,23% (or an 8,5% difference) in favour of the PC. Generic examples, however, account for 0,126%(E) and 0,132%(P), a variation of only 0,006% (or a 2,3% difference). One may deduce from this that, although the EC still shows less overall interest in Emotion than other lexical fields, it seems to employ generic lexemes relatively more frequently than the PC.

13.3 The Surprise Group

13.3.1 The lexicon of Surprise

The most important lexemes in the corpora are the cognates *surprise* and *surpreender*, with 48,5% and 35,4% respectively. Lexically they are very similar, although their syntax varies more. After that, the EC is largely composed of examples of *amaze* (19,3%), *startle* (12,4%) and *astonish* (12,1%), the remaining 6 lexemes accounting for only 7,7% between them.

As usual the lexemes are more evenly distributed in the PC, with *espantar* (23,9%), *pasmarse* (13,4%), *assombrar* (11,3%), *admirar* (9,5%), with 5 lexemes accounting for the remaining 6,5%. All the less popular lexemes in both corpora are used as more

extreme expressions of Surprise. However, it is difficult to draw easy correlations between the meanings of the other lexemes, except to say that one roughly grade *startle* > *astonish* > *amaze* and *admirar* > *espantar* > *assombrar* in ascending degrees of strength. However, *startle* and *assombrar* contain traces of Fear not present in the others. *Pasmar* is unusual in that it is more related to behaviour and the type of facial expression best translated by phrases like *he gaped in amazement* or *his jaw dropped in surprise*.

13.3.2 The semantics and syntax of Surprise

The PHENOMENON types

As can be seen in [Table 13.1](#), this is an area in which an exterior PHENOMENON is identified in 82,9%(E) and 86,6%(P) of the cases. PH. type 1 examples are very few, although the PC registers some which result from multiple phenomena. The EC has 16,3% in the 3-5 band, and the PC 7,8%, but type 4 is predominant. In the 6-9 band, type 9 is the most numerous. None of the lexemes stands out as being different from the general tendencies shown in the overall picture.

The SFoc/PFoc ratios of the two corpora are fairly similar, and the same is true of the number tagged for BEHAVIOUR. However, the way in which different parts of speech assume the PFoc or SFoc roles varies considerably. The SFoc items show a similarity, for once, in the percentage of noun forms. Countability is low in this group, being almost non-existent in the EC, and both corpora showing a particularly high level of explicitly uncountable nouns. Complementation is virtually non-existent too, but there are an exceptionally high number of adverbial phrases.

High number of SFoc participles

There is also a high number of SFoc adjectives and past participles, the latter alone accounting for 41%(E) and 26,5%(P) of all examples. The EC adjectives are few, and consist of unusual words like *agog* and *dumbfounded*, and most of the PC ones are of *atónito*. The participles are largely represented by *amazed*, *astonished*, *astounded*, *startled*, *stunned* and, above all, *surprised*, in the EC and by *admirado*, *assombrado*, *espantado*, *pasmado* and *surpreendido*, in the PC. The participles are complemented in 53,3%(E) and 29% (P) of the cases. The number of zero copulas in the PC is lower than usual and there is the high percentage of 25,2% with *ficar*, a small number of examples with both *ser* and *estar*, and a certain variety with other quasi-copulas like *parecer*. The copula situation in the EC is not unusual.

The big difference between the corpora is the fact that whereas the EC has no SFoc verbs the PC boasts 9,1% of them. A few of these are of *admirar* + clausal complementation, but most of them are with *pasmar*. The emotion features of this verb are undoubtedly there, but there is perhaps a stronger element of the behaviour associated with it.

PFoc adjectives and adverbs dominant

The PFoc adjectives + adverbs are the dominant pattern in this area of the EC, accounting for about two-thirds of the PFoc lexemes, most of them occurring with *amazing/ly*, *astonishing/ly*, *startlingly* and *surprisingly*. However, the adjective and adverb forms are rare in the PC, being restricted to *assombrosa/mente*, *espantosa/mente* and *surpreendente /mente*.

Ambivalent PFoc nouns and verbs

Although there is no ambivalence in the adjectival forms, the noun forms which appear as PFoc in both corpora are all ambivalent. This is particularly noticeable with the larger amount of examples in the PC where *assombro*, *espanto*, *pasmo* and *surpresa* are all ambivalent on an overall ratio of 69/64. Only *surprise* is involved in the EC with a 16/50 ratio. The EC seems to show a pragmatic preference for phrases like *It is surprising* over *It was a surprise*, and the PC prefers the opposite structure, *Foi uma surpresa* over *Foi surpreendente*.

The percentage of PFoc verbs is higher in the PC (19,1%) than the EC (8,3%) and the ambivalence of the nouns is reflected in some unusual uses of these verbs. Although in both corpora the main structure is a simple transitive verb with an 'a' type object, 60% (E) and 60,7%(P), the EC has 9 examples in which the existential IT is used, as in *It did not surprise me to find Mr Samgrass*, and the PC produced 5 examples of apparently intransitive examples like *Um pouco de sorte e a Virgem do Pilar por seu lado, e o milagre não era coisa de espantar*. (AQ) There were also 29 examples with -SE of a semi-reflexive type. Many of them were with *admirar* and the ambivalence of this verb is enhanced by the fact that it can function both as an PFoc and as a SFoc one with the meaning of Surprise. The classification of the -SE examples as either PFoc or SFoc is therefore rather arbitrary, although the decision was taken because of the large number of intransitive type ones which suggested that the interpretation of the Self as PHENOMENON was possibly quite valid.

13.3.3 A Linguistic profile of Surprise

This group has several syntactic features in common with the other Emotion lexemes. PFoc participles and adjectives describe the qualities of the PHENOMENON which cause the emotion in the SENSER, and there is the familiar PFoc verb + SFoc past participle combination. There are several cases of ambivalence among the nouns and verbs which indicate the symbiotic relationship between SENSER and PHENOMENON, as well as of -SE verbs which seem to fit with difficulty into either the PFoc or SFoc category. So one can say that, generally speaking, the syntactic behaviour of this area could justify its inclusion among the more central type emotions.

However, the high specificity of the PHENOMENON types belies this apparent centrality. The more central emotions with a similar syntactic profile, like Joy and Distress, have high levels of PH. types 1-5, but Surprise clearly specifies the PHENOMENON, favouring types 9-11, and even the few in band 3-5 tend to be well-specified in context. On the other hand, the fact that the Surprise emotion is easily identifiable from facial expression is confirmed by the high numbers of examples tagged for BEHAVIOUR.

So in a way everyone is right. The emotion theorists who insist on physical symptoms as a proof of emotion are right in accepting Surprise as an emotion. The linguists can point to the syntactic behaviour to justify the description of these lexemes as emotion because of their syntactic patterns. Those who prefer to put emotion down to complex cognitive processes can point to the specificity of the PHENOMENA, and say that it is too cognitive to be emotional. And this brings us back to the problem we have been trying to solve since the beginning - to what extent can the emotions be described as cognitive processes.

13.4 The Desire Group

Desire is not considered to be an emotion by Ortony et al., and they see the desirability or otherwise of something as a variable affecting other emotions. Those who need a universally recognized facial expression of an emotion to justify its inclusion in the list also reject it. Izard (1991) describes facial expressions, which he relates to Interest, which might be understood as expressing the early stages of what is eventually realised as Desire, but he does not consider Desire itself as an emotion. The only list of basic emotions quoted by Ortony et al. (ibid: 27) which includes Desire is that of Arnold (1960). Fridja (1986) also considers that it should not be ignored.

There is a certain element of emotion in Desire in that it expresses a gut reaction rather than a reasoned approach to something. Whether it is sexual desire, a craving for drugs, or the longing of a child for a particular new toy, it is difficult to deny the physical and psychological tension that accompanies it, or the fact that it can lead people to such anti-social behaviour as rape, theft, and other crimes, in order to achieve satisfaction. Although those who choose emotions on the basis of universally observable facial expression do not recognize Desire specifically, there is no doubt that we recognize certain physical indications of this emotion, although they may be part of the more generic symptoms of excitement, expectancy or interest, or be described semi-metaphorically in terms related to the physical appetites of hunger, thirst or sex.

If one were to attempt a definition of Desire, one could describe it as prospect based because the time dimension is definitely focused on the future. In Ortony et al.'s type of classification it would involve EVENTS, AGENTS and OBJECTS, because it can be used with things that happen, the people who cause things to happen, including the SENSER, and a wide variety of objects.

Negation of the lexemes under consideration was frequent, particularly with *want*, but these examples were not analysed because they normally only focused the simple negation of desire or volition to do something^[3]. These examples would have to be examined if the implications of not wanting were to be considered, but I feel it is unnecessary here to examine the non-existence of something which is not even considered a full emotion by most authorities anyhow.

13.4.1 The lexicon of Desire

Although there are several lexemes which can indicate various degrees of Desire, this group is dominated by *want* (65,5%) and *wish* (19,2%) in the EC, and *querer* (77,9%) in the PC. *Desire* and *desejar* only account for 4,9% and 12,8% of the group in their respective corpora. The only other lexemes of any numerical interest are *eager* (3,6%), *inclination* (2,1%), and *long for* (1,9%), in the EC, and *apetecer* (3,3%), *ávido* (1,1%), *cobiça* (1,6%) and *sôfrego* (1,9%) in the PC.

Want and *querer* are near-equivalents, particularly in the most usual sense when they imply volition as much as desire. They differ in their more marginal senses. *Want*, with a person as syntactic Object, is usually a blatant expression of sexual desire, but although *querer*, used in the same way, can mean much the same, it tends to be softer and more related to *love*.

Wish is unusual in that it implies Desire about a hypothetical future and, and takes either the conditional, which tends to express a possibility that the desire may be satisfied, or the subjunctive, which normally implies a near impossible desire. Thus we get, for example:

(13.26) I wish he would come. (Probable implication : he may or may not

come)

(13.27) I wish he were coming. (Probable implication : but he is not coming)

These sentences are difficult to translate as there is no verb in Portuguese which behaves quite like *wish* . Only the context can really tell us whether one needs to translate the first example by:

(13.26) a) *Deus queira que ele venha!*

b) *Oxalá que ele venha!*

c) *Gostaria que ele viesse.*

d) *Queria que ele viesse.*

which express stronger or weaker approximations to the original, but not direct translations. The second example is even more difficult to render, and one can only do interpretative translations like:

(13.27) a) *É pena que ele não venha.*

b) *Gostaria tanto que ele viesse, mas não vem.*

Desire and *desejo* are fairly similar when used in a strong sense. The EC examples use *desire* to express a strong feeling or wish, but it is no longer used in the weaker, more polite, type of phrase, like *What do you desire?* which is decidedly old-fashioned. However, the Portuguese question *O que é que (a senhora) deseja?* is a perfectly normal, polite, modern way of saying *What do you want?*, and is, for example, the cultural equivalent of the *What can I do to help you, madam?* that a superior salesperson might use to a customer in a shop.

The other lexemes describe different ways of Desiring. Apart from those already mentioned, the more central ones, are *hanker* and *long for*, and *anelar* and *ansiar*, which all express a rather more long-standing desire and imply little hope that the desire will be satisfied. The weaker type of Desire lexeme, like *care*, as in:

(13.28) 'Why, don't think about it, Mr Ryder. It was a pleasure,' he said, 'but anything you care to give is useful in a parish like mine.' BH

inclination, as in:

(13.29) Without evincing any inclination to come in again, he there delivered his valedictory remarks. GE

please, as in:

(13.30) 'I prefer not to anticipate my communication here; you will impart as much or as little of it as you please to your friends afterwards; I have nothing to do with that.' GE

and *apetecer*, are useful in situations where it is of social interest to play down too much interest. There are then two groups which are used in quite strong contexts, to refer either to desires which are seen as positive in nature, as with *eager* and *zeal*; or the more negative types of Desire, as with *avid*, *covet*, *crave*, *greed* and *lust*, and *ávido*,

cobiçar, gana(s) and sôfrego.

13.4.2 The semantics and syntax of Desire

The PHENOMENON types and Desire

The influence of *want, wish* and *querer* control the results here. The nature of Desire, and of these verbs in particular, would seem to require that the Object, or PHENOMENON, should always be explicit. Yet there are a small number of PH. type 1 examples, as can be seen in [Table 13.2](#), in both corpora, largely of the *What do you want?*, or *..será o que Deus quiser* type, in which the nature of the PHENOMENON is, by definition, unknown. Others are found with adjectives like *eager, ávido* and *sôfrego* in which the actual PHENOMENON is ill-defined. With *desejo*, the examples are often found in a generalized plural, as in:

(13.31) - Quando me ponho a pensar no que era a minha vida, os meus desejos, as minhas ambições, fico um bocado desconsolada. SU

Otherwise there is a strong tendency towards types 3-5 in both corpora, 48,9%(E) and 57,9%(P), of which most are type 5, to be found with *care to, desire, inclination to, long to, want* and *wish* in the EC, and with *ansiar, apeteecer, desejar* and *querer* in the PC. The PHENOMENON types here match the use of 'b' clauses in the syntax of these examples.

Reference to the Other as the PH. type 6 is found in 4,3% of the examples in both corpora, although these examples are rarely of the kind that imply sexual desire. The difference between the two corpora is to be found in the fact that the EC gives us 19,4% in types 7-9 whereas the PC gives us only 6,1%. However, to balance this the type 11 examples in the EC are far fewer than in the PC. This reflects the fact that the syntax of *want*, and some examples of *wish*, requires a 'c' clause and the reference to the Other's actions is perfectly clear, as in:

(13.32) "She wants this boy to go and play there." GE

The infinitive clause may not be as positive as the normal active voice, but it is not as hypothetical as a conditional or a subjunctive.

With *querer*, however, one has to use 'g' clauses, usually with the Conjuntivo form of the verb in the subordinate clause, and this tends to make it more difficult to distinguish between types 9 and 11. Although type 9 can be attributed quite easily to:

(13.33) Queria que ele viesse para o Ramalhete. M 110

because it refers to a definite person coming to a definite place, despite the hypothetical element introduced by the Conjuntivo, and type 11 to:

(13.34) - Deus queira com efeito que não chova no domingo murmurou Carlos..
M

because the reference is to the hypothetical fact of whether or not it will rain on Sunday, examples such as:

(13.35) - Quer que lhe lavre o assento?- perguntou Isaac, apiedado. AQ

is more difficult to assess as type 9, as no specific person is referred to, merely the act that someone unspecified might perform, making this example more appropriately described as type 11. Similarly, although it might be possible to classify:

(13.36) - *Quero que você seja minha... minha imperatriz!* AQ

as type 7, in which the Other's state is focused, type 11 is perhaps a better interpretation because the overall state of affairs is not simply the Other's state, but the hoped-for fact of the Other belonging to the SENSER. There are several rather fuzzy examples here, and the difference is caused by the syntax which makes it necessary to be more fact-like with *querer*, and more Other-focused with *want*. I do not pretend to have solved them all satisfactorily.

The PH. type 10 examples, in which a non-human object is desired appear in a similar ratio in the corpora. They are not difficult to identify, and it is interesting to see the similarity of the data in the two corpora for these and for those of type 6.

Largely SFoc verbs and nouns

One of the most noticeable things about this group is that it is nearly entirely SFoc, and there are few examples tagged for behaviour. The group was not considered in the overall corpora averages because of the marginal nature of Desire in relation to Emotion but, if it had been included, the data would have been distorted because it would have accounted for 13,8%(E) and 14,8%(P) of all the examples in the corpora

The SFoc verbs are the most important feature of this group, and if these verbs had been included in the overall data for the corpora, the Desire verbs would have made up 42%(E) and 50%(P) of all the SFoc verbs. Although there are a few examples in the EC with *care to*, *covet*, *crave*, *desire*, *hanker for*, *incline to*, *long for* and *please*, the vast majority of the examples are of *want* and *wish*, with 966 and 264 examples respectively. Only 32,3% of the examples with *want* take simple direct objects, with a further 1,9% of the SPOC type. The rest take clausal complementation, 53,3% with 'b' clauses, and 12,5% with 'c' clauses, and nearly all the examples of *wish* take clausal complementation, 30% taking 'b' clauses, 8% taking 'c' clauses, 18,6% taking 'f' clauses, and 35,6% taking 'g' clauses,. There were also a few SPOA and SPOO examples.

In the PC, *anelar*, *ansiar* and *cobiçar* produced a few examples but most of the SFoc verbs were accounted for by *desejar* with 123 examples and *querer* with 1592. With *desejar* 38,2% of the examples took simple noun phrase objects, 43% 'b' clauses, 10% 'g' clauses with the remaining 8,9% being accounted for by a few intransitive examples, -SE pronouns, and prepositional objects. *Querer* took 19,5% type 'a' objects, 62,8% 'b' clauses, 16,6% 'h' clauses and 1,1% intransitive and -SE examples.

The SFoc nouns are most numerous are with *desire*, *wish* and *want*, with a few examples of *eagerness*, *hankering*, *inclination*, *lust*, *yearning* and *zeal*. In the PC, *desejo* accounts for 67,8% of the nouns with few examples of nearly all the other lexemes. In both corpora the tendency is towards countability, a high level of complementation, but few adverbial noun phrases.

The few SFoc adjectives are found with *desirous*, *eager*, *greedy*, *wishful* and *zealous* in the EC, and *ávido*, *cobiçoso*, *desejoso* and *sôfrego* in the PC. Most of the examples in the EC take complementation and over half of those in the PC do too. For such a small number of examples the EC shows a fairly wide selection of copulas but most of the PC ones take the usual zero copula.

The few PFoc lexemes in the EC consist of examples of the adjective *desirable* and some marginal past participle, or passive examples of *want*. The larger number of PFoc examples in the PC is largely due to various forms of *apetecer*, but this is largely because of the unusual behaviour of the verb. Although the PHENOMENON is the Subject of the verb, it rarely appears before the verb. Instead, it appears after the SENSER which, in its turn, nearly always appears in a dative form. There are also a few past participle examples with *cobiçado* and *desejado*, and a few ambivalent adjectives like *ávido* and *sôfrego*.

13.4.3 A Linguistic profile of Desire

If one turns to language usage for clues that might help to solve the problem of whether Desire can be considered an emotion, the most significant aspect to be analysed is the high proportion of SFoc verbs. As we have seen with other groups, like Liking, the use of Active forms of SFoc verbs is a sign of a high degree of conscious evaluation of the emotional processes, and demonstrates positive affirmation of this evaluation. In this sense, the use of a SFoc verb can be seen as usable only when the emotional process has completed the 'appraisal' phase and is at that of 'action readiness'.

The analysis of the PH. types shows up a variety of objects of Desire, from simple noun phrases to complex propositions about the world. This does not necessarily mean that the simpler PHENOMENA are more directly the result of emotional processes than the more complex ones. The emotional strength of *I want a drink*, *I want to pass my exams*, or *I want my son to pass his exams* can only be measured objectively in context. The simplicity of the PHENOMENON merely indicates a simpler cognitive process behind it.

One might well argue that Desire develops from the Appreciation and Liking emotions, because it can often be seen as a consequence of them. Similarly, if one were considering the negative uses of Desire lexemes, and the use of lexemes such as *reluctance*, one could argue that they are the consequences, in part, of the Dislike, or even Distress or Fear emotions. Yet Ortony et Al. see desirability as a variable which influences the Reaction to Events emotions, and this would suggest that the evaluation of desirability, or even of Desire, about the event, precedes rather than succeeds, these emotions. However, the need to argue for such a linear succession of events is not so pressing if one remembers the points that were made in Chapter 1 about the complex processes in the brain, which allow for raw perceptual input to both influence and be influenced by feedback from all the previously stored information in the brain.

Naturally, a girl will be happy if she has a telephone call from a boy only if she wanted a call from that boy. Furthermore, the desire to receive the call may depend on her liking the boy, but it may arise from some quite unrelated fact like some happy-making information she needs which only he can give her, in which case the liking factor is directed at the information and not at the boy. In a situation like this one has an apparently linear chain of events which proceeds from liking to desiring, to receiving and to being happy. One could even continue the chain of events, and say that as the girl was happy, she wanted to celebrate, or she liked the suggestion that they should go to the cinema tomorrow, or various other possibilities which a happy frame of mind can provide.

The net result of this example is to draw attention to the way our emotions are interlinked and to suggest that rather than set linear sequences of emotions, it is more appropriate to talk of the sort of interrelating networks which experts now feel are more suitable for human thought processes. In any case, as far as Desire is concerned,

whether one considers it simply as a variable or as an emotion proper, it would seem to be caught up somewhere in the overall emotional process. Psychoanalysis has shown that desires are often unconscious or subconscious, and under these conditions their contribution to emotion is complex and subtle. However, by the time desires are actually expressed in language, their nature is clearly recognized.

[1] Wierzbicka (1992) in *Cognition and Emotion* describes this type of situation thus:

X is happy

X feels something

sometimes people think like this:

something good happened to me

I wanted this

I don't want other things

because of this, they feel something good

X feels like this

[2] The Portuguese examples could, in fact, be modified to allow a different subject:

.....sentindo o João triunfar.....

Elias sentiu a Maria a gelar perante tanto fatalismo.

This, however, is possibly due rather to the way *sentir*, in these examples, is more like the intuitive *sense* than *feel*. The English examples are distinctly related to physical feeling, and the -SELF particle can only really be substituted by *his body* in these examples. One could, however, construct more physical examples with *sentir*, and more psychological examples with *feel*.

[3] The lexemes *reluctance* and *relutância* were collected but, although they express a definite sense of 'not wanting' and can be found with the copula *feel*, they do not really fit into this group, and to include them would have meant considering other lexemes such as *hesitant*.

CHAPTER 14

COMMENT

- [14.1 General Problems](#)
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- [14.3 The Fragility of Linguistic metalanguage](#)
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14.1 General problems

The Mind/Brain debate of the last few decades and its ancestors, like that on the relationship between Body and Soul, are always fascinating themes with which to work. The emotions are of considerable significance to these discussions, whether they are seen as undesirable manifestations of our closeness to the animals, or welcome signs of our superiority to the machine. They are part of our genetic and cultural heritage, and they are essential to the way we live our lives and contribute to the way our brains work. In an intellectual climate which no longer believes that our thought processes are as linear or as rational as was previously believed, hoped or idealized, the role of the emotions in these thought processes, instead of being relegated to the realm of topics which were so subjective as to be irrelevant, has become the subject of much research and argument. The emotions are now no longer seen as just intuitive, and sometimes illogical, reactions to the world around us. Instead, they are seen to involve complex processes in the brain that defy even the laws of physics as we now understand them.

Another debate that has dominated much of linguistic and philosophical discussion in this century has been the extent to which the phenomenon of human language evolves genetically or experientially. This debate also contemplates the role of language in the way in which our thought processes both condition and are conditioned by the language we use, not just in the here and now, but over periods of evolution and in different cultures. Psychologists have tried to understand the emotions by resorting to examples in language, and linguists and philosophers have turned to psychology to defend their theorization about the language used to describe emotion.

By attempting a multi-level form of linguistic I have tried to show how, even in the limited set of human utterances which form the corpora, certain patterns of linguistic usage emerge. These patterns would seem to both demonstrate how we express whatever reality is felt to exist, as well as suggest the factors, which because of such usage, also point to possible reasons why we conceptualize and, at an academic level, theorize, about the phenomena we call the emotions.

14.2 Linguistic indicators of the Universal / Relativist positions

It may seem to some linguists that I have done little more than go over the well-trodden ground of linguistic universals and language relativism, and come up with the rather obvious conclusion that neither extreme of these two poles of linguistic investigation can be examined independently of the other. However, I hope that, by

using corpora of a certain size, whatever their imperfections, and by concentrating on data taken from language which has actually been used, rather than on data prepared with a view to describing how it can be used, I have at least come nearer to understanding the relevance of the Universalist / Relativist debate.

I would certainly make no claims that the data found in the corpora demonstrates any form of genetic universalism, but the cultural universalism to be found could supply indicators in the search for universalism at the level of human experience. Both languages share more similarities than they do differences, but there are differences, although they are often subtle.

One thing that I hope will be apparent from considering the tension between universalism and relativism between the languages, is that the holistic view I proposed to take of the language of Emotion in the Introduction - allowing for lexical, syntactic, and pragmatic analysis - has been justified. Semantic holism is only ever partial, since total holism would require total knowledge of a language, its historical and cultural contexts, and the way all individuals, including oneself, use that language in context. However, since, according to Fodor and Lepore (1992 : 32), “almost everyone [is now] a meaning holist” and “it is a widely-held view that much of the history of the philosophy of language consists of a failed attempt to make semantic atomism work”, perhaps an attempt at holism, even a very limited one like mine, is at least fashionable.

The degrees of relativity discussed here are rarely very strong, and the reasons for their existence can be attributed to a wide variety of factors. The pragmatic level of language would seem to suggest that different conventions exist as to which type of syntactic structure or lexeme is most frequently used in a specific language. This does not mean that, when they are considered in relation to each other, certain patterns cannot be seen to compensate for different patterns in the other language. However, some of these differences do indicate a genuine difference in semantic focus.

First of all, there is the relatively greater interest in Emotion lexemes shown by the PC, despite the chances that my relative inexperience in the Portuguese lexicon would produce a smaller set of examples. This may be due to a variety of factors, and it may merely mean that the authors of the the PC were more interested in describing emotion situations than those of the EC. However, it may mean that the PC authors preferred to use officially lexicalized Emotion words to describe the emotions, whereas those in the EC preferred the type of metaphorical reference to emotion which was not the object of this study, and which people like Lutz (1987: 292) suggest may be a particular feature of especially American English. An alternative hypothesis could be that the EC authors preferred to use the specific BEHAVIOUR vocabulary, for example *laugh* and *cry*, rather than lexemes of Joy or Distress. This would seem a little less likely, though, as the PC had rather fewer examples of BEHAVIOUR tagged examples with the Emotion lexemes. To insist on this point, therefore, would be simply to assert a greater preoccupation in observation of the Other for the EC authors.

Another point of difference between the corpora is the wider choice of vocabulary offered by the EC. This is a difficult question to discuss, not least because it touches on the sensitive point of the “richness” of a language. However, the most dedicated of Luso-philes should be able to accept the fact that English has been subjected to the influence of both Germanic and Romance vocabulary in a way that Portuguese has not. It is only natural, therefore, that English might have accumulated a wider choice

of lexemes by combining words from both sources, particularly in such a subjective and universally relevant lexical field as that of Emotion. Perhaps the same Lusophiles will take comfort from the fact that the PC authors regularly showed a wider and more imaginative use of the vocabulary at their disposal.

When looking for syntactic relativity, there are two points which have to be considered: the options offered by the syntax of the different languages, and the actual patterns of usage of this syntax in the corpora. As we have seen, although both languages share a lot of similar syntactic rules, there are certain differences, the most significant of which would seem to be the differences in copula usage, with Portuguese offering *estar*, *ser* and *ficar*, where English makes do with *be*; the SE reflexive / passive pronoun, the *ter* + noun instead of *be* + adjective, and less obvious types of focus offered by differences in finite and non-finite clause usage between the languages. These differences would suggest that the prism through which this reality is viewed, such as the positioning of the Senser in relation to the emotional state and processes, allows for a rather different focus.

The tendency of the EC is to favour the SFoc verbs, predicative adjectives and, to a lesser extent, past participles, and that of the PC is to favour the nouns and past participles. The use of SFoc verbs is a clear and conscious affirmation of the SENSER's role in the emotional process and, since the large majority of such verbs are transitive, both SENSER and PHENOMENON are explicit with them. The use of the copula *be* with adjectives and past participles like *afraid* and *happy* would seem to point to an affirmation of the SENSER's emotional state, or even quality.

The PC not only favours fewer SFoc verbs, but a proportionately higher number of them are intransitive or -SE pronoun examples, which would seem to show a certain focus on the emotional processes, rather than on the SENSER / PHENOMENON relationship. This tendency is also reflected in the PC's use of SFoc nouns. Although the nouns are sometimes complemented, they encourage a focus on the emotional process. The option of Portuguese to use *ter* + emotion noun rather than *be* + emotion adjective is just a more explicit separation of the SENSER and the process.

Although the variety of the copulas *ser*, *estar* and *ficar* with Portuguese allows for an interesting theoretical difference of focus between quality, state, and resulting state not easy to achieve simply by using *be* in English, the most interesting factor was the particularly frequent use of the zero copula in the PC. We can consider the emotional situation thus described as running parallel to and affecting some action by the SENSER, emphasising the close connection between the SENSER and the emotion, in rather the same way that using an attributive adjective next to a noun makes them close.

Another noticeable difference is the function of the -SE pronoun in Portuguese. The tiny number of similar examples in English allow at least for the possible existence of a certain reflexiveness in both languages. Whether this phenomenon should be interpreted as a passive, a reflexive or simply as a lexical oddity, will always depend partly on the immediate context in which it appears. However, I believe that, on certain occasions, it can be considered a reflexive, and that these cases reflect expressed conscious involvement of the Self in the emotional process.

Another peculiarity is the liking of English for 'c' type infinitive clause, or non-finite infinitive clauses in which the subject is different from that of the main clause, and usually performs the semantic role of PHENOMENON to the SENSER in the main clause. This situation is nearly always translated into Portuguese using a full -QUE

clause. The English structure tends to emphasize the link between SENSER and PHENOMENON here, but the Portuguese one seems to focus the relation or process rather than the participants.

The PFoc area is larger with the PC and, although there are still more nouns in the PC than the the EC, the most noticeable difference is with the PFoc verbs which are more numerous in the PC. Since these verbs are the most active manifestation of the PHENOMENON's role, even if it is not deliberate, this would show that the increased focus by the PC on the PHENOMENON, already demonstrated by the higher number of PFoc items, is not accidental.

Generally speaking, it would seem, therefore, that the EC attributes rather more interest to the role of the SENSER and the SENSER's state than the PC. The PC, on the other hand, shows rather more interest in the emotional process, and slightly more in the PHENOMENON.

14.3 The Fragility of Linguistic metalanguage

This study also aimed at looking at the linguistic concepts with which we attempt to analyse language and to show how these concepts, too, are only useful insofar as they are relevant. After all, the way they carve up the linguistic world is as arbitrary as the way in which any other set of concepts carves up the world it refers to and, as theoretical constructs, they are only as good as the theory they represent.

The analysis of deep cases and semantic classification of verbs in relation to emotion may be very useful for language analysis, but both traditional grammar and contemporary psychology have influenced not only the names but also the semantic interpretation given to these classifications. Similarly, consideration of the syntactic behaviour of the Emotion lexicon suggests that the notions of stative / dynamic, the Progressive and the Imperative, the Passive - Active gradient, what constitutes a modal verb, the function of copulas, and other 'dummy' verbs, are just a few of the more obvious cases of the fragility of the meta-language we use to describe what we see, or want to see.

14.4 Language and the psychology of the emotions

As we have seen psychologists not only use language to discuss emotion, like everyone else, but they also try and use linguistic tests to try and prove something about the psychology of emotion. In the last few years they have come a long way from viewing emotion as irrational and involuntary, and from analysing it simply in terms of facial expression and physical reaction. There is no longer such a strong distinction made between emotion and mood, and neither are studied as separate from cognition, but rather as essential parts of the cognitive process. Thus we get articles with titles like 'Mood Affects Memory Because Feeling *Are* Cognitions' (Laird: 1991) and 'Neuropsychology and the Cognitive Nature of the Emotions' (Parrott & Schilkin: 1993) arguing that emotion and cognition are inseparable. Ledoux (1993) counters with the separatist argument, but when a heavyweight emotion theorist like Fridja (1993: 381) weighs in with a strong statement like "emotions in all instances involve a process of appraisal, and cognitive appraisal at that", one realizes that the defenders of the 'inseparable' point of view are definitely gaining the higher ground.

I hope I have shown how a re-evaluation of the linguistic meta-language used to describe the behaviour of the language of emotion is needed to accompany the changing concepts in psychology. Using the SENSER / PHENOMENON distinction,

I have tried to show how, both theoretically and at the level of the evidence from the corpora, the PHENOMENON must be seen as dependent on the SENSER, and very rarely as acting independently. If one views the PHENOMENON in this way, it is difficult not to come to the conclusion that it results from some sort of cognition or mental process. The distinction made between verbs of perception, emotion and cognition is perfectly legitimate, and one can demonstrate degrees of difference between them, but the most interesting point that should be made is the extent to which they are similar, and how the the borders between the linguistic areas are decidedly fuzzy.

Perception focuses on the exterior object as it is perceived sensorially, but emotion and cognition combine in the appraisal process of this object in a way which then leads to some kind of action or statement. The most obvious indicator of this to be found in the corpora is the way the PHENOMENON is more often than not explicit at a linguistic level. However, as we have seen, the different emotions vary considerably as to the type of PHENOMENON they attract, and this, and the fact that they also vary in the extent to which they are SFoc or PFoc, draws further attention to the fact that some emotions are more “emotional” than others.

If one is looking for central type emotions which focus largely on the SENSER's state rather than cognitive processes, Joy and Distress would be one's first choices, followed by Fear and Anger. These four emotion groups are accepted by all emotion theorists, yet the linguistic evidence is that the strong emotions are often more thoroughly processed cognitively than the weaker moods. Simply to argue, Jamesian fashion, that the emotion is only identified in words after the event, is, as we have seen, no longer considered an acceptable explanation.

The Liking and Dislike groups pose several problems. Everyman tends to regard them as the most typical of emotions, whereas the theorists tend to classify them as less emotional and more cognitive. They are decidedly SFoc, but they nearly always demand an expressed PHENOMENON. Although they may be seen as the result of complex cognitive processes, these factors are often buried in the unconscious. Besides this, they seem to condition several of the other emotions, and must work in conjunction with or even precede them.

Hope is seen to be closely linked to the more intellectual side of the spectrum, and yet the status of Hope as an emotion is justified in part by the general rather undirected state of *hoping*. However, it would seem that some pragmatic notion of correctness or politeness interferes in the degrees to which English and Portuguese express a similar future-directed wish by means of *hoping*, *expecting*, *wanting* and *liking*, and the Portuguese words that can be used to translate them.

The remaining Emotion groups were all rather smaller, and most of them turned out to be cognitively complex, with fairly complex scenarios which included influence from social as well as more personal factors. The two lexical groups which Ortony et al. preferred to consider as variables rather than emotions, Surprise and Desire, should also be considered in any approach to emotion. Ortony et al.'s classification, although attractive, is not foolproof, and could probably be improved.

14.5 Will Artificial Intelligence ever experience emotion?

Eça de Queiroz, through Carlos da Maia^[1], voices the belief that the curse of Satan is that he is unable to love, when he says *Sou um impotente de sentimento, como Satanás ... Segundo os padres da Igreja, a grande tortura de Satanás é que não pode*

amar. ^[2] There is also the age-old myth in our collective unconscious that shows lack of love as a curse, as when the monster, beast or frog in the fairy tale needs the love of the princess to regain his human status. Some would now argue that love is what distinguishes us, not from Satan, but from our robot. The question is - do we want our robot to be kissed by the fairy princess, or AI experts, and become human?

If there is now little doubt that emotion is inextricably bound up with cognition, it follows that if we aim to produce intelligent robots, whether or not they can be given consciousness, some attempt must be made to teach them something about the emotions. Although I believe it will be extremely difficult to produce a human-like robot, I hesitate to say such a thing will never exist. I remember reading Huxley's (1932) *Brave New World* thirty years ago and I was not alone in believing then that, although imaginative, it was still safely in the realms of science fiction. Nowadays, as one of the burning questions in the media is whether legislation should be brought in to prevent some entrepreneurial genetic scientist starting a Design-a-Child agency, I hesitate to say that future generations will never see a version of Lieutenant Data.

Therefore I prefer to say that once - rather than if - artificial intelligence can use language, there is no reason why it cannot be taught how to use emotion words correctly in the appropriate context. At the level of Searle's Chinese room type of non-consciousness, there is reason to believe that a robot will eventually be able to master the rules and regulations of language enough to be able to convince many people that it understands what it is saying. At this stage, the use of the words of emotion will constitute just another semantic field in the robot's vocabulary but, unless some bright programmer deliberately sets out to make the robot able to convince people that it has emotions, it is unlikely that its application of emotional language will go much beyond stating programmed information about people, and the social formulae which often employ this lexicon. However, whether the robot can ever become conscious depends very much on what we manage to find out about consciousness, and that problem is very much more complex than the linguistic one.

Let us, however, take a quantum leap and imagine that consciousness can be produced in our robots. What purpose will it serve to produce more than the elementary emotions needed to aid cognition in our robot? Presumably a suitable form of fear might aid its self-preservation. Perhaps liking for its controller and dislike for the controller's enemies might be an advantage, but surely, we could provide for it to build another version of itself without getting involved with love. It might also be flattering if it had pride in its controller's achievements, but not very desirable for it to be too proud of its own. However, if the emotions are the essence of consciousness, as many now believe, how conscious should we make our robot?

I use the word *controller* for a simple reason. Since it is highly unlikely that even the strongest AI enthusiast will want to produce a machine which will dominate its human creator, the obvious role for the future robot would seem to be that of servant to its human master / mistress. Now, since history has proved that the big problem of the master-slave relationship is that, to the chagrin of the dominant element, the subordinate element has opinions and feelings of its own, it would seem foolhardy, at the moment when the possibility of creating an ideal, non-human, conveniently intelligent, all-purpose, but docile and obedient slave finally exists, to then go and spoil it all by giving it those troublesome human characteristics of complex emotions, opinions and Self-hood.

Perhaps I am cynical, but I suggest that although we might teach our robot how to use emotion language when appropriate, and supply it with some form of elementary

consciousness and emotions, for its own peace of mind we should limit its ability to ask too many questions about the meaning of words, life or whatever. If we decide to go any further along the road to consciousness, Design-a-Child would need to join forces with Design-a-Robot and become Design-a-Personality, an area where distinctions between human and robot would become difficult to establish. However, I am not over-worried we shall ever have to take these decisions - unless, in the meantime, we evolve into God.

[\[1\]](#) In *Os Maias* p. 151.

[\[2\]](#) Translation - p.135. "I'm sentimentally impotent like Satan. According to the Fathers of the Church, the great torture of Satan is that he is unable to love".

BIBLIOGRAPHY

- Aguilar, Rafael Cano. 1981. *Estructuras Sintácticas Transitivas en el Español Actual*. Madrid: Gredos.
- Alatis, James E. (ed.) 1968. *Report of the Nineteenth Annual Round Table Meeting on Linguistics and Language Studies*. Washington: Georgetown University Press.
- Allen, Cynthia L. 1986. 'Reconsidering the history of like'. *Journal of Linguistics* vol. 22, no. 2: 375-410.
- Allerton, D.J. 1982. *Valency and the English Verb*. London and New York: Academic Press.
- Altman, Joseph. 1978. 'Three Levels of Mentation and the Hierarchic Organization of the Human Brain'. In Miller and Lennenberg (eds.), 87-110.
- Anderson, John M. 1971. *The Grammar of Case: Towards a localistic theory*. Cambridge: Cambridge University Press.
- Andrews, Avery. 1985. 'The major functions of the noun phrase'. In: Shopen, Timothy (ed.). 1985. Vol. I, 62-154.
- Argyle, Michael. 1988. *Bodily Communication*. 2nd edition. London: Methuen.
- Aristotle. *Ethics*. 1953. Translated by J.A.K. Thomson. Harmondsworth: Penguin Books.
- Arnold, M. B. (ed.) 1960. *Emotion and Personality*. New York: Columbia University Press.
- Asimov, Isaac. 1968. *I, Robot*. London: Panther Books.
- Atkins, Sue, Clear, Jeremy, and Ostler, Nicholas. 1992. 'Corpus Design Criteria'. In *Literary and Linguistic Computing* Vol. 7. No. 1, 1-16.
- Austin, J.L. 1962. *How To Do Things With Words*. Oxford: Clarendon Press
- Austin, J.L. 1963. *Performative-Constatative*. In Searle, 1973.
- Averill, James R. 1989. 'Principia Pathematica: A Rose by another Name'. In *Cognition and Emotion*, Vol. 3 Issue 3, 241-252. Hove and London: Lawrence Erlbaum Associates.
- Bach, E. and Harms, R.T. (eds.) 1968. *Universals in Linguistic Theory*. New York: Holt Reinhart.
- Bach, Emmon W. 1980. 'In Defense of Passive'. In *Linguistics and Philosophy*, Vol. 3 3, 297-342.
- Badcock, Christopher. 1992. *Essential Freud*. 2nd ed. Oxford: Blackwell.
- Ballesteros, Margarita Porroche. 1988. *SER, ESTAR y Verbos de Cambio*. Madrid: Arco/Libros, S.A.
- Ballmer, Th and Brennenstuhl, W. 1981. *Speech Act Classification*. Berlin, Heidelberg, New York: Springer-Verlag.
- Barfield, Owen. 1953. *History in English Words*. London: Faber.
- Barlow, Horace. 1987. 'The Biological Role of Consciousness'. In Blakemore and Greenfield (eds.), 361-376.
- Beaugrande, Robert de. 1980. *Text, discourse and Process*. London: Longman.

- Beedham, Christopher. 1982. *The Passive Aspect in English, German and Russian*. Gunter Narr Verlag: Tübingen.
- Bendix, E.H. 1966. *Componential Analysis of General Vocabulary: The Semantic Structure of a set of verbs in English, Hindi and Japanese*. Bloomington: Indiana University. The Hague: Mouton and Co.
- Benveniste, E. 1966. *Problèmes de linguistique générale*. Paris: Gallimard.
- Bernstein, Basil. 1971-74. *Class codes and control*. 3 vols. London: Routledge and Kegan Paul.
- Bever, Thomas G., Carroll, John. M., and Miller, Lance A. (eds.) 1984. *Talking Minds*. Cambridge, Mass: M.I.T.
- Blakemore, Colin and Greenfield, Susan (eds.) *Mindwaves* 1987. Oxford: Basil Blackwell.
- Bloomfield, L. 1936. 'Language or Ideas?' In Katz, 1985, 19-25.
- Bolinger, Dwight. 1977. *Meaning and Form*. London and New York : Longman.
- Bolinger, Dwight 1984. 'Surprise'. In Raphael, Raphael And Vadovinos (eds.), 45-58
- Boas, Franz. 1940. *Race, Language and Culture*. New York and London: The Free Press.
- Bowlby, John 1973. *Separation - Anxiety and Anger. Attachment and Loss*. Vol. II. London: The Hogarth Press.
- Bowlby, John 1974. *Attachment. Attachment and Loss* Vol.I. London: The Hogarth Press.
- Bresnan, Joan. (ed.) 1982. *The Mental Representation of Grammatical Relations*. London And Cambridge, Massachusetts: The MIT Press.
- Bunge, M. 1977. 'Emergence And The Mind'. *Neuroscience*, 2: 501-9.
- Busse, Winfried, and Vilela, Mário. 1986. *Gramática de Valências: esboço de apresentação e aplicação ao português*. Coimbra: Livraria Almedina.
- Cardoso, Miguel Esteves 1988. *Os Meus Problemas*. Lisboa: Editora Assírio e Alvim.
- Carvalho, José G. Herculano de. 1984. *Pequena Contribuição à História da Linguística*. Coimbra: Coimbra Editora.
- Carvalho, Martine Dreneau Rebelo de. 1986. *Contribuição para o Estudo sintático-semântico dos verbos SER, ESTAR e ANDAR - Auxiliar*). Tese de Mestrado. Porto: Universidade do Porto.
- Casteleiro, João Malaca. 1981. *Sintaxe Transformacional do Adjectivo*. Lisbon: INIC.
- Chafe, Wallace L. 1970. *Meaning and the Structure of Language*.. Chicago: University of Chicago Press.
- Chatterjee, Ranjit 1985. 'Reading Whorf through Wittgenstein'. In *Lingua* Vol. 67. No. 1 September, 1985.
- Chomsky, Noam. 1957. *Syntactic Structures*. The Hague: Mouton
- Chomsky, Noam. 1964. 'Current Issues in Linguistic Theory'. In Fodor and Katz. (eds.) 1964, 50-118.
- Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, Mass.: The M.I.T. Press.

- Chomsky, Noam 1972. *Language and Mind*. Enlarged edition. New York: Harcourt Brace Jovanovich, Inc.
- Church, Frank, and Gale, William. 1991. 'Concordances for Parallel Texts'. In Proceedings of *Using Corpora* Conference, 40 - 62
- Churchland, Patricia Smith. 1986. *Neurophilosophy - Towards a Unified Science of the Mind/Brain*. Cambridge, Massachusetts / London, England: The MIT Press.
- Clark, Stephen. 1987. 'The Description and Evaluation of Animal Emotion'. In Blakemore and Greenfield (eds.), 139 -147.
- Cole, Peter, and Morgan, J.L. (eds.) 1975. *Syntax and Semantics. Vol. 3. Speech Acts*. New York: Academic Press.
- Cole, Peter, and Sadock, Jerrold M. 1977. *Syntax and Semantics. Vol 8. Grammatical Relations*. New York: Academic Press.
- Collins Cobuild English Grammar. 1990. London: HarperCollins
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Comrie, Bernard, 1985. *Tense*. Cambridge: Cambridge University Press.
- Cook, Walter A., S.J. 1979. *Case Grammar: Development of the Matrix Model (1970 - 1978)*. Georgetown: Georgetown University Press.
- Cooper, David E. 1973. *Philosophy and the Nature of Language*. London: Longman.
- Coseriu, E. 1962. *Teoría Del Lenguaje Y Lingüística General*. Madrid: Gredos.
- Coseriu, E. and Geckeler, H. 1974. 'Linguistics and Semantics'. In Sebeok, 1974, 103-171.
- Crystal, David. 1971. *Linguistics*. Harmondsworth: Penguin Books Ltd.
- Crystal, David 1987. *The Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.
- Cuesta, Pilar Vazquez, and Luz, Maria Albertina Mendes da. 1971. *Gramática da Língua Portuguesa*. Lisbon: Edições 70
- Cunha, Celso and Cintra, Lindley. 1984. *Nova Gramática do Português Contemporâneo*. Lisbon: Edições Sá de Costa.
- Damasio, António R, and Damasio, Hanna. 1992. 'Brain and Language'. In *The Scientific American*, September, 1992, 62-71.
- Damasio, António. 1994. *Descartes Error*. London: Picador.
- Darwin, C.R. 1872. *The Expressions of Emotions in Man and Animals*. London: Murray.
- Davitz, Joel R. 1969. *The Language of Emotion*. New York and London: Academic Press.
- Descartes, R. *Les Passions de L'Ame*. Philosophical Writings : a Selection Translated and edited by Elizabeth Anscombe and Peter Geach. 1952. London.
- De Sousa, Ronald. 1990. *The Rationality of Emotion*. Cambridge, Mass.: The M.I.T. Press.
- Dik, Simon C. 1981. *Functional Grammar*. Dordrecht: Floris.
- Downing, Angela and Locke, Philip. 1992. *A University Course in English Grammar*. New York and London: Prentice Hall.

- Dowty, David R. 1979. *Word Meaning and Montague Grammar*. Dordrecht/Boston/ London: D.Reidel Pub. Co.
- Eccles, Sir John. 1987. 'Brain and Mind, Two or One?' In Blakemore and Greenfield (eds.), 293 - 306.
- *The Economist*. 'Looking at inner landscapes'. 3rd July 1993.
- Eibl-Eibesfeldt, I. 1971. *Love and Hate*. London: Methuen.
- Ekman, P., Friesen, W.V., and Ellsworth, P. 1972. *Emotion in the Human Face*. Elmsford, N.Y.: Pergamon Press.
- Ekman, Paul (ed.) 1982. *Emotion in the Human Face*. 2nd edition. Cambridge: Cambridge University Press.
- Farrell, Brian. 1987. 'Psychoanalytic Explanatiion, with special reference to Historical Material'. In Blakemore and Greenfield (eds.), 89 - 105.
- Fernando, Chitra. 1989. 'The Emotions and their Linguistic Expression: Joy and Grief'. In Working Papers of the Speech, Hearing and Language Research Centre, School of English and Linguistics, Macquarie University, Sydney.
- Fillenbaum, Samuel, and Rapoport, Amnon. 1971. *Structures in the Subjective Lexicon*. New York and London: Academic Press.
- Fillmore, Charles J. 1968. 'The case for Case'. In Bach and Harms (eds.), 1 - 88.
- Fillmore, Charles J. 1971. 'Some Problems for Case Grammar'. In: O'Brien, R. (ed.) *Report of the Twenty-Second Annual Round Table Meeting on Linguistics and Language Studies*, 35-56. Washington.
- Fillmore, Charles J. 1977. 'The Case for Case Reopened'. In Cole and Sadcock (eds.), 59 -81
- Firth, R. 1936. *We, the Tkopia, Kinship in Primitive Polynesia*. Boston.
- Fisiak, Jacek (ed.) 1980. *Theoretical Issues in Contrastive Linguistics*. Amsterdam: John Benjamins B.V.
- Flanagan, Owen J. Jr. 1985. *The Science of the Mind*. Cambridge, Mass.: M.I.T. Press.
- Fodor, Jerry A. 1985. 'Some notes on what Linguistics is about'. In Katz, 1985, 146-160.
- Fodor, Jerry A. and Katz, Jerrold J. (eds.). 1964. *The Structure of Language: Readings in the Philosophy of Language*. New Jersey: Prentice-Hall Inc.
- Fodor, J. and Lepore. E. (eds.) 1992. *Holism - a shopper's guide*. Oxford, U.K. and Cambridge, U.S.A: Blackwell
- Frank, Robert H. 1988. *Passions within Reason*. New York and London: W.W. Norton and Co.
- Freud, S. 1953. *Beyond the Pleasure Principle*. (English Collected works). London.
- Frijda, Nico H. 1986. *The Emotions*. Cambridge: Cambridge University Press.
- Frijda, Nico. H. 1987. 'Comment on Oatley and Johnson-Laird's "Towards a Cognitive Theory of Emotions"'. In *Cognition and Emotion* Vol 1, Issue 1, 51-58. Hove and London: Lawrence Erlbaum Associates.

- Frijda, Nico H. 1993. 'Appraisal and Beyond'. In *Cognition and Emotion* Vol. 7, Issues 3 and 4, May/July, 225 - 232.
- Frijda, Nico H. 1993. 'The Place of Appraisal in Emotion'. In *Cognition and Emotion* Vol. 7, Issues 3 and 4, May/July, 357 - 388.
- Frisch, K. von. 1967. *The Dance Language and the Orientation of Bees*. Cambridge, Mass: Belknap Press.
- Gardner, Howard. 1987. *The Mind's New Science*. New York: Basic Books, Inc.
- Gardner, R.A. and Gardner, Beatrice T. 1969. 'Teaching sign-language to a Chimpanzee'. In *Science*, Vol 165, 664-672.
- Geckeler, Horst. 1971. *Semántica Estructural y Teoría del Campo Léxico*. Madrid: Editorial Gredos.
- Goodall, Jane. 1964. 'Tool-using and Aimed Throwing in a Community of Free-living Chimpanzees'. In *Nature*, Vol. 201, 1264-1266.
- Gordon, Ian E. 1989. *Theories of Visual Perception*. Chichester and New York: John Wiley and Sons.
- Greenberg, J. (ed.). 1963. *Universals of Language*. Cambridge, Mass.: M.I.T. Press.
- Gregory, Richard 1987. 'In Defence of Artificial Intelligence'. In Blakemore and Greenfield (eds.), 236-243 .
- Greimas, A. 1965. *La Sémantique Structurale*. Paris: Larousse.
- Greimas, A. 1970. *Du Sens: Essais Sémiotiques*. Paris: Seuil.
- Grice, H.P. 1973. 'Utterer's Meaning, Sentence Meaning, and Word Meaning'. In Searle, 1971, 54-70.
- Grice, H.P. 1975. 'Logic and conversation'. In Cole and Morgan. (eds.) *Syntax and Semantics* Vol. 3. New York: Academic Press.
- Gross, M. 1975. *Méthodes en syntaxe. Régimes des constructions complétives*. Paris: Herman.
- Haan, Pieter de. 1991. 'TOSCA and beyond'. In Proceedings of the *Using Corpora* Conference, 92-109.
- Hacker, Peter 1987. 'Languages, Mind and Brain'. In Blakemore and Greenfield (eds.), 485-506.
- Halliday, M.A.K. 1967. 'Notes on transitivity and theme in English: Part 1'. In *Journal of Linguistics* 3. 37-81. and : Part II. *Journal of Linguistics* 3. 199-244.
- Halliday, M.A.K. 1969. 'Types of Process'. In Kress, G. (ed.) 1976, 159-173.
- Halliday, M.A.K. 1973. *Exploration in the Functions of Language*. London: Edward Arnold.
- Halliday, M.A.K. and Hasan, Ruqaiya. 1976. *Cohesion in English*. Longman. London.
- Halliday, M.A.K. 1979. *Language as Social Semiotic*. London: Edward Arnold.
- Halliday, M.A.K. 1984. *An Introduction to Functional Grammar*. London: Edward Arnold.
- Harland, Mike. 1992. 'Structuring hypertext: a modern language teaching example'. In Proceedings of the ALLC-ACH Conference, 31 - 3.
- Harris, Roy 1987. 'The Grammar in Your Head'. In Blakemore and Greenfield (eds.), 507-516.

- Harris, Roy. 1990. *Language, Saussure and Wittgenstein*. London and New York: Routledge.
- Hartmann, R.R.K. 1980. *Contrastive Textology*. Heidelberg: Julius Groos Verlag.
- Hartmann, R.R.K. 1989. 'Lexicography, Translation and the So-Called Language Barrier'. In Snell-Hornby and Pöhl, (eds.). 1989, pp. 9-18.
- Helbig, Gerhard. 1983. *Valenz - Satzgeider - semantische Kasus - Saltmodelle*. Leipzig.
- Hillman, James 1971. see Von Franz and Hillman.
- Hockstra, Teun, Hulst, Harry van der, and Moortgat, M. (eds.) 1980. *Lexical Grammar*. Dordrecht, Holland: Foris Publications.
- Hohman, G.W. 1966. 'Some effects of spinal cord lesion on experienced emotional feelings'. *Psychophysiology*, 3, 143-5.
- Holland, Dorothy and Quinn, Naomi. 1987. *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press.
- Humboldt, Wilhelm von. 1838 /1988. *ON LANGUAGE - The Diversity of Human Language-Structure and its Influence on the Mental Development of Mankind*. Tr. Peter Heath. Intro. Hans Aarsleff. Cambridge: Cambridge University Press.
- Humphrey, Nicholas. 1987. 'The Inner Eye of Consciousness'. In Blakemore and Greenfield (eds.), 377 - 382.
- Hundert, Ed. 1987. 'Can Neuroscience Contribute to Philosophy?' In Blakemore and Greenfield (eds.), 407 - 430.
- Huxley, Aldous 1932. *Brave New World*. Harmondsworth ': Penguin Books.
- Izard, Carroll E. 1991. *The Psychology of Emotions*. New York and London ': Plenum Press.
- Jackendoff, Ray. 1985. *Semantics and Cognition*. Cambridge, Mass ': The MIT Press.
- James, Carl. 1980. *Contrastive Analysis*. Harlow ': Longman
- James, W. 1884. 'What is an Emotion?' *Mind*, 9, 188-205.
- Johnson-Laird, Philip 1987. 'How Could Consciousness Arise from the Computations of the Brain?' In Blakemore and Greenfield (eds.), 247-258.
- Johnson-Laird, Philip 1988. *The Computer and the Mind*. London: Fontana Paperbacks.
- Johnson-Laird, P.N. and Oatley, Keith. 1989. 'The Language of Emotions: An Analysis of a Semantic Field'. In *Cognition and Emotion* Vol. 3. Issue 2, 81-123. Hove and London: Lawrence Erlbaum Associates.
- Jung, Carl G. 1964. *Man and his Symbols*. London: Aldus Books Ltd.
- Jung, Carl G. 1971. *Psychological Types*. London: Routledge. (Translated from the original *Psychologische Typen*, 1921).
- Jung, Carl. G. 1991. *O Eu e o Inconsciente*. Petropolis, Brazil: Editora Vozes Lda. (Translated from the original *Die Beziehungen dem Ich und dem Unbewussten*, 1971, Walter Verlag, AG, Olten.)
- Kahn, Charles H. 1973. *The Verb 'BE' in Ancient Greek*. In Verhaar 1973. part 6.

- Kahn, Charles H. 1986. 'Retrospect on the Verb TO BE and the Concept of Being'. In Knuutilla, S. and Hintikka, J. (eds.).
- Katz, J.J. and Postal, P.M. 1964. *An Integrated Theory of Linguistic Descriptions*. Cambridge, Mass.: M.I.T. Press.
- Katz, Jerrold J. 1984. An Outline of Platonist Grammar. In Bever, Carroll and Miller, (eds), 17-48.
- Katz, Jerrold J. (ed.). 1985. *The Philosophy of Linguistics*. Oxford: Oxford University Press.
- Katz, Jerrold J. 1990. *The Metaphysics of Meaning*. Cambridge, Mass: The MIT Press.
- Keenan, Edward L. 1980. 'Passive is Phrasal (not Sentential or Lexical)'. In Hockstra, Hulst and Moortgat (eds.). 1980.
- Keenan, Edward L. 1985. Passive in the world's languages. In Shopen (ed.). 1985, 243-281.
- Kenny, Anthony. 1963. *Action, Emotion and Will*. London and Henley: Routledge and Kegan Paul Ltd.
- Kenny, Anthony. 1973. *Wittgenstein*. Harmondsworth: Penguin.
- Kleinginna, P.R. Jr., and Kleinginna, A.M. 1981. 'A categorised list of emotional definitions, with suggestions for a consensual definition'. In *Motivation and Emotion* 5,4, 345-79.
- Knuutilla, S. and Hintikka, J. (eds.). 1986. *The Logic of Being*. Dordrecht/Boston: D.Reidel Publishing Co.
- Krebs, John 1987. 'The Evolution of Animal Signals'. In Blakemore and Greenfield (eds.), 163 - 174.
- Kress, Gunther (ed.). 1976. *Halliday: System and Function in Language*. Oxford: Oxford University Press
- Kuiken, Don (ed.). 1991. *Mood and Memory*. Newbury Park: Sage Publications.
- Kundera, Milan. 1984. *The Unbearable Lightness of Being*. (Translated from the Czech by Michael Heny Heim). London, Boston: Faber and Faber.
- Lado, Robert. 1957. *Linguistics across Cultures*. Ann Arbor: The University of Michigan Press.
- Laird, James D. 1991. 'Mood Affects Memory Because Feelings Are Cognitions'. In Kuiken (ed.) 1991, 33 - 38.
- Lakoff, George. 1966. 'Stative verbs and adjectives in English'. The Computation Laboratory of Harvard University, Report No. NSF-17, 11-116.
- Lakoff, George 1971. 'On Generative semantics'. In Steinberg, and Jakobovits, 1971, 232-96. Cambridge: Cambridge University Press.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George and Kôvecses, Zoltán. 1987. The cognitive model of anger inherent in American English. In Holland and Quinn, 195-221.
- Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar*. Volume I. Stanford, California: Stanford University Press.
- Langacker, Ronald W. 1991. *Foundations of Cognitive Grammar*. Volume II. Stanford, California: Stanford University Press.

- Langendoen, D.T. and Postal, P.M. 1985. 'Sets and Sentences'. In Katz 1985, 227-248.
- Leborans, Maria Jesus Fernández. 1977. *Campo Semántico y connotación*. Madrid: Cupsa Editorial.
- Ledoux, Joseph E. 1993. 'Cognition versus Emotion, Again - this time in the Brain : A Response to Parrott and Schulkin'. In *Cognition and Emotion* Vol. 7, Issue 1, January, 61-64.
- Leech, Geoffrey N. 1983. *The Principles of Pragmatics*. London and New York: Longman.
- Lehrer, Adrienne. 1974. *Semantic Fields and Lexical Structure*. Amsterdam and London: North Holland Pub. Co.
- Levinson, Stephen C. 1983. *Pragmatics*. London and New York: Cambridge University Press.
- Lewis, C.S. 1936. *The Allegory of Love*. London: Oxford University Press.
- Lorenz, Konrad. 1952. *King Solomon's Ring*. London: Methuen and Co. Ltd.
- Lounsbury, F.G. 1955. *The Varieties of Meaning*. Washington: Institute of Languages and Linguistics.
- Lounsbury, F.G. 1956. 'A semantic analysis of the Pawnee Kinship usage'. *Language*, 32 (1): 158-94.
- Luján, Marta. 1980. *Sintaxis y Semántica del adjetivo*. Madrid: Ediciones Cátedra, S.A.
- Luján, Marta and Hennessy, Fritz (eds.). 1976. *Current Studies in Romance Linguistics*. Washington D. C. 20057: Georgetown University Press.
- Lutz, Catherine. 1987. 'Goals, events, and understanding in Ifaluk emotion theory'. In Holland and Quinn, 290 - 312.
- Lutz, Catherine A. 1988. *Everyday sentiments on a Micronesian atoll and their challenge to Western theory*. Chicago: Chicago University Press.
- Lyons, John. 1968. *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- Lyons, John. 1977. *Semantics*. Cambridge: Cambridge University Press.
- Magee, Bryan et al. 1978. *Men of Ideas*. London: BBC Books.
- Magee, Bryan. 1987. *The Great Philosophers*. London: BBC Books
- Maia, Ângela Rosa Pinho da Costa. 1990. *Teorias e Modelos da Emoção. Estudos Experimentais sobre a Relação entre a Tristeza e o Reconhecimento Verbal numa Tarefa de Atenção Selectiva*. Dissertação de Mestrado. Universidade do Porto.
- Maia, Belinda M. H. S. 1986. *FAZER - DO - MAKE : Análise Contrastiva - Aspectos Lexicais, Sintácticos, Semânticos e Textuais*. Dissertação de Mestrado. Universidade do Porto.
- Maia, Belinda M. H. S. 1988a. 'Tense and Aspect in English and Portuguese'. In: *Actas do 1º Encontro Nacional sobre o Ensino de Línguas Vivas na Universidade Portuguesa*. 255 - 271. Lisboa. Faculdade de Letras.

- Maia, Belinda M. H. S. 1988b. 'Light in J. R. R. Tolkien and in the Portuguese translation - a lexical analysis'. In *Revista da Faculdade de Letras do Porto - Línguas e Literaturas*. II Série. Vol. V - Tomo 1, 173 - 203.
- Mateus, M. Helena Mira, Brito, Ana Maria, Duarte, Inês Silva, and Faria, Isabel Hub. 1983. *Gramática da Língua Portuguesa*. Coimbra: Livraria Almedina.
- Maynard Smith, J. 1976. 'Evolution and the theory of games'. *American Scientist*, 64 pp. 41-5.
- McCawley, J.D. 1968. The role of semantics in a grammar. In Bach and Harms 1968, 125-69.
- McNaughton, N. 1989. *Biology and Emotion*. Cambridge: Cambridge University Press.
- Meulen, Alice ter. 1980. *Substances, Quantities and Individuals*. Indiana: Indiana University Linguistics Club.
- Michael, Leonard and Ricks, Christopher. 1980. *The State of the Language*. Berkeley: University of California Press.
- Miller, George A. and Lenneberg, Elizabeth (eds.). 1978. *Psychology and Biology of Language and Thought*. New York: Academic Press.
- Miller, Jane. 1983. *Many Voices: Bilingualism, Culture and Education*. London: Routledge and Kegan Paul.
- Morton, Andrew Q. and Michaelson, Sidney. 1990. *The Qsum Plot*. Edinburgh: University of Edinburgh.
- Morris, Desmond. 1977. *Manwatching*. London: Triad Granada.
- Morris, D., Collett, P., Marsh, P., O'Shaughnessy, M. 1979. *Gestures - Their Origin and Distribution*. London: Jonathan Cape.
- Myers, Fred R. 1986. *Pintupi Self, Pintupi Country*. Berkeley / Los Angeles/ Oxford: University of California Press.
- Nascimento, M. Fernanda Bacelar de. 1987. *Contribuição para um Dicionário de Verbos do Português*. Lisbon: INIC.
- Nida, Eugene A. 1975. *Componential analysis of Meaning*. The Hague / Paris: Mouton.
- Norman, D.A. 1981. 'Twelve issues for cognitive science'. In Norman (ed.) *Perspectives on cognitive science* (265 - 295). Hillsdale, NJ : Erlbaum.
- Oatley, Keith and Johnson-Laird, P.N. 1987. 'Towards a Cognitive Theory of Emotions'. In *Cognition and Emotion* Vol. 1. Issue 1. Hove and London: Lawrence Erlbaum Associates.
- Oatley, Keith and Johnson-Laird, P.N. 1990. 'Semantic Primitives for Emotions'. In *Cognition and Emotion* Vol. 4. Issue 2. Hove and London: Lawrence Erlbaum Associates.
- Oatley, Keith. 1991. 'Living together' - a review of Lutz 1988. In *Cognition and Emotion*, Vol. 5, Issue 1. 65-79. Hove and London: Lawrence Erlbaum Associates.
- Oatley, Keith 1992. *Best laid schemes. The Psychology of Emotions*. Cambridge: Cambridge University Press.
- Oliveira, Maria Elisa Macedo de. 1979. *Syntaxe des Verbes Psychologiques de Portugais*. Thèse présentée a L'Université de Paris VII.

- Ortony, Andrew, Clore, Gerald L., Collins, Allan. 1988. *The Cognitive Structure of Emotions*. Cambridge and New York: Cambridge University Press.
- Parfit, Derek. 1987. 'Divided Minds and the Nature of Persons'. In Blakemore and Greenfield (eds.), 19-26.
- Parrott, W.Gerrod, and Schulkin, Jay. 1993. 'Neuropsychology and the Cognitive Nature of the Emotions'. In *Cognition and Emotion* Vol. 7, Issue 1, January, 43- 60.
- Pelletier, Francis Jeffry (ed.). 1979. *Mass Terms: some Philosophical problems*. Dordrecht / London: D. Reidel Pub. Co.
- Penrose, Roger. 1989. *The Emperor's New Mind - concerning Computers, Minds and the Laws of Physics*. London: Vintage.
- Plato. *The Republic*. Translated with an Introduction by Desmond Lee. 1974. 2nd ed. Harmondsworth: Penguin Books.
- Plato. *The Last Days of Socrates*. Translated with an Introduction by Hugh Tredennick. 1954. Harmondsworth: Penguin Books.
- Plutchnik, R. 1980. *Emotion: A Psychoevolutionary Synthesis*. New York: Harper and Row.
- Pontes, Eunice. 1973. *Verbos Auxiliares em Português*. Petrópolis, Brazil: Editora Vozes. Ltda.
- Popper, Karl R. and Eccles, John C. 1977. *The Self and Its Brain - an argument for Interactionism*. London: Routledge and Kegan Paul.
- Pottier, B. 1964. *Linguistique Générale*. Paris: Klincksieck.
- Prieto, L. 1964. *Principes de la Noologie*. The Hague: Mouton.
- Prieto, L. 1966. *Messages e Signaux*. Paris: Presses Universitaires de France. 2nd ed. 1970.
- Proceedings of the *Using Corpora* Conference. 1991. Oxford: Oxford University Press.
- Proceedings of the *ALLC-ACH* Conference 1992. Oxford : Oxford University Press.
- Proceedings of the *Making Sense of Words* Conference. 1993. Oxford: Oxford University Press
- Putnam, Hilary. 1988. *Representation and Reality*. Cambridge, Mass.: MIT Press.
- Querido, António A.M. 1976. 'The Semantics of Copulative constructions in Portuguese'. In Luján and Hennessy (eds.), 343 -366
- Quine, W.V.O. 1960 . *Word and Object*. Cambridge, Mass.: The MIT Press.
- Quine, W.V.O. 1964. 'Speaking of Objects'. In Fodor, J.A. and Katz, J.J. 1964, 446-459.
- Quirk, Randolph, Greenbaum, Sidney, Leech, Geoffrey, Svartvik, Jan. 1972. *A Grammar of Contemporary English*. London: Longmans.
- Quirk, Randolph, Greenbaum, Sidney, Leech, Geoffrey, Svartvik, Jan. 1985. *A Comprehensive Grammar of the English Language*. London and New York: Longman.
- Ranchod, Elisabete Marques. 1990. *Sintaxe dos Predicados Nominais com ESTAR*. Lisbon: INIC.

- Raphael, Lawrence J., Raphael, Carolyn B. and Valdovinos, Miriam R. (eds.). 1984. *Language and Cognition*. New York and London: Plenum Press.
- Robey, David. 1992. 'ALLC-ACH '92: Report on the Nineteenth International Conference of the Association for Literary and Linguistic Computing and the Twelfth International conference on Computing and the Humanities'. In *Literary and Linguistic Computing*. Vol 7, No. 4, 239 - 242.
- Rorty, Amélie Oksenberg (ed.). 1980. *Explaining emotions*. Berkeley and Los Angeles: University of California Press.
- Rougemont, Denis de. 1936. *O Amor e o Ocidente*. (Translated from the French). 2ª edição 1982. Lisbon: Morães Editores.
- Rouveret, A. and Vergnaud, J-R. 1978. *Specifying Reference to the subject - French Causatives and conditions on Representations*. Paris
- Russell, Bertrand. 1903. *The principles of Mathematics*. 2nd edition. London.
- Russell, Bertrand. 1946. *History of Western Philosophy*. London: Unwin Paperbacks.
- Ryle, Gilbert 1949. *The Concept of Mind*. Harmondsworth: Penguin Books.
- Sacks, Oliver. 1985. *The Man who Mistook his Wife for a Hat*. New York: Summit Books.
- Sacks, Oliver. 1989. *Seeing Voices*. London: Pan Books.
- Sagan, Carl 1977. *The Dragons of Eden*. London: Coronet Books. Hodder and Stoughton.
- Sartre, Jean-Paul. 1939. *Esquisse d'une théorie des émotions*. 1960. Paris: Hermann.
- Saussure, F. de. 1916. *Cours de Linguistique Générale*. Paris: Payot.
- Schlick 1936. 'Meaning and Verification'. *Philosophical Review* 45.
- Schmidt-Radefeldt, Jurgen (ed.). 1976. *Readings in Portuguese Linguistics*. North-Holland Linguistic Series 8. Amsterdam, New York and Oxford: North-Holland Pub. Co.
- Schroten, Jan 1976. 'Surface structure constraints on Portuguese pseudo-reflexive sentences'. In Schmidt-Radefeldt (ed.) 1976, 139 -155.

- Searle, John. 1969. *Speech Acts : An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.
- Searle, John (ed.). 1973. *The Philosophy of Language*. Oxford: Oxford University Press.
- Searle, John. 1983. *Intentionality*. Cambridge: Cambridge University Press
- Searle, John. 1984. *Minds Brains and Science*. The 1984 Reith Lectures. London: Penguin.
- Searle, John. 1987. 'Minds and Brains without Programs'. In Blakemore and Greenfield (eds.), 209 - 234.
- Sebeok, T.A. (ed.). 1974. *Current Trends in Linguistics*. vol 12. The Hague: Mouton.
- Sekuler. Robert and Blake, Randolph. 1985. *Perception*. New York: Alfred A. Knopf.

- Serbat, Guy. 1981. *Cas e fonctions*. Paris: Presses Universitaires de France.
- Shopen, Timothy (ed.). 1985. *Language Typology and Syntactic Description*. 3. Vols. London: Cambridge University Press.
- Snell-Hornby, Mary. 1983. *Verb-descriptivity in German and English*. Heidelberg: Carl Winter. Universitätsverlag.
- Snell-Hornby, Mary and Pöhl, Esther. 1989. *Translation and Lexicography*. Missouri: John Benjamins B.V. and Paintbrush and Euralex.
- Soames, S. 1984. Semantics and Psychology. In Katz 1985, 204 -226.
- Stein, Gabriele. 1979. *Studies in the Function of the Passive*. Tübingen: Gunter Narr Verlag.
- Steiner, George. 1992. *After Babel*. Oxford and New York: Oxford University Press.
- Steinberg, D.D. and Jakobovits, L.A. (eds.). 1971. *Semantics*. London and New York: Cambridge University Press.
- Stevenson, C.L. 1963. *Facts and values*. Yale University Press
- Storr, Anthony. 1987. 'Why Psychoanalysis Is Not a Science'. In Blakemore and Greenfield (eds.), 75-88.
- Strawson, P.F. 1959. *Individuals*. London: Methuen.
- Strawson, P.F. 1964. 'Intention and Convention in Speech Acts'. In SEARLE 1973, 23-38.
- Strawson, P.F. 1971. *Logico-Linguistic Papers*. London: Methuen.
- Strongman, K.T. 1978. *The Psychology of Emotion*. Second Edition. Chichester: John Wiley and Sons.
- Strongman, K.T. 1987. *The Psychology of Emotion* Third Edition. Chichester: John Wiley and Sons.
- Svartvik, J. 1966. *On Voice in the English Verb*. The Hague: Mouton.
- Szentágothai, Janos. 1987. 'The Brain-Mind Relation: A Pseudoproblem?' In Blakemore and Greenfield (eds.), 323-338.
- Talmy, Leonard. 1985. 'Lexical patterns: semantic structure in lexical form'. In Shopen, T. (ed.). 1985. Vol. III, 57-139.
- Tesnière, L. 1959. *Éléments de la syntaxe structurale*. Paris: Klincksieck.
- Thomas, Keith. 1983. *Man and the Natural World: Changing attitudes in England 1500-1800*. Harmondsworth: Penguin Books.
- Tomkins, S.S. 1962;1963. *Affect, Imagery and Consciousness*. 2 vols. New York: Springer.
- Trudgill, Peter. 1974. *Sociolinguistics*. Harmondsworth: Penguin.
- Young, J.Z. 1978. *Programs of the Brain*. Oxford: Oxford University Press
- Van Dijk, Teun A. 1977. *Text and Context. Explorations in the Semantics and Pragmatics of Discourse*. London: Longman.
- Vaño-Cerdá, Antonio 1982. *SER y ESTAR + Adjectivos*. Tübingen: Gunter Narr Verlag.
- Vendler, Zeno. 1967. *Linguistics and Philosophy*. Ithaca and London: Cornell University Press.
- Verharr, John W.M. (ed.). 1973. *The Verb BE and Its Synonyms*. Part 6. Dordrecht /Boston: D. Reidel Pub. Co.

- Vilela, Mário. 1980. *O Léxico da Simpatia*. Porto: INIC
- Vilela, Mário. 1992. *Gramática de Valências: Teoria e Aplicação*. Coimbra: Livraria Almedina.
- Von Franz, Marie-Louise, and Hillman, James. 1971. *Lectures on Jung's Typology*. Zurich: Spring Publications.
- Von Franz, Marie-Louise. 1972. *Problems of the Feminine in Fairy Tales*. Dallas: Spring Publications.
- Wardhaugh, Ronald. 1977. *Introduction to Linguistics*. New York: McGraw-Hill Book Company.
- Weinreich, U. 1963. *On the Semantic structure of language*. In Greenberg (ed.). 1963. 73-113.
- Whorf, Benjamin Lee. 1956. *Language, Thought and Reality*. Massachusetts: The M.I.T. Press
- Wierzbicka, Anna. 1972. *Semantic Primitives*. Frankfurt: Athenäum Verlag.
- Wierzbicka, Anna. 1988. *The Semantics of Grammar*. Amsterdam: John Benjamins Pub. Co.
- Wierzbicka, Anna. 1990. 'Introduction'. 'The Semantics of Emotion: FEAR and its relatives in English'. In *Australian Journal of Linguistics*. Vol 10. No. 2. December 1990. 133 - 138 and 359 - 375
- Wierzbicka, Anna 1992. 'Talking about Emotions: Semantics, Culture and Cognition'. In *Cognition and Emotion* Vol. 6, Issues 3 and 4.
- Wierzbicka, Anna. 'Cognitive Domains and the structure of the Lexicon'. To appear in Gelman, S and Nissefeld, L. (eds.)
- Wierzbicka, Anna. 'Defining Emotion Concepts'. To appear in *Cognitive Science*.
- Wilson, J.R.S. 1972. *Emotion and Object*. London: Cambridge University Press.
- Wittgenstein, Ludwig. 1922. *Tractatus Logico-Philosophicus*. London: Routledge and Kegan Paul.
- Wittgenstein, Ludwig. 1953. *Philosophical Investigations*. tr. by G.E.M. Anscombe. Oxford: Basil Blackwell.
- Wittgenstein, Ludwig. 1958. *The Blue and Brown Books*. Oxford.
- Wyss, Dieter. 1988. 'La Conciencia Onírica'. In *Rev. Filosofía Uni. Costa Rica*, XXVI 63,63, 3 - 8.
- Xavier, Maria Leonor Lamas de Oliveira. 1985. *Santo Agostinho. Falar-Conhecer- Ensinar em De Magistro*. Dissertação de Mestrado em Filosofia, Faculdade de Letras de Lisboa. Lisbon.
- Young, J.Z. 1978. *Programs of the Brain*. Oxford: Oxford University Press.

Dictionaries

English Monolingual

- Gove, Philip Babcock. (ed.) 1986. *WEBSTER'S Third New International Dictionary of the English Language - Unabridged*. Springfield, Mass.: Merriam-Webster, Inc.
- Hornby, A.S. 1974. *Oxford Advance Learner's Dictionary of Current English*. London: Oxford University Press.
- *Longman Dictionary of the English Language*. 1984. Harlow: Longman.
- McArthur, Tom. 1981. *Longman Lexicon of Contemporary English*. Harlow: Longmans.
- Murray, James A.H., Bradley, Henry, Craigie, W.A., and Onions, C.T. (eds.) 1933 / reprint 1961. *The Oxford English Dictionary*. Oxford: Oxford University Press.
- *Roget's Thesaurus*. 1962 Edition. Revised and Modernised by Robert A. Dutch, O.B.E. Harlow: Longmans.
- *The Oxford Dictionary of Quotations*. 1979. 3rd edition. London: Book Club Associates.
- *The Shorter Oxford English Dictionary*. 1973. 3rd edition. Oxford: Clarendon Press.
- Sinclair, John. Editor. 1987. *Collins COBUILD English Language Dictionary*. London: Collins.

Portuguese Monolingual

- Edípica, Tertúlia. 1988. *Dicionário de Sinónimos*. Porto: Porto Editora
- Ferreira, Aurélio Buarque de Holanda. 1986. *Novo Dicionário da Língua Portuguesa* 2a. edição. Rio de Janeiro: Editora Nova Fronteira.
- Figueiredo, Cândido de. 1939. *Dicionário da Língua Portuguesa*. 15a. edição. Amadora: Livraria Bertrand.
- Vilela, Mário. *Dicionário do Português Básico*. Porto: Edições ASA

English / Portuguese Bilingual

- *Dicionário de Português-Inglês*. 1987. Porto: Porto Editora.
- Konder, Rosa W. 1982. *Longman English Dictionary for Portuguese Speakers*. Harlow: Longman, and Rio de Janeiro: Ao Livro Técnico.
- *Michaelis Illustrated Dictionary*. 1961. Vol II Portuguese-English. São Paulo: Edições Melhoramentos.
- *The New Michaelis Illustrated Dictionary*. 1958. 10th edition. Vol. I English-Portuguese. São Paulo: Edições Melhoramentos / Wiesbaden: F.A. Brockhaus.

- Morais, Armando de. 1985. *Dicionário de Inglês-Português*. Porto: Porto Editora Lda.
- Taylor, James L. 1958. *A Portuguese-English Dictionary*. London: George G. Harrap and Co. Ltd.

Texts for Corpora

English Texts

- Carroll, Lewis. 1865. *Alice in Wonderland*. In *The Annotated Alice*. Harmondsworth : Penguin.
- *Alice no País das Maravilhas*. (Translation by Maria de Meneses) Lisbon: Portugália Editora.
- *Alice no País das Maravilhas*. (Translation by Henriques Marques Junior) Guimarães and Ca. Editores.
- Conrad, Joseph. 1900. *Lord Jim*.. London: Book Club Associates.
- *Lord Jim* (Translation by Cármen Gonzalez) Mem Martins: Edições Europa-América
- Dickens, Charles. 1860. *Great Expectations*. London: Spring Books.
- 1969. *Grandes Esperanças*. (Translation by Armando de Morais) Lisbon: Portugália Editora.
- 1975. *Grandes Esperanças*. (Translation by Carmen Gonzalez). Mem Martins : Publicações Europa-America.
- Greene, Graham. 1978. *The Human Facto*. Harmondsworth: Penguin.
- 1979. *O Factor Humano*. (Translation by João Belchior Viegas). Amadora : Livraria Bertrand
- Fitzgerald, F. Scott 1925. *The Great Gatsby*. Harmondsworth: Penguin.
- 1986. *O Grande Gatsby*. (Translation by José Rodrigues Miguéis). Lisbon: Editorial Presença.
- Lawrence, D.H. 1930. *The Virgin and the Gypsy*. Harmondsworth: Penguin.
- *A Virgem e o Cigano*. (Translation by Alexandre Pinheiro Torres). Lisboa: Edições Livros de Brasil.
- 1986. *A Virgem e o Cigano*. (Translation by Aníbal Fernandes)
- Le Carré John. 1963. *The Spy who came in from the Cold*. London: Pan Books Ltd.
- *O Espião que Saiu do Frio*. (Translation by Luis Serrão). Mem Martins : Publicações Europa-América.
- Waugh, Evelyn 1945. *Brideshead Revisited*. Harmondsworth : Penguin.
- Woolf, Virginia. 1927. *To the Lighthouse*. London : Triad Grafton Books.
- 1987. *Rumo ao Farol*. (Translation by Mário Cláudio). Porto: Edições Afrontamento.

Portuguese texts

- Baptista, António Alçada 1989. *Tia Suzana, Meu Amor* Lisbon: Editorial Presença.

- Luis, Agustina B. 1953. *A Sibila*. Lisbon: Guimarães Editores.
- Monteiro, Luis.de Sttau. 1961. *Angústia para o Jantar*. Lisbon: Edições Atic
- 1964. *The Rules of the Game*. (Translation by Ann Stevens) London: Putnam and Co. Ltd.
- Namora, Fernando 1949. *Retalhos da Vida de um Médico: primeira serie*. Amadora : Livraria Bertrand
- Pires, José C. 1982. *Balada da Praia dos Cães*. Lisbo : Edições O Jornal.
- 1986. *Ballad of Dog's Beach*. (Translation by Mary Fitton) London and Melbourne : J.M. Dent and Sons Ltd.
- Queiroz, Eça de 1888. *Os Maias*. Lisbon : Edições Livros de Brasil.
- 1965. *The Maias*. (Translation by Patricia McGowan Pinheiro and Ann Stevens) London: J.M. Dent and Sons. Ltd
- Ribeiro, Aquilino.
- 1913. *O Jardim das Tormentas*. Amadora : Livraria Bertrand.
- 1922. *Malhadinhas*. Amadora : Livraria Bertrand.
- 1957. *A Casa Grande dos Romarigães*. Amadora: Livraria Bertrand
- 1958. *A Mina de Diamantes* . Amadora : Livraria Bertrand.
- 1958. *Quando os Lobos Uivam* . Amadora : Livraria Bertrand.
- Torga, Miguel 1940. *Os Bichos*. 14^o edição. Coimbra
- 1950. *Farrusco the Blackbird, and other stories from the Portuguese*. (Translation by Denis Brass). London: George Allen and Unwin Ltd.