

XVI Encontro da A.P.E.A.A.

PAPER by : Prof. Dra. Belinda M.H.S.Maia

TITLE : The 'problem' of the language of Emotion

1. The topic of 'emotion'

Before one starts to talk about "the language of Emotion", one needs to be aware of the apparent reality to which this language refers - the topic of "emotion" - which has been at the centre of controversy for centuries. On the one hand, there have been those who favour a view of humanity as ideally rational, and able to control the more primitive or animal instincts. These have tended to regard emotion as something negative which works against the interests of this ideal. On the other hand, there are those who value the poetic side of human nature and the mysterious power of the irrational, and believe that Man's instincts are more genuine than his reason. These usually glorify and create some sort of mystique around the emotions.

The argument began, as usual, with Plato and Aristotle, but the modern study of emotions probably can be said to start with Descartes' distinction of the duality of Mind and Body. He himself had doubts about the actual function of the emotions - as Kenny in his book "Action, Emotion and Will" (1963) explains - but it seems that he would still have supported the idea that the way emotions function take the sequence of events to be:

1.	2.	3.
Emotion producing situation	Individual's perception of event and consequent emotion	Individual's resulting behaviour

i.e. that the man sees the lion, understands the danger, feels fear, and runs away.

However, William James (1884) believed that the sequence of events was quite different. He saw things as

1.	2.	3.
Emotion producing situation	Individual's resulting emotion	Individual's perception of event and consequent behaviour

i.e. that the man sees the lion, runs away, and then reasons that he felt fear. This meant that man was seen as behaving in accordance with mechanical responses which were either instinctive, or became instinctive after an initial learning process.

This analysis served as the theoretical basis for most research into emotion by psychologists from the nineteenth century until quite recently. In a scientific world which needed physical proof on which to base any deductions about reality, it allowed for the analysis of physical emotional reactions to be carried out without any complications from scientifically vague entities like the psyche. Darwin's (1872) emphasis, and that of anthropologists like Eibl-Eibesfeldt (1971)¹, and psychologists like Ekman (1982) and Izard (1991) was on showing how facial expressions and the body language of emotion had evolved from animal to man. Based on this type of evidence, cases were made for certain emotions being universal to mankind. Ekman (1982) suggests that the universal emotions are happiness, surprise, fear, sadness, anger and disgust/contempt².

This classification shows the tendency of these psychologists to ignore an emotion most of us feel to be fundamental - love. They explain it away as being either expressed through the other emotions or as too bound up with rational processes to be considered an emotion. Yet we continue to recognize the reality of the 'coup de foudre', more often than not associate 'passion', especially the Portuguese 'paixão', with love, and cite love as a reason for forgiveness before the law for the 'crime passionel'. However, this example draws attention to the fact that the debate about emotion rages most furiously around how far it is instinctive and how far it is involved with rational processes.

However, this research into facial expression was carried out using Behaviourist-approved experiments, and the results fitted in neatly with notions of evolution of the brain, and the development of primal instincts which were formed at an early stage of evolution for the obvious reasons of survival and propagation of the species. Parallel to these experiments were others which analysed the visceral sensations associated with emotions, blood pressure and other phenomena which were objectively measurable. Most of us will recognize the way in which we describe these sensations in relation to emotion - 'fuming with rage', 'trembling with fear', 'tense with anticipation' etc.

¹ See Eibl-Eibesfeldt (1971) for illustrations - pages 42, 146 and 147.

² See Argyle (1975) page 130 for illustration and explanation

Rationalist and materialist dominated thought, therefore, relegated the serious study of emotion to the category of physical experience for the large part of this century. Psychiatrists, phenomenologists and others may have continued to give the human psyche more credit for complexity, but most main-line psychologists, many philosophers, and those interested in human and artificial intelligence, were more committed to a reductionist approach.

However, over the last two decades, the big philosophical discussion over the nature of Mind and Brain has led people to see an understanding of emotion as central to the understanding of human intelligence, even at the most materialistic level. Although artificial intelligence has proved to be more efficient at certain things, like mathematics, than human intelligence, scientists have not been able to duplicate those aspects of our intelligence which choose only what is relevant in a particular situation. It would seem that emotion, far from being a simple physical reaction, contributes in some complex way to this ability. Theories on the nature of emotion, and the language we use to talk about both these theories, and about the emotions we experience, are the focus of a debate which involves a wide variety of disciplines.

2. Linguistics, conceptualisation and emotion

One discipline which is involved in this debate is linguistics, and specifically in that area of research which involves our capacity to conceptualize. When Wittgenstein and other members of the Vienna Circle first set out to work out how we thought, by reducing our language to basic mathematical-type concepts out of which more complex notions were constructed, they dismissed the language they described as 'emotive' as irrational, culture bound and not susceptible to analysis. Unfortunately for them, this distinction meant that the vast majority of linguistic usage could not be analysed except in relation to the structure of language.

In America, the structuralist Bloomfield (1936) actually expressed the belief that studying the structure of language was the task of linguists, but that meaning was more the responsibility of sociologists and anthropologists. Structuralist and transformational-generative grammarians were always principally interested in the structure of language, and the lexicon was considered to be an inventory of words which could always be slotted into the structures once these had been formalized sufficiently.

However, when Chomsky's original idea of inborn structures had been mooted, and its application to syntax shown to be too complex to be reduced to simple basic

structures + transformations, others in the field of what was called "generative semantics" tried to postulate the idea of basic semantic, rather than syntactic notions. With this they re-entered the age-old discussion of whether knowledge and ideas are inborn or acquired. They re-ignited the argument which Plato started when he proposed that knowledge was inborn - you just needed education to develop what was already there - and which had led others, particularly in the 18th century, to seek for universals in human thought.

Jerry Fodor and Jerrold Katz were among the leaders in this argument, but they have come to take different positions in the last few years. Katz (1985) now espouses a view of language being more of a cultural artifact, whereas Fodor (1985) still hopes to find some sort of basic semantic structures embedded in the brain. He does, however, recognize the problem of language relativity sufficiently to contribute to a book on *Holism* (1992), which contrasts the idea that semantic universals can be found, with the view that each language should be approached as a whole and as part of a social system. Patricia Churchland (1986) in her *Neurophilosophy* discusses the problem of knowledge being part of our neurological makeup, and shows that it is, to a certain extent, but feels that attempts to try and trace a conceptual framework for the psychology of man through language back across the years to some ideal early *homo sapiens* is carrying the universal innateness of knowledge too far. Putnam (1988), once a keen supporter of the innateness theory, now allows for an element of inventiveness in culture which pushes our intelligence and language processes to evolve.

Relativity in normal language usage has always been recognized - albeit often unwillingly by some. The Sapir-Whorf hypothesis, as it is called after its two anthropologist-linguist proponents early this century, argued that each person's view of the world is conditioned by the language that person speaks, and that each language is in turn moulded by social and cultural factors. This was an unfashionable view in the 60s and 70s, but George Steiner has returned to the theme very convincingly in his 'After Babel', and in the present academic climate, which favours a total relativity of even short texts, language relativity is again taken for granted.

Much of this change of heart is traceable to Wittgenstein (1953) who, in his later theory in *Philosophical Investigations*, reversed the idea that language could be reduced to ultimately analysable parts, and came up with the theory that even our most obvious semantic concepts are controlled by the language that expresses them and the situation in which they appear.

Emotion is a particularly interesting subject to study for signs of both universalism and relativism. Studies of facial expression and gestures among humans, primates and other animals do show that there are some realities related to basic survival that can in one way or another be associated with the emotions. However, the ways in which these emotions develop, and are viewed socially, varies quite considerably across cultures. For example, Lutz (1987), an American anthropologist, was interested to see that, although a child among the Ifaluk islanders demonstrated what we call "happiness" in the same way as any other child, the culture she belonged to hastened to discourage her from demonstrating an emotion which was seen as too individualistic for the communal good of the tribe. A word for the notion of happiness exists in Ifaluk - but its connotations were different from those most English speakers associate with "happiness".

Although, to quote George Steiner (1992 : 206), "Meaning is at all times the potential sum total of individual adaptations", it is also true that the language we use helps to structure the way in which we view the world. Whether one sees language as expressing some kind of objective reality, or at least as expressing some version of human or individual experience, there is no doubt that the study of the language with which we describe a partly innate aspect of our psychology has much to offer.

3. Language, emotion and the brain

Naturally, by the time we get round to describing our emotions we have reached a fourth stage in the sequence of events described earlier:

1.	2.	3.	4.
Emotion producing situation	Individual's perception of event and consequent emotion	Individual's resulting behaviour	Individual's description of the event

Therefore, by the time we get to expressing ourselves about the situation, we have had time to rationalize about it all and prepare a description of our experience. However, the whole thinking process is far less straightforward, and the situation shown above is much less linear than it appears. It also works at an amazing speed. The study of memory shows that emotion plays a key part in the forming of memory, and in the accessing of former experience. The speed with which the brain retrieves and processes the vital information to create sufficient fear for one to jump out of the way of a car hurtling towards one, defies even the laws of physics as they are now understood, according to Penrose (1989). These processes are not simple linear ones but seem to work in a way

which allows for the combination of perception of the immediate situation with complex forms of feedback from previous experiences.

As far as language is concerned, it is now possible to locate certain functions of thought and language in specific parts of the brain, and two Portuguese neuroscientists studying in the States, António and Hanna Damasio, have been at the forefront of this research. According to them (1992) "language exists both as an artifact in the external world - a collection of symbols in admissible combinations - and as the embodiment in the brain of those symbols and the principles which determine their combinations. The brain uses the same machinery to represent language that it uses to represent any other entity". Language, therefore, not only processes our experience in a way which allows us to communicate with the outside world, it is also one among a set of structures supplying the brain with information about that world. Although the cultural and social aspects of our experience can be partly explained on the basis of visual and aural perception, there seems little doubt that linguistic knowledge also forms the way each individual interpretes the world.

4. Studying 'how we mean' in relation to emotion

There are various ways of examining 'how we mean' within linguistics, and several of them have been applied at some time or another to the study of emotion. The obvious approach for many people is to study the official lexicon of emotion. People seem to instinctively believe that if we have a word for something, some sort of corresponding reality for this word must exist.

However, most emotion words are usually classified as abstract concepts and, although the layman may see philosophers as people whose speciality is to deal in abstract concepts, linguistic philosophers have long lamented the abstract and mentalistic terminology with which language in general is riddled. For example, such people find difficulty in making abstract concepts conform to mathematical notions of countability³. However, it is not so easy to do without them, and a favourite metaphor of Quine's (1960 and 1964 : 454), in relation to getting rid of them, refers to the need to be careful about throwing away the planks of 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.

³ See Strawson (1951)

Attempts to draw up lists of emotions have been made for hundreds of years and, in this century, most of them have been made by psychologists, as Strongman demonstrates in his *Psychology of Emotion* (1987). He quotes an article which dealt with over 200 different definitions of the word *emotion* alone! It is significant that the most complete lexicon I have found so far, at least in English, was compiled by a team composed of a cognitive scientist and a psychologist, Johnson-Laird and Oatley (1989). Johnson-Laird believes that ultimately artificial intelligence can be made to work in a way similar to human intelligence, but he recognizes that reproducing emotional processes is one of the biggest challenges to be overcome.

The main attempts by linguists to analyse the lexicon have come from Fillenbaum and Rapoport (1971), who concluded that the lexicon of emotion is so subjective as to be almost unanalysable, and a leading lexicologist, Anna Wierzbicka, who has several publications on how we conceptualize emotion. However, because of a renewed interest in the subject, there are a large number of people interested in discussing the language of emotion.

Some 25 years ago, Davitz (1969), a psychologist, drew up a lexicon of the language of emotion and got laughed at by his peers for basing it on people's linguistic descriptions of what physical feelings they associated with which emotions. His book has now been re-published and adverse comments have been publicly retracted⁴ because his work is now seen as being ahead of its time. Now that the era of cognitive psychology is in full swing, his approach is better appreciated.

The cognitive approach in linguistics, led by such as Jackendorf and Langacker, focuses on the psychology of how the brain physically perceives outside reality, and how we express this perception in language. A well-known work which started a lot of linguistic research in this direction is Lakoff and Johnson (1980)'s *Metaphors we live by*. The metaphor approach seeks to see how we express what we feel through metaphor rather than the accepted lexical concepts. Thus, 'sadness' and 'happiness' are examined in terms of 'downness' and 'upness', because of the metaphors like feeling 'down' or 'on top of the world' associated with these emotions, and their corresponding physical facial expression and body language.

Apart from research that concentrates on the words and phrases we use to express emotion, several people have drawn attention to the semantics of the syntax or structures in which the lexicon of emotion appears. Philosophers such as Vendler and Kenny have

⁴ Fridja (1986) Page 184.

shown how our linguistic usage suggests that emotion is not subject to the human will, because the emotion verbs are not used in the Imperative - it is almost impossible to find a suitable context for an order like 'Dislike John!' - or with the progressive aspect, which is associated with ongoing action controlled by will. This has led linguists classifying types of verbs, like Dowty (1979), Halliday (1984) and Quirk (1985), to call them 'stative verbs', and to see the subject of these verbs as passive recipients or experiencers of the emotion.

A point which has not been made in much of this literature is that the verbs which are seen by some⁵ as the 'dynamic' verbs which complement the 'stative' emotion verbs - i.e. as 'please' complements 'like', or 'annoy' does 'be angry' - also seem to reject the imperative and the progressive in actual language usage⁶. 'Annoy him!' may be theoretically possible, but it is just as rare as 'Dislike John!'. Also, because it sounds quite natural to say 'John is annoying Mary', it may come as a surprise to find that this structure is actually rare in real usage. Psychologically speaking, we seem to prefer the focus 'Mary was annoyed with John'.

Another syntactic point sometimes made is that 'to be annoyed' is the passive of 'annoy', thus making the subject of 'annoy' the agent. However, again in practice, agentive situations of this kind are very rare. It appears that few people are perceived as deliberately causing other people's emotions. Within the same line of thought, which ignores the reasons why agentiveness is not part of the phenomenon of emotion, examples like 'Mary was loved by John' are frequently used by grammars and books on linguistics when discussing the passive. Yet I have searched a 17.5 million word corpus with several thousand examples of 'love' for such a straightforward example and found none.

There are plenty of other aspects of the syntax of emotion which draw attention to its specificity, and which suggest that it should be analysed on its own terms and not as some sort of defective form of the normal syntax governing verbs of action. The same can be said of the study of the nouns, the usage of which stretches the terms 'countability' and 'non-countability' to breaking point.

An approach adopted by another team of cognitive scientists and psychologists, Ortony, Clore and Collins (1988), in their *The Cognitive Structure of Emotions*, tries very hard to both get outside language to analyse the phenomenon of emotion. Their

⁵ For example Quirk et al(1985) and Halliday (1984)

⁶ See Maia (1994)

approach was to try and draw up a set of situations which can be described as emotional, while calling the linguistic labels for them (in English) 'tokens'⁷. Their ambition was to show that any specific language does not necessarily account for all these situations lexically, and some of their categories, like 'fears-confirmed' are lexically empty in English, and another of their categories, 'gloating', is not lexicalized in Portuguese. However, Milan Kundera would take them to task for not including others which he claims are lexicalized in his native Czech. Although they do form categories for certain emotions we feel for others, he would seem to favour a wider set of co-feelings than they propose, including "joy, anxiety, happiness, pain".

Ortony and his team also saw these "valenced reactions" to be conditioned by certain variables. Thus 'Liking', for example, is only affected by:

- 1) the degree to which the object is appealing
- 2) the degree of familiarity with the object

but other categories are more complex. These variables are not just theoretical hunches, but are based on the observations of psychological research.

When I was preparing my own analysis of emotion in English and Portuguese, I found the general psychological framework proposed by Ortony and his team very useful. It provided a more detailed classification than that to be found with theories formed around an average of 6-8 basic emotions. Also, as it tried to avoid falling into the language trap, it encouraged me to analyse the whole context in which the lexemes appeared, so that, for example, I had to separate those examples of 'afraid' that meant 'fear' from those that were nearer 'regret'.

My own analysis was carried out by coordinating a lexical, syntactic, semantic and contextual analysis of a large number of examples extracted from an electronically prepared corpus, in order to come to conclusions as to which patterns of usage were most relevant both to emotion in general, and to the different categories of emotion in particular. A quantitative analysis of this kind often confirms general theories on the subject, but it also gives a good view of which theories are really relevant, and which are, at best peripheral.

I did not use the metaphor approach which some cognitivists advocate, partly because it does not lend itself to the type of quantitative analysis with electronic corpora with which I wished to experiment, and partly because it is not very satisfactory when two languages are being compared. The reason why I believe this is so is because a

⁷ See Ortony, Clore and Collins (1988) page 19.

corpus of any size would have to be largely formed from examples contributed by friends, colleagues and student who, since they would need to know what you wanted, would be, or become, very subjective sources on which to base objective analysis. Besides, if a culture actually prefers to use an official lexicon to codify its experience, both from a qualitative and a quantitative point of view, it would seem unwise of a linguist to ignore this fact.

5 Conclusion

As should now be clear, neither emotion nor the language of emotion should be approached lightly. The topic of emotion is now at the centre of the age-old arguments about the difference between 'mental' and 'physical', 'nature' and 'nurture'. Are the emotions a set of innate responses built in over various stages of evolution for the protection and propagation of the species and reinforced by culture? Are they the essential difference between man and machines? If rational processes can be more easily replicated by machines, do emotional ones, therefore, hold the key to what we call 'consciousness'? Will artificial intelligence ever be able to simulate, or even create, consciousness? And where would this leave us, humans? Can we hold on to our pride in being unique by showing that the mystery of 'consciousness' is unsolvable - thus leaving us free to hypothesize about some 'spiritual' soul or other non-physical individual identity? Or is our brain an extremely complex set of neurons - the understanding of which is only in its earliest stages - but something which is, ultimately, a physical and biological phenomenon?

Big questions, you may say, and how can a study of the language of emotion contribute? Whichever way you view language, there seems to be no doubt that it can give us clues as to how we construct the world and culture around us. Or does it construct us, and are all the arguments we have just looked at been constructed out of both innate language structures, and their modification by the experience built into them over centuries of practising how to express ourselves? Or have we got it wrong? After all, folk theories of physics have not proved scientifically correct. We can only speculate on these questions, at least for the time being, as no one has yet discovered a way of getting outside language to find out the answers.

BIBLIOGRAPHY

- ARGYLE, Michael. (1975) *Bodily Communication*. 2nd edition. London & New York : Methuen & co. Ltd.
BLOOMFIELD, L. (1936) 'Language or Ideas?' In Katz (1985), pp.19-25.

- CHURCHLAND, Patricia Smith. (1986) *Neurophilosophy - Towards a Unified Science of the Mind/Brain*. Cambridge, Massachusetts / London, England : The MIT Press.
- DAMASIO, Antonio R, & DAMASIO, Hanna. (1992) 'Brain and Language'. In *The Scientific American*, September, 1992, pages 62-71.
- 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 & Peter Geach. (1952) London.
- DOWTY, David R. (1979) *Word Meaning and Montague Grammar*. Dordrecht / Boston / London : D.Reidel Pub. Co.
- EIBL-EIBESFELDT, I. (1971) *Love and Hate*. London : Methuen.
- EKMAN, P., FRIESEN, W.V., & 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.
- 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.
- FODOR, Jerry A. (1985) 'Some notes on what Linguistics is about'. in KATZ (1985), pp.146 - 160.
- FODOR, Jerry A. & 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
- FRIJDA, Nico H. (1986) *The Emotions*. Cambridge : Cambridge University Press.
- HALLIDAY, M.A.K. (1984) *An Introduction to Functional Grammar*. London. Edward Arnold.
- HOLLAND, Dorothy & QUINN, Naomi. (1987) *Cultural Models in Language and Thought*. Cambridge : Cambridge University Press.
- JAMES, W. (1884) What is an Emotion? *Mind*, 9, pp. 188-205.
- 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 pp.81 - 123. Hove and London : Lawrence Erlbaum Associates.
- KATZ, Jerrold J. (Ed.) (1985) *The Philosophy of Linguistics*. Oxford University Press. Oxford.
- KATZ, Jerrold J. (1990) *The Metaphysics of Meaning*. Cambridge, Mass : The MIT Press.
- KENNY, Anthony. (1963) *Action, Emotion and Will*. London and Henley : Routledge and Kegan Paul Ltd.
- LAKOFF, George & JOHNSON, Mark. (1980) *Metaphors We Live By*. Chicago : University of Chicago Press.
- LUTZ, Catherine. (1987) 'Goals, events, and understading in Ifaluk emotion theory'. In HOLLAND & QUINN pp. 290 - 312.

- MAIA, Belinda (1994) *A Contribution to the Language of Emotion in English and Portuguese*. Universidade do Porto.
- 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.
- ORTONY, Andrew, CLORE, Gerald L., COLLINS, Allan. (1988) *The Cognitive Structure of Emotions*. Cambridge and New York: Cambridge University Press.
- PENROSE, Roger. (1989) *The Emperor's New Mind - concerning Computers, Minds and the Laws of Physics*. London : Vintage.
- PUTNAM, Hilary. (1988) *Representation and Reality*. Cambridge, Mass. : MIT Press.
- QUINE, W.V.O. (1964) 'Speaking of Objects'. In FODOR, J.A. and KATZ, J.J. (1964) pp. 446 - 459.
- QUIRK, Randolph, GREENBAUM, Sidney, LEECH, Geoffrey, SVARTVIK, Jan. (1985) *A Comprehensive Grammar of the English Language*. London and New York : Longman.
- STRAWSON, P.F. (1959) *Individuals*. London : Methuen.
- VENDLER, Zeno. (1967) *Linguistics and Philosophy*. Ithaca and London : Cornell University Press.
- WHORF, Benjamin Lee. (1956) *Language, Thought and Reality*. Massachusetts : The M.I.T. Press
- 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. pp. 133 - 138 & pp. 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*.
- WITTGENSTEIN, Ludwig. (1922) *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul.
- WITTGENSTEIN, Ludwig. (1953) *Philosophical Investigations*. tr. by G.E.M. Anscombe. Oxford : Basil Blackwell.