AISB 2008 Convention
Communication, Interaction and Social Intelligence

1st-4th April 2008
University of Aberdeen

Volume 2:
Proceedings of the
AISB 2008 Symposium on Affective Language in Human and Machine

Contents

"*You make me feel…*": Affective Causality in Language Communication

Andrzej Zuczkowski[1] and **Ilaria Riccioni**[2]

Abstract. In this paper we analyse linguistic structures, such as "You make me feel angry", which imply the possibility that a person can cause another person's affect. We illustrate the concept of "affective causality", based on an implicit-naïve theory of interpersonal relations linked to common sense. We present two theoretical alternative viewpoints (deriving from psychology and psychotherapy) which promote people's emotional autonomy. We propose an alternative linguistic model to causal structures, in which a listener's feelings are not causally linked to a speaker's utterances. We also show the relation between affective causality in language and in perception. Finally, we outline some possible uses of our model in relation to Affective Computing.

1 AFFECTIVE COMPUTING AND AFFECTIVE CAUSALITY

Affective Computing [13] deals with how a computer can: (1) recognize emotions; (2) express emotions; (3) demonstrate emotional intelligence; and (4) have emotions. As psychologists, whose main research field is language communication, we focus on how people talk *about* their own feelings and causally relate them to other people's verbal and/or non verbal behaviour. We shall illustrate a naïve viewpoint of "affective causality" (cf. sections 2-5) vs. a critical one (cf. sections 7.1 and 7.4).

Anyway, the problem of affective causality concerns not only language communication, but also perception, as we shall try to show in sections 7.1 and 7.2, where we shall illustrate the difference between expressive qualities and effect qualities.

Furthemore, in section 7.3 we shall try to explain that there is a strong relation between affective causality in language communication and affective causality in perception: the former depends on and is rooted in the latter.

Therefore, we do believe that our paper can be productive in order to find solutions in relation to the theoretical issues in the above mentioned points (1), (2) and (3): these very theoretical issues will throw light on technical aspects concerning Affective Computing (cf. section 8).

2 AN INTRODUCTORY EXAMPLE : "YOU MAKE ME FEEL…"

As an introductory example, let us suppose that after you (= the Speaker S) have said something to me (= the Listener L), I feel angry and I tell you: "You make me feel angry". By this utterance I mean it is you who aroused my anger; because of what you said to me, I got angry. I also mean that if you had not said to me what you did or if you had said something different, I would not have got angry.

In this way, I attribute some effects which are inside me, internal to me (i.e. my feeling), to some causes which are outside me, external to me (i.e. your words and you). Such an attribution implies my firm belief that after your words I had no other way to react except that of feeling angry.

In some contexts, besides my thinking of you as the one who caused those effects, I can also attribute to you the intention of and the responsibility for having caused these effects. My "attributive reasoning" can then be paraphrased in the following way: (1) I feel angry (the effect) because (2) *you* made me feel angry by saying what you said (the causal link between your words and my anger); therefore (3) you *intended* to make me feel angry (intention) and you succeeded in doing so (responsibility).

3 AFFECTIVE CAUSALITY

One of the many ways in which affect can be communicated by people in their written and spoken language can take the following forms:

(i) "You *make me feel* angry/sad/glad/happy…";

(ii) "She *amused* me"; "You're *boring* me"; "He'll *astonish* me".

These two linguistic structures are in fact the main ones we normally use in everyday life in order to *describe* perlocutionary acts [1, 17, 18] which produce effects on affects.

Such verbs (to amuse, to bore, to astonish…) and verbal expression (to make somebody feel…) in utterances (i) and (ii) share a *causal* semantic structure which could be schematized in the following way: somebody causes, caused or will cause a certain affect in somebody else: anger, sadness, joy, boredom, astonishment, happiness, amusement…

We are dealing here with somebody's "causation", "production", "generation", "creation" of something new in somebody else: an affect. For that reason, we propose to call this kind of causation "affective causality".

4 FOCUS ON S

Verbs and verbal expressions of type (i) and (ii) solve in a causal way the problem concerning the relation between S, what s/he says and L: it is S who causes, by saying what s/he says, certain affects in L; it is S who amuses, bores, astonishes…L.

[1] University of Macerata, Centre of Research in Psychology of Communication, Italy, email: zuko@unimc.it.
[2] University of Macerata, Centre of Research in Psychology of Communication, Italy, email: i.riccioni@unimc.it

Inside the communicative structure which is made by S, his/her words and L, the whole focus is put on S and on what s/he says: L's effects are caused by S's words and thus by S who utters them. The main role is given to S and to his/her words; s/he does all the job: it is s/he who is the only one who acts, is active, performs an action, while L seems to be passive and dependent on what S says. Utterances (i) and (ii) do not acknowledge any autonomy to L but underline a whole dependence of L on S.

5 AN IMPLICIT THEORY OF INTERPERSONAL RELATIONS (THE COMMON SENSE VIEWPIONT)

Utterances (i) and (ii) *are not simply ways of speaking*, they also *show what people believe* (think, are convinced) happens in language communication, i.e. they convey an implicit theory of interpersonal relations, common sense, confirmed and reinforced every day by the language itself. Such implicit theory is the one illustrated in section 2.

Now the question is: is it proper to use perlocutionary verbs or verbal expressions to describe what happened between S and L and to say "S amused/ bored/astonished L" or "S made L feel angry/sad/glad/happy"? In other words, is it proper to state that S and his/her words *cause* L's affects?

6 PARADOXICAL CONSEQUENCES OF AFFECTIVE CAUSALITY

If I believe that my affects are caused by what others said to me, then I grant myself no power over my feelings and so I do not take upon myself the responsibility; therefore I am not in charge of my feelings.

Thus, I attribute power and responsibility to others: it is you who make me feel the way I feel. Vice versa, I can cause other people's feelings and have power over them; I can control them and take charge of them.

If such were the case, I would be the cause of and the one responsible for your feelings but not my own; you would be the cause of and the one responsible for my feelings but not your own. Each of us would be in the other's thrall. We both would be totally dependent on other people; we could have great power over others' feelings but no power over our own: my feelings depend on other people (it is they who can make me feel bad or good) and other people's feelings depend on me (it is I who can make them feel good or bad).

7 TWO ALTERNATIVE VIEWPOINTS

7.1 FOCUS ON THE RELATION BETWEEN S AND L: GESTALT PSYCHOLOGY

In the field of perception, Gestalt psychologist W. Metzger [9] distinguishes three categories of global qualities of the objects we perceive: *shape* qualities ("round", "linear",…), *material* qualities ("smooth", "transparent",…) and *expressive* qualities ("cheerful", "sad",…). To these he adds a fourth category of qualities ("attractive", "pleasant", "repugnant", "amusing", "boring", interesting",…) which, unlike shape, material and expressive qualities, are not *object* qualities, i.e. they do not belong to objects as objects. These qualities refer to the relation between the perceived object and the perceiving subject, and more precisely to the particular *effect* of the relation on the perceiving subject. We can call them *effect qualities*.

Metzger's viewpoint, applied to language communication [17], is not solely focused on either S or L, but is focused on both, or – more precisely – on the *relation* between S and L. According to Metzger, effect qualities are the global outcome, which is experienced with phenomenal immediacy, of the *interaction* between S and L. Since they are global qualities, i.e. Gestalt qualities, they reflect some phenomenal *conditions* which are *structural* inasmuch as they refer to some features of S, some of L, some of what S says and some of the relation between S and L, i. e. features of the particular and wider Gestalt that they constitute all together.

According to this viewpoint, S and L are on the same level; the term "conditions" recognizes the contribution both of them give to the effect: the effect of a speech act by which S "causes" a feeling in L depends not only on the features of the one who "performs the action" (i.e. S), but also on the features of the one who "undergoes the action" (i.e. L). In contrast, the common sense viewpoint (cf. sections 2-5) tends to consider L's features to be nonexistent and to exalt the features of S and his/her words.

7.2 EXPRESSIVE QUALITIES VS EFFECT QUALITIES

In fact, though effect qualities are properties not of S but of L's feelings and result from L's relation with S, everyday language communication attributes such qualities not to L but to S.

When I say, for example, "That movie is amusing", "This exercise is boring" or "Mary is depressing", I use "amusing", "boring" and "depressing" as if it were object qualities, in particular as if it were expressive qualities of the movie, of the exercise, of Mary, as when I say "That movie is cheerful" or "Mary is sad". Expressive qualities such as "cheerful" and "sad", which are the movie's and Mary's properties, have to be distinguished from effect qualities such as "amusing" and "depressing", which refer to the effect that my relation with the movie or with Mary has on *my* feelings.

A movie may be cheerful and not amuse me, just as my interaction with a sad person may not depress me. Cheerfulness and sadness are the movie's and Mary's properties, they do not depend on my feelings; in contrast, amusement and depression are feelings which *I* experience over the movie and Mary. Another person could experience different feelings. But, instead of saying more correctly "I feel depressed, when I'm with Mary" (because, for example, she is sad), language allows me to say "Mary is depressing me" or even simply "Mary is depressing".

In this way, qualities which are *relative to the perceiving subject* are presented by language as *object's absolute qualities* and the relation between object and subject is presented as a cause-effect relation: it's the "I" who is the experiential or phenomenal subject who is depressed, amused or bored; however, from a linguistic or grammatical point of view, that "I" is presented as an object, i. e. a direct object of the action of something else (movie, exercise) or someone else (Mary) which in its (or her) turn becomes the subject of the sentence: "It's the movie that amuses *me*", "It's the exercise that bores *me*", "It's

Mary who depresses *me*". Yet again a causal structure appears focused on the other-than-I, whether object or person.

Yet, if the feelings I experience over objects and persons depend on me too, how is it possible to maintain that it is that-other-than-I which causes my feelings and to say "That movie is amusing me", "This exercise is boring me", "Mary is depressing me", "You make me feel angry", i.e. how is it possible to use a linguistic structure according to which my feelings depend on objects and on other persons?

7.3 WHY IS CAUSAL LAUNGUAGE FOCUSED ON S?

The common sense answer takes the following line: we talk the way we do, i.e. we use causal expressions (i) and (ii), because affective causality *really exists*; *it is true* that others make us feel a certain way, and just as true that we make others feel a certain way.

According to Gestalt theory, such an answer is to be thought of as "naïve", because it implies that language refers to *transphenomenal reality*: here the existence of affective causality in transphenomenal reality accounts for the existence of affective causality in language.

In contrast, as far as the relations between language and the non-linguistic reality which language refers to are concerned, according to the "critical" or "less naïve" viewpoint of Gestalt theory, language refers to *phenomenal reality,* i.e. not to the world but to our experience of the world. Thus, the answer to our question has to be looked for, first of all, within the scope of the relations between language and phenomenal reality.

Metzger [9] thinks of phenomenal reality as a *continuum* in which it is possible to distinguish *perceived phenomenal reality* (here and now I perceive something) from *represented phenomenal reality* (here and now I think/believe/imagine/remember…something).

A Gestalt specific answer to our question comes from Albert Michotte's [10, 11] experimental phenomenology of the perception of causality. His experiments show that 1) causality is a phenomenal datum, 2) it is a perceived phenomenal datum before becoming a represented phenomenal datum, and 3) it is a perceived phenomenal datum without a transphenomenal correlate.

This means that causality is an immediate perceptual datum which strictly depends on a well-defined system of stimuli, i.e. on well-defined structural conditions of a spatial, temporal and kinetic nature. These conditions make the causal impression coercive: but it is sufficient to change them only a little so that a causal impression disappears. Michotte's experiments show that a causal impression is not a question of "interpretation" due to acquired knowledge or thought: the causal meaning of an event is *intrinsic, immanent* in the event itself and independent of past experience or thought. In other terms, causality -- as well as objects' shapes, movements etc. -- is a global property, a Gestalt quality which imposes itself in a coercive way on our perception without any mediation of thought or past experience.

Thus, the answer to our question could be found by seeing the perceptual experience which language refers to as governing: then the correlate of the language of affective causality would be seen to lie, first of all, on the perceptual phenomenal level.

If I am convinced (i.e. if I do not doubt it) that other people cause my feelings, it is because I find the highest degree of consistency between what I *experience* daily in the course of my communication with others and the meaning that these particular causal expressions offer me in conceptualizing (or representing) my *experience*. Here the word "experience" has to be understood not as "represented phenomenal reality" but as "perceived phenomenal reality" because the causal link between language and feelings is not a representation, a thought, but a perception, and only afterwards does the link become a representation (thought, belief, conviction or prejudice).

7.4 FOCUS ON L: PSYCHOTHERAPY

In the psychotherapy field, some theories (such as F. Perl's Gestalt Therapy [12], E. Berne's Transactional Analysis [3, 4, 5], R. and M. Goulding's Redecision Therapy [7, 8], R. Bandler and J. Grinder's NeuroLinguistic Programming [2]) maintain a viewpoint which is centred on L's emotional autonomy and independence and which is then antithetical to the one that would take S as its focus. According to them, no one is responsible for other people's actions, thoughts and feelings; each person is responsible not only for his/her own actions but also for his own thoughts and feelings (but not for those of other people); s/he has enough power and capability to be the master of his/her own life. Personal responsibility, power and capability are often denied and externalized for different reasons by using, for example, the utterances (i) and (ii), so that people consider out of their control feelings which are their own responsibility.

According to this point of view, in our examples it is not S who, by saying what s/he says, amuses or bores L or makes him/her angry, but, on the contrary, it is L who amuses or bores himself/herself or makes himself/herself angry. In these expressions, perlocutionary verbs are used in a reflexive way: the grammatical subject and direct object are no longer two different persons (as in the case of "*S* makes *me* feel angry"), they are the same and only one person ("*I* make *myself* feel angry").

For that reason, in a psychotherapy session, addressing a client who says "S's talk makes me feel angry", Goulding & Goulding [7, 8] do not ask him/her questions such as "What did S tell you to make you feel angry?", because such questions would confirm the client's belief that his/her anger is caused by S. On the contrary, they ask him/her: "When you are listening to S, what do you tell yourself in your head to make yourself angry?". By this kind of questioning, they shift the focus away from S (where it lays in the client's description) to the client himself/herself and they re-propose to him/her his/her anger as a feeling which is totally his/hers, which is dependent on him/her and not on S, as a feeling, then, which s/he can begin to feel himself/herself the master of and be responsible for.

8 DIFFERENT USES OF OUR MODEL IN RELATION TO AFFECTIVE COMPUTING

How can this model be useful in Affective Computing?

(i) As we have already mentioned in section 1, this model seems useful in relation to our theoretical discussion in point (3): if we aim at creating an *emotionally intelligent* [15, 6] computer, then the adoption of our critical model seems preferable.

(ii) If we want to create a computer able both to perceive other people's emotions and recognize its own, we have to construct a computer able to distinguish expressive qualities from effect qualities.

(iii) Thus, given the strong relation between point (i) and point (ii), this same model can be used both on a linguistic and perceptual level.

9 CONCLUSIONS

In this paper we analysed one of the many ways in which affect can be communicated by people in their written and spoken language. In particular, we referred to linguistic structures, such as (i) and (ii) [cf. section 3], which imply the possibility that a person or an object can cause another person's affects. We illustrated the concept of "affective causality", based on a implicit-naïve theory of interpersonal relations linked to common sense. We presented two theoretical alternative viewpoints: the first one derives from Gestalt theory; the second one refers to relevant theories of psychotherapy which promote people's emotional autonomy.

Throughout the paper, we defend a point of view in favour of reciprocal affective autonomy, within and outside psychotherapy sessions [14]. We conclude that in everyday communication, instead of using sentences with focused-on-S causal expressions such as "You make me feel angry", it would be more proper to use such correlative sentences as "You say what you say *and* I feel angry" (or "I make myself feel angry") or " *When* you say what you say, I feel angry" (or "I make myself feel angry"). In others words, we can use coordinate or subordinate sentences, in which what you say and what I feel are kept apart and not causally linked [16].

We also believe that the awareness in using alternative options to causal structures in affective communication can increase the communicative skills and effectiveness in order both to produce and to interpret speech acts in verbal communication as well as in order to perceptually recognize our and other people's emotions. That is the reason why we believe that our model can be applied to the main theoretical and technical issues of Affective Computing.

REFERENCES

[1] J.L. Austin, *How to Do Things with Words*, Oxford University Press, Oxford, U.K., (1962).

[2] R. Bandler, J. Grinder, *The Structure of Magic*, Science and Behavior Books, Palo Alto, California, USA, (1975)

[3] E. Berne, *Transactional Analysis in Psychotherapy*, Grove Press, New York, USA, (1961).

[4] E. Berne, *Games People Play*, Grove Press, New York, USA, (1964).

[5] E. Berne, *What do You Say after You Say Hello?*, City National Bank, Beverly Hills, California, USA, (1972).

[6] D. Goleman, *Emotional Intelligence*, Bloomsbury , London, UK ,(1996)

[7] M.M. Goulding, R.L. Goulding, *The Power is in the Patient*, TA Press, San Francisco, USA, (1978).

[8] M.M. Goulding, R.L. Goulding, *Changing Lives through Redecision Therapy*, Brunner e Mazel, New York, USA, (1979)

[9] W. Metzger, *Psychologie*, Steinkopff, Darmstadt, Germany, (1954)

[10] A. Michotte, *La perception de la causalité*, Publications Universitaires, Louvain, Belgium, (1954).

[11] A. Michotte, *Causalité, permanence et réalité phénoménales*, Publications Universitaires, Louvain, Belgium, (1962).

[12] F.S. Perls, R.F. Hefferline, P. Goodman, *Gestalt Therapy*, The Julian Press, New York, USA, (1951)

[13] R. Picard, *Affective Computing*, MIT Press, Cambridge (Mass) (USA), (1995)

[14] I. Riccioni, *La percezione della sintonia dialogica*, Edizioni Junior, Bergamo, Italy (2005).

[15] P. Salovey, J.D. Mayer, Emotional Intelligence, in *Imagination, Cognition and Personality*, 9, 185-211, (1990)

[16] C.M. Steiner, *Achieving Emotional Literacy*, Avon Books, Nee York, USA, (1997)

[17] A. Zuczkowski, *Strutture dell'esperienza e strutture del linguaggio*, CLUEB, Bologna, Italy, (1995).

[18] A. Zuczkowski, *Dialoghi quotidiani: il counselling amicale*, CLUEB, Bologna, Italy, (2004).