

# Lacan and Maturana: Constructivist Origins for a 3<sup>0</sup> Cybernetics

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*'Subhuti was Buddha's disciple. He was able to understand the potency of emptiness, the viewpoint that nothing exists except in its relationship of subjectivity and objectivity. One day Subhuti, in a mood of sublime emptiness, was sitting under a tree. Flowers began to fall about him. "We are praising you for your discourse on emptiness", the gods whispered to him. "But I have not spoken of emptiness," said Subhuti. "You have not spoken of emptiness, we have not heard emptiness," responded the gods. "This is the true emptiness." And blossoms showered upon Subhuti as rain.' Zen story quoted in Reps, 1973.*

## **ABSTRACT**

We examine some difficulties in the use made of second-order cybernetics, and the absence within radical constructivism of a theory of the subject. We introduce Lacan's approach to the subject particularly in the structure of discourse. We consider the implications this conception has both in the need for a third-order cybernetics, and for a formulation of an ethics based on calling into question the subject's relation to this third order as it manifests itself in transference.

## Part I

# ***The Genesis of a Third-order Cybernetics [ 3<sup>0</sup>C ]***

### **Introduction**

While the assumptions of realism worked tolerably well within the frame of the first-order cybernetics, it became apparent to those who were to become the second-order cyberneticians that there was 'more to this than meets the eye', and more to be understood than was allowed within the realist frame. Second-order cybernetics was born therefore by generating a domain of discourse about observers, and the ways in which they brought forth the apparently objective realities which they enacted. Heinz von Foerster and others who were involved in the generation of 2<sup>0</sup>C were keen to problematise the assumption that there was an objectively existing reality which was 'there' independent of any observer. The creation of the 2<sup>0</sup>C was a necessary step to unfold the apparently independent existence of objects to show that this existence was contingent upon the operations of distinction of some particular observer who was working within a tradition of observing and with a given intent. Attention was thus shifted from the apparently independently-existing objective reality to the languaging domain of observers where particular worlds were consistently "talked forth" or, rather, brought forth.

### **Observer-Community Consensuality**

Maturana's (1987) use of the notion of 'consensual criteria' for the acceptability of an 'explanation' within any given observer-community is a full working through of this position of differentiating observer-space. The permitted variations within the scientist's space of observing are the ways in which they differentiate from one another in relation to any given phenomena.

The idea of 'consensuality' is necessitated by his theory, which points to the advisability of the parenthesizing of objectivity. Once this move to a parenthesized reality is made we can no longer depend on independently existing objects to arbitrate between our different observer opinions and disagreements as to 'how it really is out there'. Such disagreements about 'reality' can only be resolved within the ways in which we communally specify the criteria for the acceptability of explanations. As Maturana (1988) pointed out the notion of 'reality' is used as a step in an argument to persuade someone else to agree to something which they already do not agree with. Reality only appears - as an issue - in the context of a breakdown of a social agreement of some kind.

This idea of consensuality - consensual criteria for the acceptability of an explanation within any given observer community - emerges as a crucial distinction in

Maturana's *oeuvre*, formalised as the criteria for scientific validation which functions as a third-order closure.

While within Maturana's broad theory we may discern several particular theories e.g., a theory of perception; of epistemology; of biology; of language and communication; of ethics; and so forth, nowhere is there to be found what we might recognise as a theory of the 'subject'. This is partly because his background system of understanding is that of experimental biology. More than this however, his theory, whilst premised upon the paramountcy of the individual autopoietic biological cell, gives a thorough-going social answer to many of the questions about individual phenomena. The following quote will illustrate this:

"For a living system in its operation as a closed system there is no inside or outside, it has no way of making the distinction. Yet, in language such a distinction arises as a particular consensual co-ordination of actions in which the participants are recursively brought forth as distinctions of systems of distinctions. When this happens self-consciousness arises as a domain of distinctions in which the observers participate in the consensual distinctions of their participations in language through languaging. It follows from this that the individual exists only in language, that the self exists only in language, and that self-consciousness as a phenomenon of self distinction takes place only in language. Furthermore, it also follows that since language as a domain of consensual co-ordinations of actions is a social phenomenon, self-consciousness is a social phenomenon, and as such it does not take place within the anatomical confines of the bodyhood of the living systems that generate it, on the contrary, it is external to them and pertains to their domain of interactions as a matter of coexistence." [Maturana 1987, p.63].

Thus, in our search for a theory of the subject, the trail in Maturana leads back to the social phenomena of languaging. This is not a direction which yields a psychological theory of the subject. For this we will turn to the writings of Lacan:

"The Other is, therefore, the locus in which is constituted the I who speaks to him who hears, that which is said by the one being already the reply, the other deciding to hear it whether the one has or has not spoken.

But this locus also extends as far into the subject as the laws of speech, that is to say, well beyond the discourse that takes its orders from the ego, as we have known ever since Freud discovered its unconscious field and the laws that structure it." [p141 Ecrits 1977]

In doing this we will find quite another view taken of languaging, as Lacan raises the *problematique* of how the supposed subject-of-speaking comes to produce himself as a one (self).

There is an old Irish joke which goes as follows: A tourist was lost in the countryside having failed to find his hotel. He stopped his car to ask an old man by the side of road if he knew which direction he should take in order to find his destination. The old man thought for a long moment before replying "Ah yes, but if I were you I wouldn't start from here." In order to arrive at a theory of the subject, we too want to start somewhere else.

## What the 2<sup>0</sup>C lacks

Heinz von Foerster (1984) elaborates the shift from the first- to the second-order cybernetics like this :

" Here are two examples of this shift in scientific thinking : 1) observations are not absolute but relative to the observer's point of view ( i.e., his co-ordinate system - Einstein's theory of relativity); 2) observations affect the observed so as to obliterate the observer's hope of prediction ( i.e., his uncertainty is absolute - Heisenberg's uncertainty principle).

Given these changes in scientific thinking, we are now in the possession of the truism that a description ( of the universe) implies one who describes ( observes it). What we need now is a description of the 'describer' or, in other words, we need a theory of the observer. "

So the problem which gave rise to the 2<sup>0</sup>C was that of how to delineate a world which included the observer:

"However, in accord with the classical tradition of scientific inquiry, which perpetually asks "how?" rather than "what?" this task calls for an epistemology of "How do we know?" rather than "What do we know?"

These remarks of von Foerster reveal the limitations of the second-order cybernetics approach. The project is to switch from the detailing of the contents of our knowledge ( 'what' it is that we know) to the description of the mechanisms whereby we come to invent a particular reality ( 'how' it is that we bring forth a given reality) - from a *diachronics* of knowing to a *synchronics* of knowing. The 'observer' is taken for granted as an independently existing entity who has the given power to unilaterally bring forth ( 'compute') a particular reality. Apart from his two rather vague recommendations to observers as to how they 'ought to' approach the bringing forth of realities - summarised as his 'Ethical' and 'Aesthetical' imperatives - there is no articulation of the ways in which diverse observers are coordinated in their computing of realities. Thus von Foerster's 'how' of the observer is just that - a 1<sup>0</sup>C version of the supposed 2<sup>0</sup>C observer. The 'who' and the 'why' of the 2<sup>0</sup>C is left obscured.

Here we can see the falling-short of the task of the second-order cyberneticians. Instead of pressing home the assault upon realism to its ultimate location (the sanctified 'self-hood' of the individual), the task focused upon instead is that of how 'observers'

come to compute a reality. There is no sense in which we can here equate the status of 'observer' with that of 'subject', although von Foerster and others seem to use these terms interchangeably, as in this quotation :

"It is syntactically and semantically correct to say that subjective statements are made by subjects. Thus, correspondingly, we may say that objective statements are made by objects. It is only too bad that these damned things don't make any statements." [1976]

Despite the plethora of "self-" phrases in the 2<sup>0</sup>C literature - for example, 'self-referencing', 'self-organizing', 'self-producing', 'self-correction', 'self-control', 'self-specifying', etc., there is a general vagueness about what it is that this 'self-' entity might be. It is interesting to note Maturana's extrication of himself from this morass where he points out that the use of the phrase "Self-Organization" is a mistake. For him 'organization' is a spontaneous phenomenon which is invariant as long as the system conserves its class identity: there is no 'self' entity which is operating upon itself as if from a distance from itself-as-a-system to maintain the coherence of its organization intact.

The game of the 2<sup>0</sup>Cybernetician was then the 'observing of observers' or the 'cybernetics of cybernetics'. However, as we can see from the following list of difficulties - which the 2<sup>0</sup>C domain did not succeed in addressing - the escape from the realist illusion was merely another realist illusion:

- it did not abandon in a thoroughgoing manner the realist privileging process;
- it did not go far enough in its use of parenthesising; and
- it did not avoid the loss of the parenthesising effects of the observer's 2<sup>0</sup>C domain in moving into the realist 1<sup>0</sup>C domain once practice was engaged.

On this latter point, while the world of 'solid objects' was parenthesized so that we were always reminded that their particular existence and significance were dependent upon some observer's activities, the illusion of 'real solidity' was transferred to the privileging of the 'Observer' as unquestionably the ultimate source of reality, as the bed-rock truth.

## **The Meta-Language of the Meta-Observer.**

In 'backing away' from the 1<sup>0</sup>C world view of real objects, the 2<sup>0</sup>C domain was created in such a way that the anticipated liberation of being able to move more freely [both conceptually and practically] was not forthcoming. It was as if the 2<sup>0</sup>Cyberneticians had backed themselves into a corner, i.e., had re-established a realist privileging of some 'corner' of the universe that was 'knowable' and 'real'. Its main manifestation in systemic practice was to engender a passivity, uninvolvedness or impotence on the one hand; or to create illusions of omniscience on the other, from apparently being able to occupy a meta-perspective from which a transcendent view could be had.

While there is much talk of 'Observers' and 'Meta-Observers' in Maturana's system, this is often mistakenly taken to imply that there is a privileged vantage point (meta-perspective) to which one can arrive by virtue of making complex distinctions of distinctions in conversations. However, Maturana's intent is quite the reverse. Namely, that these conversations occur in the domain of explanations and are only our way of *being in* our experiential flow at some given moment. We are structurally embedded in, and an intrinsic part of, our own medium. We cannot find or take any position which is apart from the medium in which we live. There is no way of separating oneself from the effects of one's actions in one's niche. This relates quite closely to Lacan's thesis that "There is no meta-language". Zizek elaborates Lacan's position thus:

"Metalanguage is not just an Imaginary entity. It is Real in the strict Lacanian sense - that is, it is impossible to occupy its position. But, Lacan adds, it is even more difficult simply to avoid it. One cannot attain it, but one also cannot escape it. That is why the only way to avoid the Real is to produce an utterance of pure metalanguage which, by its patent absurdity, materialises its own impossibility : that is, a paradoxical element which, in its very identity, embodies absolute otherness, the irreparable gap that makes it impossible to occupy a metalanguage position." [p. 156]

Unfortunately, many consultants and 'systemic' therapists, persist in the illusion that their epistemological stance constitutes a 'meta-perspective'

- which 'elevates' them to a transcendent position from which they can obtain an encompassing and compelling 'true over-view' of the systemic complexities, and, worse still,
- which insulates and positions them in a domain apart from that in which the phenomena of the consulting context is taking place. In other words, they imagine that they can sustain an orthogonal relation to the events in which they are deeply intersected.

This widespread confusion as to whether the consultant is '*a part of*' or '*apart from*' the immediate context of relationships within which the 'problem' is being unfolded arises directly from the fact that the 2<sup>0</sup>Cyberneticians had not gone far enough. They had shifted the question from the diachronic "What?" to the synchronic "How?" of knowing by formulating the 2<sup>0</sup>Cybernetics. But they had not articulated the 2<sup>0</sup>C diachronic "Who?" (observer) of the knowing, and beyond this, (to complete the Aristotelian quartet), the synchronic "Why?" of it all. Put another way, while the 1<sup>0</sup>Cyberneticians had specified the purpose of the object in terms of the supposed objective 1<sup>0</sup>C reality, the 2<sup>0</sup>Cyberneticians had parenthesised this by introducing a synchronics of the 1<sup>0</sup>C, but without fully acknowledging and unfolding the 2<sup>0</sup>C observer's own intents and purposes in doing this.

To parenthesise the observer position itself, we need a 3<sup>0</sup>C in order to properly examine "Who" it is that 'holds' these purposes, and indeed to examine the 'purpose of purpose', or in other words, the "Why" of the observer. We are particularly interested to

discern the ways in which the multiple meanings of multiple observers - manifested in differentiated speaking and listening positions - are coordinated and organized in terms of a 3<sup>0</sup> Cybernetics diachronically in relation to each other; and synchronically in relation to an ideal.

## Nayman of Noland

So we need to consider how the question of the subject arises for Maturana and Lacan. Consider Maturana and Varela on human reflection:

"...everything we said in this book, through our knowledge of our knowledge, implies an ethics that we cannot evade, an ethics that has its reference point in the awareness of the biological and social structure of human beings, an ethics that springs from human reflection and puts human reflection right at the core as a constitutive social phenomenon...." (p245, Maturana & Varela 1987)

And Lacan on the position of the sceptic:

"Scepticism does not mean the successive doubting, item by item, of all opinions or of all the pathways that accede to knowledge. It is holding the subjective position that *one can know nothing....* Scepticism is something that we no longer know. Scepticism is an ethic. Scepticism is a mode of sustaining man in life, which implies a position so difficult, so heroic, that we can no longer even imagine it - the way of desire." (p223, Lacan b 1977)

Maturana's subject springs as a social phenomenon from human reflection; and Lacan's scepticism is what Lacan identifies as a mode of sustaining man in life which is the "way of desire". Do these notions meet in Maturana's 'consensual criteria'? What happens when we make a Lacanian reading of Maturana? Is there something lacking in Maturana's exegesis? We think that there is.

What then is the nature of this lack, and how are we to make sense of its presence in Maturana? The subject's relation to languaging is constitutive of desire for Lacan. What is the 'motor' of Maturana's reflection-giving-rise-to-knowledge-of-knowledge? How does Maturana address himself to desire?

This phrase "Nayman of Noland" from James Joyce well captures the form of bleak artistry shown in the writings of Samuel Beckett which elaborate upon nothingness, futility, and purposelessness. His writings sustain an inner monologue of absence and inconclusiveness. The Unnameable says "Let us go on as if I were the only one in the world, whereas I am the only one absent from it." The stark and uncompromising writings of Beckett offer the best metaphor for indicating where it is that we wish to locate our starting point - no-where. One quotation from "Worstward Ho" will suffice:

" A place. Where none. A time when try see. Try say. How small. How vast. How if not boundless bounded. Whence the dim. Not now. Know

better now. Unknow better now. Know only no out of. No knowing  
how know only no out of. Into only. Hence another. Another place  
where none. Whither once whence no return. No. No place but the one.  
None but the one where none. Whence never once in. Somehow in.  
Beyondless. Thenceless there. Thitherless there. Thenceless thitherless  
there." [pp. 11-12]

To try to address the question of this lack we begin 'somewhere else'. In a certain sense where we start from is precisely no-where, i.e. from a nothingness in the place of all human existence. To be more precise, we start with the absence, lack or void obscured by the human invention of the human subject. To be some-one, some presumed unity, is the most taken for granted everyday assumption under which we operate. This is not to say that we wish to assert an ontological status for this 'absence' - as if we somehow 'know' that it is really there. Rather we wish to say that the domain of human languaging is lacking. This lack is covered up or obscured by the operations of our languaging co-ordinations. This lack that is prior to the languaging inventions of the human 'being' is obscured particularly by the instantiation of 'subjectivity', 'the subject', and the 'self' in the embodiment which comes to be taken as the unique 'existential address' of each 'subject': the 'subject' arises in the place of this lack.

We begin then with the problematising of the 'subjectivity' attributed to each existential address. We are interested in the processes whereby we come to lose trace of our selves. From Maturana's point of view, an object obscures the operations of distinction which some observer must make in order to bring it forth as an object. In this way the 'subject' comes to be an 'Object' which obscures the operations of distinction which some observer has made to bring it forth. Furthermore, the individual person [bodyhood] also continues to support this process of obscuring by conserving the objective status of his own sensed subjectivity which always acts to cover over his lack.

Thus at whatever level it may appear [1<sup>0</sup>C, 2<sup>0</sup>C, 3<sup>0</sup>C] any sense of 'thingness' existing objectively is, for us, an invitation to unfold the operations of distinction and unobscure the lack in relation to which such an 'object' is brought forth.

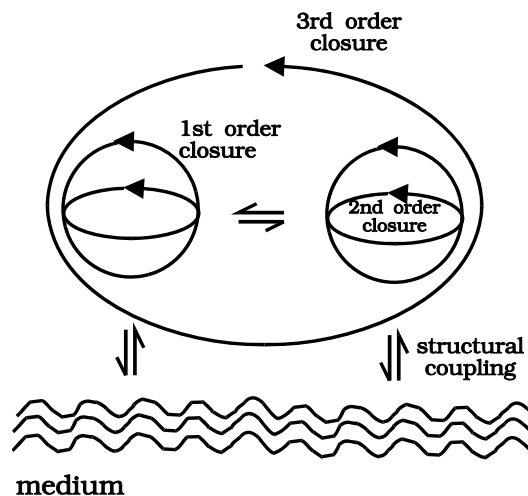


## Part II

### *Lacan and Maturana*

#### The community of observers

Maturana's first order closure of being is that of a metacellular system, the second order closure of being is the effect of the operational coherence of a nervous system, and the third-order closure that of languaging. The following diagram shows the relations between these three forms of closure:



"The nervous system participates in cognitive phenomena in two complementary ways. These have to do with its particular mode of operation as a neuronal network with operational closing as part of a metacellular system.... The presence or absence of a nervous system determines any discontinuity between organisms that have a cognition relatively restricted and those that are open-ended, as in human beings...Maturana & Varela 1987 (p175)

We call social phenomena those phenomena that arise in the spontaneous constitution of third-order couplings, and social systems the third order unities that are thus constituted. The form embodied by unities of this class varies considerably from insects to ungulates to primates. What is common to them all is that whenever they arise - if only to last a short time - they generate a particular internal phenomenology, namely, one in which *the individual ontogenies of all the participating organisms occur fundamentally as part of the*

*network of co-ontogenies that they bring about in constituting third-order unities.* Maturana & Varela 1987 (p193)

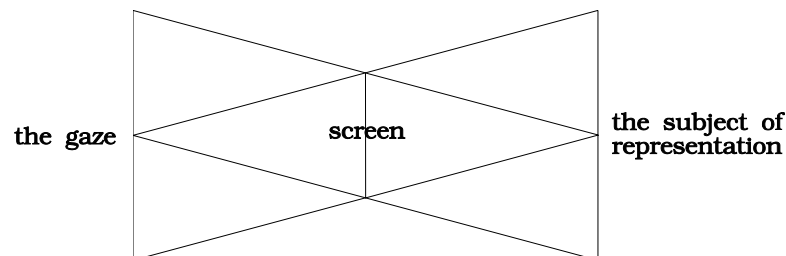
If languaging is constitutive of a 3rd order closure, what is Maturana doing when he argues that scientific explanation represents a particular form of third-order closure? Crucial in Maturana's articulation of autopoietic being is the concept of the closure of the nervous system. But in his seminal paper on "What is it to see" (1983), Maturana argues that "the phenomenon connoted by the word perception cannot be one of grasping features of an independent object world", and that "the phenomenon that we call perception consists in bringing forth a world of actions". He goes on to argue for putting objectivity in parentheses. That is, although he must use a language of objects, he will not use the object as an argument to validate his statements, but only scientific explanations.

These scientific explanations are systems of operational coherences agreed by a community of standard (operationally coherent) observers - they are co-ordinations of the members of a scientific community. So these systems of operational coherence are the basis of an articulation of being as a third-order closure - a particular (languaging) constituting of social relations which brings forth a community of observers. This is what we have called a *discourse*. How are we to locate this discourse in relation to Maturana's orders of closure and our 1<sup>0</sup>C and 2<sup>0</sup>C?

## The imaginary surface of the real

If we go back to the phenomenon of perception, there are striking similarities in Maturana's and Lacan's positions. This is how Lacan approaches the 'bringing forth' of a reality in terms of the field of the visible and the function of the gaze in relation to the subject:

"We can grasp in effect something which, already in nature, appropriates the gaze to the function to which it may be put in the symbolic relation in man. ... I have drawn two triangular systems - the first is that which, in the geometral field, puts in our place the subject of representation, and the second is that which turns *me* into a picture. On the right-hand line is situated, then, the apex of the first triangle, the point of the geometral subject, and it is on that line that I, too, turn myself into a picture under the gaze, which is inscribed at the apex of the second triangle. The two triangles are here superimposed, as in fact they are in the functioning of the scopic register....



What determines me, at the most profound level, in the visible, is the gaze that is outside. it is through the gaze that I enter light and it is from the gaze that I receive its effects. Hence it comes about that the gaze is the instrument through which light is embodied and through which I am *photo-graphed*. (p106, Lacan b 1977)"

Lacan does not suspend things in a dialectic between the screen and that which is beyond. Rather he argues that there is a fracture, a bi-partition, a splitting of the being to which the being accommodates itself. This is the alienation of the subject in the sense that Lacan uses it, which occurs even in the natural world. :

"Only the subject - the human subject, the subject of the desire that is the essence of man - is not, unlike the animal, entirely caught up in this imaginary capture. He maps himself in it. How? In so far as he isolates the function of the screen and plays with it. Man, in effect, knows how to play with the mask as that beyond which there is the gaze. The screen is here the locus of mediation. (p107, Lacan b 1977)"

So here is a crucial distinction between the human being and the animal. The animal is captured by the image - that which is brought forth by an operational closure in the world of actions. This is the imaginary surface of the real - the screen. Alienation arises through the taking of this screen in the place of the real: this alienation is another way of speaking of the parenthesising of objectivity.

But for the human subject this image is appropriated to the functioning of the symbolic. The symbolic functions as an Other which is the locus in which is situated the languaging that governs whatever may be made present of the subject - it is the field of that living being in which the subject has to appear. The imaginary surface of the real then takes on the form of the chain of signifiers - the symbolic inscribed on the (imaginary) surface of the real.

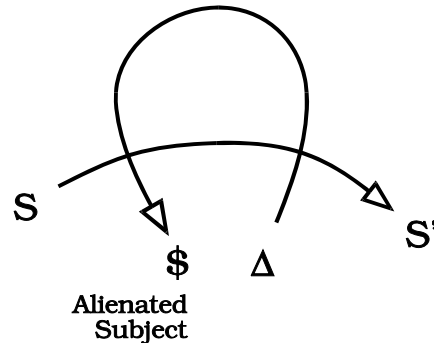
## **The symbolic framework obscuring the real**

In Maturana's third-order closure languaging is operative in support of a linguistic operational coherence. Speaking of a fifteen-year-old patient named Paul from New York, who had his corpus callosum (two brain hemispheres) severed, Maturana recounts how:

"In Paul's case, we see the operational intersection of three different persons in one body. At some time, these persons can be independent, self-conscious beings. This dramatically shows that it is in language that the self, the *I*, arises as the social singularity defined by the operational intersection in the human body of the recursive linguistic distinctions in which it is distinguished. This tells us that in the network of linguistic interactions in which we move, *we maintain an ongoing descriptive recursion which we call the "I". It enables us to conserve*

*our linguistic operational coherence and our adaptation in the domain of language. (p231, Maturana & Varela 1987)"*

How come we call the 'ongoing descriptive recursion' "I"? How does the "I" come



to be named as such - or named at all? Lacan approaches this as follows.

In this diagram, the subject is shown as a signifier which arises as a response to a real need which is mediated by a chain of signifiers. This chain of signifiers is an already-there languaging into which the subject inserts himself as a subject - an "I". Doing this is a response to the *demand* of the Other of language which results in an alienation - a signifier in the place of need - and *desire* becomes the condition which arises as a result of having a left-over in relation to his need. This *desire* is the desire of the subject, which is also the *desire* of the Other insofar as the Other as languaging also has a left-over. Lacan calls this left-over *objet petit a*. The subject then arises as a particular cut in the signifying chain. The chain is metonymic, and the cut is metaphoric. The metaphoric cut is an articulation of the chain.

Languaging then is defined by the metonymic chaining of signifiers S.....S'; and a new framework - a symbolic framework - is defined as a metaphoric articulating of this metonymic surface. This metaphoric articulating is operative through a substitution of one signifier for another:

S  
S

In effect we can think of this in terms of there being two axes. An imaginary surface of the real, which covers the real, and on which the symbolic is inscribed as the signifying chain articulating that surface; and a symbolic framework obscuring the real which is a making of sense by the metaphoric substituting of one signifier for another. The imaginary surface acts as support for the symbolic framework insofar as the one arranges and is an arrangement of the other. These 'arrangements' are the existential and referential articulations which are the effects of the signifier. It now becomes possible to speak of the metonymy of metaphor, and the 'levels' of metaphor in the sense of a series of metaphoric substitutions.

Maturana's third-order is a discourse which is constitutive of the social. It is a particular articulation of the languaging co-ordinations between speaking human beings. What sense can we make therefore of a fourth order closure?

This can be taken as the particular co-ordinations of metaphoric substitution in languaging - a paradigmatic structuring of substitution: a particular form of metaphoric practice within which the languaging is inscribed.

The orders of closure of Maturana in relation to the 1<sup>0</sup>C and the 2<sup>0</sup>C are summarised in the diagram below. The progression of identifications up the diagonal (the shaded cells) indicate the way in which each articulation is both a further 'level' of metaphoric substitution, which finds its support in the chaining of signifiers in the progression body -> subject -> social -> paradigmatic. Maturana's orders indicate single, double, treble and quadruple articulations of metonymy. These are the support for the diachronic and synchronic metaphoric substitutions of 1<sup>0</sup> and 2<sup>0</sup> observers - the "What", "How" of the 1<sup>0</sup>C, and the "Who" and "Why" of the 2<sup>0</sup>C.

Levels	Maturana's Orders			
	1 <sup>0</sup> unity	2 <sup>0</sup> unity	3 <sup>0</sup> unity	4 <sup>0</sup> unity
extimate identity				paradigmatic WHY
extimate viability			social WHO/M	
intimate identity		subject HOW		
intimate viability	body WHAT			



Intersection/  
Identification

The 4x4 matrix then shows ways in which the articulation of metonymy may support levels of metaphor. These ways place the subject (Maturana's 2nd order) both in relation to a reality *qua* surface of the real; and in relation to a symbolic framework under a paradigmatic metaphor. The discourses arise in the social through the way in which the individual places himself as a speaking and listening being in relation to the symbolic framework. The symbolic framework in these terms is that which is Other to the social which the social brings forth in discourse - a Maturana-*esque* 4th order closure.

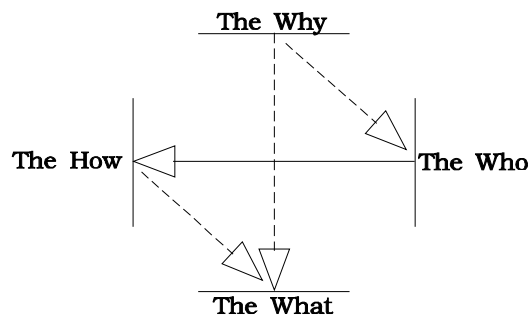
Identifications? For the human subject, alienation arises in his taking himself in the place of a signifier - a signified for another signifier. The human subject is a desiring subject precisely in the sense of being subject to the effects of the signifier: need becomes translated into desire. The human subject becomes desiring through this alienation which is a first articulation of the subject in the chain of signifiers and which is in this sense also

a first identification (the "What"). A second articulation/identification (the "How") arises through the subject taking himself to have an inside and an outside supported by the closure of the nervous system. A third articulation/ identification (the "Who") arises through the subject constituting himself through his invention in discourse.

## The invention of the subject in discourse

So what of a 3<sup>0</sup>C manifesting itself as an economy of discourses? Why should this arise as an effect of a 3<sup>0</sup>C? How do we arrive at an argument for a 3<sup>0</sup>C?

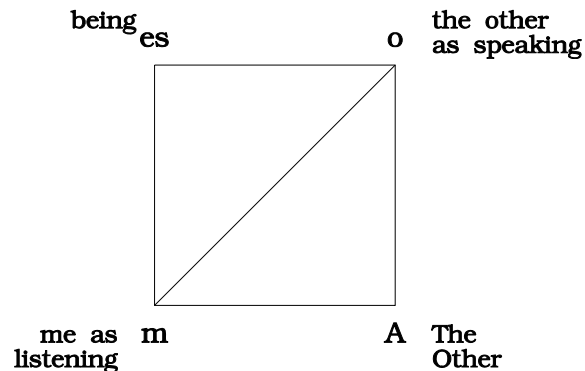
The precise ways in which the discourses are configured in relation to each other as an economy of discourses is described in Boxer & Kenny 1990. The forms of all the discourses are shown in the appendix, but one of them - the master discourse - is shown below:



### *The discourse of the master*

The oppositions of the what and the why, and the how and who are a representation of the levels of meaning under the paradigmatic metaphor. The solid and dotted lines represent the way in which the subject places himself in relation to the symbolic framework. The solid lines are the relation between speaking and listening - the conversational axes. It is these which *cover* the real in the form of the screen (indicated by the diagonal dotted lines). The vertical or horizontal dotted lines - the virtual axes - indicate the impossible axis in which the subject has his being in relation to the Other, which is obscured. In the master discourse we see this as the listening "Who" determining the speaking "How"; the "How" covering the "What"; and the "What" obscured by the "Why" where the master has his being. But how are we to understand this virtual axis ?

The diagram below is based on the Schemas L and R in the *Ecrits* (p193 and 197). In these the o-m axis is the speaking-listening axis; and the virtual axis is an impossible axis in which there is a direct relationship between being (es) and the Other (A).



This axis is impossible because it implies a direct relation to the symbolic without the mediation of the imaginary:

"One trains analysts so that there are subjects in whom the ego is absent. That is the ideal of analysis, which, of course, remains virtual. There is never a subject without an ego, a fully realised subject, but that in fact is what one must aim to obtain from the subject in analysis. The analysis must aim at the passage of true speech, joining the subject to an other subject, on the other side of the wall of language. That is the final relation of the subject to a genuine Other, to the Other who gives the answer one doesn't expect, which defines the terminal point of the analysis..."

"There are two meanings to be given to Freud's phrase - *Wo Es war, soll Ich werden*. This *Es*, take it as the letter S. It is there, it is always there. It is the subject. He knows himself or he doesn't know himself. That isn't even the most important thing - he speaks or he doesn't speak. At the end of the analysis, it is him who must be called on to speak, and to enter into relation with the real Others. Where the S was, there the *Ich* should be. (p246, Lacan 1988)"

So the virtual axis, which we shall refer to as  $\Phi$ , is a direction: an approach to this axis. To satisfy the desire of the subject is impossible in the sense that this  $\Phi$  axis is an impossible axis. This axis is the desire to identify himself as a living being in his plenitude - no left-over. That this axis is in this sense virtual also *obscures* the real in the sense that being in relation to the Other obscures the alienated nature of the Other as itself barred  $\bar{A}$ . This desire of the subject is also the desire of the Other - "where the *Es* was, there the *Ich* should be".  $\Phi$  arises in the place of the lack of the Other.

The different directions of the discourse - negative (es->o->m->A), and positive (es->m->o->A) - indicate the subject's relation to desire. The negative discourses giving primacy to what can be supported by the imaginary surface of the real; and the positive

discourses giving primacy to the metaphoric articulation of the surface through a network of substitutions. This is the way in which the subject is invented in discourse - as a relation between the ego and others. This is how Lacan speaks of the aim of analysis:

"Throughout the course of the analysis, on the sole condition that the ego of the analyst does agree not to be there, on the sole condition that the analyst is not a living mirror, but an empty mirror, what happens between the ego of the subject - it is always the ego of the subject which speaks, ostensibly - and the others. The entire development of the analysis consists in the progressive displacement of this relation, which the subject can grasp at any moment, beyond the wall of language, as being the transference, which is his and in which he doesn't recognise himself. It isn't a matter of reducing this relation, as you'll find it written, but of having the subject assume it where he is. The analysis consists in getting him to become conscious of his relations, not with the ego of the analyst, but with all these Others who are his true interlocutors, whom he hasn't recognised. It is a matter of the subject progressively discovering which Other he is truly addressing, without knowing it, and of him progressively assuming the relations of transference at the place where he is, and where at first he didn't know he was. (p246, Lacan 1988)"

### **Full speech and empty speech**

The 3<sup>0</sup>C arises then as soon as we introduce this virtual  $\Phi$  axis. The economy of discourses is constituted as the diachronics of a configuration of speaking-listening subject-positions in relation to this  $\Phi$ .  $\Phi$  arises as an ideal around which the economy is configured.

So far we have mapped one set of (Maturana's) closures onto the 1<sup>0</sup>C and 2<sup>0</sup>C. Why is this 3<sup>0</sup>C needed? Is Maturana's conception of consciousness not enough?

"... we saw that a living being exists only as long as it drifts in a domain of perturbations, regardless of the characteristics of that domain and how it changes because of its own operation. We then saw that the nervous system generates a behavioural dynamic through generating relationships of internal neuronal activity in its operational closure. The living system, at every level, is organised to generate internal regularities. The same occurs in the social coupling through language in the network of conversations which language generates and which, through their closure, constitutes the unity of a particular human society. This new dimension of operational coherence of our languaging together is what we experience as consciousness and "our" mind and self. (p232, Maturana & Varela 1987)"

Why are these networks of conversation not enough? Our reply is that although as behaviours, they support a 2<sup>0</sup>C, no mention is made of the emergence of different



signifying practices. Nor of how languaging might become invested with the meaning in the way that we assume "our" selves as subjects?

The experience of the operational coherence of our languaging is a necessary condition but not a sufficient condition for the bringing-forth of subjectivity? Here is Lacan on the subject of empty speech:

"I have tackled the function of speech in analysis from its least rewarding angle, that of 'empty' speech, where the subject seems to be talking in vain about someone who, even if he were his spitting image, can never become one with the assumption of his desire. (p45, Ecrits)"

Empty speech is for him to be contrasted with full speech therefore, in which the subject becomes one with the assumption of his desire. This assumption involves linking the effects of the signifier in the dividing of the subject with a realisation of what is left out - that playing with the mask beyond which there is the gaze. Beyond which is the desire of the Other which the subject assumes as his own.

Maturana's conception of languaging is, in these terms, an account of empty speech:

"Words, as we know, are tokens for linguistic co-ordination of actions and not things that we move from one place to another. It is our history of recurrent interactions that makes possible our ontogenic structural drift in a structural coupling that affords interpersonal co-ordination of actions; this takes place in a world we share because we have specified it together through our actions. (p233, Maturana & Varela 1987)"

So we have arrived at what is lacking in Maturana. Maturana makes no distinction between empty and full speech - between the automaton and the real beyond the screen. Granted he acknowledges the loss of objectivity, but the price paid is a high one: the absence of desire. It is from this that the nature of the difference may be derived: whereas for Lacan the subject is constituted in relation to desire, for Maturana the subject is constituted in relation to the screen.

## Part III

### *The subject of Theory*

The question we are interested in then is what it can mean to be a 'Self'. The usual way in which we differentiate ourselves from other animals is to say that we have language. Maturana claims that humanity only comes into being with language. While he means this in the first instance in terms of the co-ordinations of joint actions, it is also consistent with the common observation that while animals may be conscious of what is going on around them, humans can do more than this - we have the capacity for 'self-consciousness', meaning that we can become aware of our own mental processes, and furthermore, that each individual knows unerringly that these mental states are his own. It is precisely this sense of own-ership of the mental processes occurring within the bodyhood [ existential address] of the human person that we wish to bring into question.

This is not merely to make a critique of the concept of 'self-consciousness' as 'self'- contradictory, i.e., a phenomenon which 'owns' the mental states cannot at the same time be manifested as a mental state. We wish to go much further than this and insist that this certainty of 'own-ership' is the final resort of realism, of objectivity without parenthesis. Accordingly, we want to insist that the notion of the 'Self' functions, at best, as a type of fictive hypothesis which, perhaps over time, is expanded into a comprehensive theory (or even paradigm) which pragmatically 'works' to cover or encompass the greatly diverse experiences which flow through our bodyhood as we live from moment-to-moment and day-by-day. The theory acts to render this diversity as order and relative harmony. Speaking from his theory of 'Self' as a Wittgensteinian language-game, Harré observes as follows:

"...to be a self is not to be a certain kind of being but to be in possession of a certain kind of theory. One uses the theory to organise one's knowledge and experience of one's own states in the way that one uses the physical theories of which one is in command to organise one's knowledge and experience in the physical world. " ( p. 262, 1985).

This notion of the 'self' as a grammatical side-effect , and as a superordinating paradigm which lends the illusion of order to the flux of experience, is quite akin to the ideas of Kelly (1955) who viewed the human as a personal system of endless construct generation. Among the constructs generated were those he called 'core constructs' whose function was the instantiation and maintenance of the 'Self'. The identity of a 'self' was something generated within the web of intersecting meaning-axes constructed by the individual's actions in the world. Kelly's notion of the 'personal' construct system may be read not only as 'personal' in the sense of idiosyncratic, but also as a system of constructs which produced the 'person' ['self'-production]. In western cultures it would seem that the

notion of a 'self' [ or a mind, or subjectivity] is modeled upon the example of the incarnation of the individual person as a single body - it is unitary, coherent, bounded, separate etc. It is interesting that we often confound the two terms 'personal' [ bodyhood] and 'private' [domain of an 'inner self']. When someone asks an embarrassing question we may reply that we cannot answer because it is a 'personal' matter, or even a 'private' matter, and so it is none of their business.

## **The Private "I" Investigation**

A central part of our project then has been to conduct an investigation into the 'Private "I"'. In order to do this we have relied upon the paradoxical character of the Lacanian notion of the Real. By this we mean that the Real is :

- not only that which eternally eludes symbolisation;
- not only that which must always be a retrospective construction to explain away the distortions of the symbolic framework;
- but more so, that which although it does not exist has very particular causal effects.

Zizek (1989) humorously illustrates this aspect of the Real by reference to the Hitchcockian device of the MacGuffin - that pure pretext whose only function is to trigger a sequence of snowballing events within whose grasp our protagonists struggle helplessly.

"...two men are sitting in a train: one of them asks; 'What's that package up there in the luggage rack?' 'Oh, that's a MacGuffin.' 'What's a MacGuffin?' 'Well it's an apparatus for trapping lions in the Scottish Highlands.' ' But there are no lions in the Scottish Highlands.'...

'Well, you see how efficient it is!' " (p.163)

Zizek continues to note that

"Needless to add, the MacGuffin is the purest case of what Lacan calls objet petit a : a pure void which functions as the object-cause of desire."

## **"Naughto-poiesis"**

Thus we may consider the 'Self' to be a Real object in the Lacanian sense; that is, a cause which itself does not exist. This is the  $\Phi$ . To the degree that we have here a recursive process of 'Self'-production - i.e., a non-existent entity generating its own non-existence in a continuous way - then we may call this a process of production of the 'zero', the 'absence', the 'nulla', the 'naught'. In a word, this is 'naughto-poiesis'. The 'Self' then functions like a conjectural exercise within a given theoretical framework, within a given epistemological/aesthetical set of presumptions. However, just as with scientific theories, the 'theoriser' comes to identify his 'Self' [reflected in the conversational domain as roles, activities, status, privileges, duties, co-ordinations] so exactly with his espoused

theory that such theory ceases to be 'held' propositionally, or conjecturally, and comes to exert a hold over the very embodiment of the person.

What is important to understand here is that Lacan inverts the usual understanding of what it means to have a 'private inner self'. The usual understanding of this is that our 'inner self' is a richly complex being whose fullness and wonderfulness is extremely difficult to express through the impoverishment of language. That is, language just simply cannot convey the exotic inner world of 'self'. One hopes to be 'recognised' by some other(s) as to one's deep attractions. The Lacanian view is exactly the opposite of this. Instead of 'selves' being full of ineffable meaning and merely thwarted by language, this signification surplus serves to obscure a basic lack. The failed attempt to represent signification opens up this void which itself is the subject of the signifier.

Therefore, when we conduct our search for this 'Private "I"' and come up empty-handed, we have located it! It is this discourse of the 'voiding' of the subject-space that we have elaborated in creating the 3<sup>0</sup>C. To unpack our approach a bit further we turned to some of Lacan's schemas, particularly that of schemas L and R. We indicated how our use of these schemas became particular forms of discourse predicated upon the subject-void. What are the ethical implications which follow from this naughto-poiesis?

## The 3<sup>0</sup>C as constitutive of an ethics

Here is Maturana on the subject of love:

"Biology also shows us that we can expand our cognitive domain. This arises through a novel experience brought forth through reasoning, through the encounter with a stranger, or, more directly, through the expression of a biological interpersonal congruence that lets us see the other person and open up for him room for existence beside us. This act is called *love*, or, if we prefer a milder expression, the acceptance of the other person beside us in our daily living. This is the biological foundation of social phenomena: without love, without acceptance of others living beside us, there is no social process and, therefore, no humanness... (p246, Maturana & Varela 1987)"

This love is a *seeing* of the other person in a way which leads us to open up for him (or her) room for existence beside us. Lacan approaches this as transference:

"The subject comes into play on the basis of this fundamental support - the subject is supposed to know, simply by virtue of being a subject of desire. Now what actually happens? What happens is what is called in its most common appearance the *transference effect*. This effect is love. It is clear that, like all love, it can be mapped, as Freud shows, only in the field of narcissism. To love is, essentially, to wish to be loved. (p253, Lacan b 1977)"

Again we have desire supporting the subject, but this time giving rise to a transference effect called love. This subject supposed-to-know is what opens up room for existence beside us - a space in which to love and be loved brought forth by the link between the desire of the one and the desire of the other. But perhaps introducing the notion of desire is a mere detour of semantics? Maturana goes on:

"We may resist the notion of love in a scientific reflection because we fear for the objectivity of our rational approach. Yet from what we have said in this book it should be apparent that such a fear is unfounded. Love is a biological dynamic with deep roots. It is an emotion that defines in the organism a dynamic structural pattern, a stepping stone to interactions that may lead to the operational coherences of social life. *Every* emotion (fear, anger, sadness, etc) is a biological dynamic which is deep-rooted and which defines structural patterns, stepping stones to interactions that may lead to different domains of operational coherences (fleeing, fighting, withdrawing, etc). (p248, Maturana & Varela 1987)"

So it is clear that for Maturana, in love we are dealing with a biological dynamic. It is this dynamic which defines structural patterns leading to operational coherences which we *name* as love, but which are in this sense 'already there'. Reflection therefore is a coming to recognition of an already-thereness. From Maturana's point of view there is no need to fear the objectivity of our rational approach because it is only an alignment of one form of behaviour - languaging - to another.

But is there something to fear here? Maturana comes to the conclusion that

"what biology shows us is that the uniqueness of being human lies exclusively in a social structural coupling that occurs through languaging, generating (a) the regularities proper to the human social dynamics, for example, individual identity and self-consciousness, and (b) the recursive social human dynamics that entails a reflection enabling us to see that as human beings we have only the world which we create with others - whether we like them or not.... (p246, Maturana & Varela 1987)".

Extending the autopoietic characteristics of first- and second- order systems to the higher order forms of social structural coupling gives rise to the whole question of this *naming* and who is doing it. As Kenny (1991) asks in his paper on the subject of autopoiesis: "does the subject matter?" What does make the difference between the family, the asylum and the concentration camp as forms of social structural coupling? If there are those who would argue that these are all the fruits of reflection and an 'opening up of room for existence', are reflection and love enough therefore as an ethics? It is a question of what we mean by 'love' of course. If, as Lacan suggests, love is "a transference effect", then its basis is in the desire of the subject. But if the "I" is an already-thereness, then in what sense does this already-thereness open up room for existence? We are back to the missing articulation of the subject of theory.

For Lacan, love is constitutive of the space beside us, but desire is constitutive of love, and the real is motor of desire. And how are we to divine the functioning of the real in this Lacanian sense? For Lacan the *real* is not to be confused with reality:

"Where do we meet this real? .... The real is beyond the *automaton*, the return, the coming back, the insistence of the signs, by which we see ourselves governed by the pleasure principle. The real is that which always lies behind the automaton, and it is quite obvious, throughout Freud's research, that it is this that is the object of his concern. (p54, Lacan b 1977)"

Here then is the ethic implied by Lacan - the way of desire. It is to call the transference into question - to continually realise the that-is-not-it-ness in the impossible approach to  $\Phi$ . The desire of the subject arises in the place of the desire of the Other, which is in the place of the lack of the Other. This is where the real arises. Encountering this real is an effect of encountering what the Other lacks. *Interpretation in the transference* is what brings the encounter with this lack - this left-over.

A 3<sup>0</sup>Cybernetics is therefore a way of speaking of the effects of transference. By transference is meant a being in relation to  $\Phi$  - the subject's want-to-be which arises in the place of the lack of the Other. A discourse is an invention of the subject as a 2<sup>0</sup>C speaking/listening in relation to this  $\Phi$ . A paradigmatic metaphor is a 2<sup>0</sup>C substitution which takes the place of this  $\Phi$  obscuring the lack of the Other and the subject's desire. The articulation of a closure of an economy of discourses is an interpretation therefore - it reveals what is left out, calling into question the paradigmatic metaphor as an obscuring of  $\Phi$ .

## **References**

- SAMUEL BECKETT .[1983] *Worstward Ho*. Grove Press. New York.
- PHILIP BOXER & VINCENT KENNY (1990). *The Economy of Discourses: A Third-Order Cybernetics?* *Human Systems Management* Volume 9, Number 4 pp 205-224.
- ROM HARRÉ ( 1985). *The Language Game of Self-Ascription: A Note*. In *The Social Construction of the Person*, [eds.] K.J. Gergen and K.E. Davis, New York: Springer-Verlag.
- GEORGE KELLY ( 1955). *The Psychology of Personal Constructs*. 2 Vols. New York : Norton.
- VINCENT KENNY (1991) *On the Subject of Autopoiesis and its Boundaries: Does the Subject Matter?* *International Journal of General Systems*. (in press).
- JACQUES LACAN b (1977) *Ecrits: a selection*. Translated by Alan Sheridan. Tavistock [first published in French Editions du Seuil 1966]
- JACQUES LACAN (1977) *The Four Fundamental Concepts of Psycho-Analysis*. Translated by Alan Sheridan. Tavistock [first published in French Editions du Seuil 1973]
- JACQUES LACAN (1988) *The Seminar of Jacques Lacan. Book II. The Ego in Freud's Theory and in the Technique of Psychoanalysis 1954-1955*. Edited by Jacques-Alain Miller. Cambridge University Press. [first published in French Editions du Seuil 1978]
- HUMBERTO MATURANA (1983) *What is it to see?* *Arch. Biol. Med. Exp.* 16: 255-269.
- HUMBERTO MATURANA & FRANCISCO VARELA (1987) *The Tree of Knowledge: The Biological Roots of Human Understanding*. New Science Library.
- HUMBERTO MATURANA (1987). *The Biological Foundations of Self-Consciousness and the Physical Domain of Existence in: E.R. Caianiello [ed] Physics of Cognitive Processes*. Singapore. World Scientific.
- HUMBERTO MATURANA (1988). 'Reality: The search for objectivity or the quest for a compelling argument . *Irish Journal of Psychology*, Vol. 9, No.1, pp.25-82.
- PAUL REPS (1973) . *Zen Flesh, Zen Bones*. [Pelican]
- HEINZ VON FOERSTER ( 1976). *On where do we go from here?* In K. Wilson [ed.], *The Collected Works of the Biological Computer Laboratory*. Peoria, Ill. : Illinois Blueprint Corporation.
- HEINZ VON FOERSTER (1984) *Observing Systems*. [ Intersystems Publications]
- SLAVOJ ZIZEK ( 1989). *The Sublime Object of Ideology*. [ Verso : London].

# Appendix

## The Economy of Discourses

