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Angeletics – A Message Theory

Abstract: The Greek word angelia means message. We use the word angel with regard to a divine messenger. There is an old theological tradition dealing with the study of such messengers, namely angelology. Angeletics is different from angelology as it is concerned with the study of natural and particularly of human messages and messengers. This does not mean that the analysis of the religious phenomenon is irrelevant (Serres, 1993). Quite the contrary, it is a contribution to the study of production, distribution, interpretation, storage, and control of messages and messengers in pre-modern societies. Angeletics in a narrow sense belongs to the Humanities and Social Sciences and is closely related to rhetoric (McElholm, 2001; Capurro, 1992). In a wider sense it deals with the study of messages as a natural phenomenon. In the first part of this paper I will briefly refer to angeletics as an interdisciplinary theory (Capurro, 2003). The second part deals with some questions concerning the difference between messages at the organic and the human level. Some insights are based on the online discussions at the „Electronic Conference on the Foundations of Information Science" (FIS, 2002). The concepts of message and information are closely related (Capurro/Hjørland, 2003). The twofold meaning of the Latin term informatio as 'moulding matter' and 'moulding the mind', i.e., the ontological meaning and today's prevailing epistemological use of information as message communication gives prima facie rise to an analogy between human communication and the question of message transmission at the sub-human level. I will argue that the interpretation of life processes as angeletic ones can be considered in its own right, i.e., beyond the realm of an analogy. An interdisciplinary message theory can become the basis of a complex, non-reductive view of the manifold hierarchies of communication.

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I. Angeletics as an Interdisciplinary Theory

Claude Shannon's theory of communication (Shannon, 1948) is not a theory about information transmission but about

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message transmission. Shannon uses the term 'message' instead of 'information' in its usual meaning as 'knowledge communicated'. The concept of information within this theory refers to the number of binary choices in order to create or codify – a message. In reality – as it was conceived an applied – the theory is about signal transmission and the ways in which to make it more reliable. Shannon correlates information and uncertainty, as

opposed to the everyday meaning of information. The semantic and pragmatic aspects are excluded from this engineering perspective of communication. Warren Weaver found Shannon's definition of information as counterintuitive (Shannon/Weaver, 1972). But Shannon had indeed substituted the everyday meaning by using the word message.

Message and information are related but not identical concepts:

- a message is sender-dependent, i.e. it is based on a heteronomic or asymmetric structure. This is not the case of information: we receive a message, but we ask for information,
- a message is supposed to bring something new and/or relevant to the receiver. This is also the case of information,
- a message can be coded and transmitted through different media or messengers. This is also the case of information,
- a message is an utterance that gives rise to the receiver's selection through a release mechanism or interpretation.

Following Luhmann we make a difference between message („Mitteilung") i.e., the action of offering something (potentially) meaningful to a social system („Sinnangebot"), information („Information") i.e. the process of selecting meaning from different possibilities offered by a message, and understanding („Verstehen") i.e., the integration of the selected meaning within the system, as the three dimensions of communication within social systems (Luhmann, 1987: 196).

Messages can be of imperative, indicative or optional nature. A human sender, an individual or a group, may believe to have a message for everybody and for all times and *vice versa*, someone may think everything is a message to him/her. Between these two poles there are several possible hierarchies. In order to select or interpret a message the receiver must have some kind of common pre-understanding with the sender of the message, for instance a similar form or (linguistic) code.

What kind of specific criteria can be postulated by a message theory concerning the way a sender, a medium and a receiver of messages should act in order to be successful under finite conditions? By finite conditions I mean that neither the sender, nor the messenger, nor the receiver have any kind of certainty that their actions will fit the ideal situation in which:

- a sender addresses a receiver, sending him/her a message that is new and relevant for him/her, i.e., he/she follows the *principle of respect*,
- a messenger brings the message undistorted to the receiver, i.e., he/she follows the *principle of faithfulness*,
- a receiver reserves judgement, based on a process of interpretation, about whether that the message is true or not, i.e., he/she follows the *principle of reservation*.

Messages can be studied according to their form, content, goal, producers, and recipients. In his theory of communication or „communicology" Vilem Flusser makes a basic distinction concerning two goals of communication:

- the dialogical goal, aiming at the creation of new information,
- the discursive goal, aiming at the distribution of information (Flusser, 1996).

According to Flusser the age of mass media with their hierarchical one-to-many structure of information distributors -- we could call this the CNN-principle -- would finally dominate all forms of information

creation. In other words, the possibility for a receiver to become a sender of messages within a dialogical system remains a subordinate option. Since the rise of the Internet things started to change, at least concerning the easier and cheaper possibility for many receivers to become senders, including such hierarchical distribution options as one-to-one, one-to-many, many-to-many and many-to-one. There is an ongoing debate on the future structure of the Internet. The pressure of established information *oligopoles* (= concentration of power in *few* hands) will not vanish although it may decrease. At the same time new forms of domination and exclusion arise (ICIE, 2004).

Digital messages have a deep impact on cultural, political, and economic activities leading to what can be called a message society. In other words, angeletics or the study of messages plays a paradigmatic role in 21st century science and society. The social issues concern different aspects such as origin, purpose, and content of messages, power structures, techniques and means of diffusion, history of messages and messengers, coding and interpreting messages, as well as psychological, political, economic, aesthetic, ethical and religious aspects. A scientific cosmos that can be explored only through a patient and long-term interdisciplinary effort.

The question, 'what is a message?' opens a new perspective not only with regard to media studies but also to the study of signs and their interpretation. Angeletics is a research field at the crossroad of media studies, semiotics, and hermeneutics. Each interpretation presupposes a process of message transmission. Hermes is the messenger of the gods, not just an interpreter of these messages. The message-bearing nature of communication is what angeletics aims to analyse. But any process of message transmission presupposes indeed a hermeneutic situation in which sender and receiver have some common basis of understanding. In other words, angeletics operates with the sender/receiver difference based on the belief that understanding or, more generally, that a selection process between two systems is possible. Hermeneutics operates with the difference between pre-understanding and interpretation based on the belief that what is object of the process of interpretation has been successfully transmitted, i.e., offered to the receiver as an object of selection. Semiotics is concerned with the whole process by which a sign, what it intends to signify and what the interpreter is supposed to select are viewed as a dynamic, self-organising structure.

Peter Sloterdijk has pointed out that we live in a "time of empty angels" or "mediatic nihilism", in which we forget what message is to be sent while the messengers multiply: "This is the very *disangelium* of current times" (Sloterdijk, 1997). Nietzsche's word *Disangelium* (Nietzsche, 1999: 211) in contrast to *evangelium*, points in this case to the empty nature of the messages disseminated by the mass media, culminating in Marshall McLuhan's dictum: „The medium is the message." The question now is to what extent the internet creates a new angeletic space producing new synergies of messages and messengers without the hierarchical one-to-many structure of mass media, i.e. giving the receiver the opportunity to become a sender. Information ethics deals with these new forms of human communication in a world where the classic local parameters for the creation and distribution of messages are more and more dependent on the global digital network -- and *vice versa* (Capurro 2003).

II. Angeletics at the Crossroad of Hermeneutics and Biology

How do we distinguish messages at the human level from messages, say, at the DNA-level? I call the view of natural processes as angeletic processes the *postal paradigm*. Taking into consideration the original twofold meaning of the term 'in-formation' as 'moulding matter' and as 'knowledge communicated' we can say that a cell or, more generally, a living system, is in-formed on the basis of message selection in order to satisfy its constraints. The physicist Carl-Friedrich von Weiszäcker remarks that the modern concept of information is a new way of asking for what Plato and Aristotle called *idea* or *morphe* (Weizsäcker, 1974). But what is the main difference between Plato's concept of participation (*methexis*) as in-formation and today's view of communication? Answer: the inversion of the relation between time and form. According to today's evolutionary perspective forms evolve within the horizon of time not the other way round. What does it mean for angeletic processes to be in time?

The biologist Koichiro Matsuno puts it this way creating implicitly a hierarchy between human and non-human communication:

> „Folks, Ted's crisp summary reminds me once again of one recurring theme surrounding the sturdy issue on the difference between dynamics in time and dynamics of time. Recently, I had an opportunity to spend some time with a young fellow just 1 year and 2 months old both in the morning and in the evening for about a month. Of course, she does not speak, but is very sharp in pointing to what she would like to do. She likes to eat pear much more than apple. She never fails in pointing to a piece of peeled pear when both pear and apple are on the plate. When her mouth is full of juicy pear, she does not care even if I have eaten up all pieces of peeled pear on the plate. But, she got angry to find no pear to take when she was ready for another piece. This incidence has again waken[ed] me up to the simple fact that dynamics of time is more basic empirically. Even if one does not have a clear perception of what time looks like, experiencing time-phenomena or dynamics of time can proceed as facing no obstacles. A difficult problem, however, arises to those who can speak. Those who take framing whatever statements in present tense for granted has to have some preconception of time as a criterion of what present tense is all about. One popular vehicle for this objective is space-time continuum. Theoretically, it may be okay. Empirically, it is not. My young fellow has been quite sensitive to the discontinuity between the movement in progress (pear in her mouth) and the movement perfected (ready for another piece) without being bothered by the global context referred to in the present tense (somebody eats up all the pieces on the plate)." (Koichiro Matsuno, FIS 2002: 17.01.03)

When we observe dynamics in time, i.e. from the point of view of a neutral or objective observer, we do it methodologically *in the same way* in the case when, say, a DNA-messenger intends to *in-form* a cell or when we observe how this young fellow eats pears. Such an observation concerns, as Koichiro remarks, what is going on within the objective framework of a „space-time continuum". It is a view from nowhere. There is a leap if we switch to the internal perspective, the view from „now-here". Of course neither the young fellow nor the cell have a „preconception of time as a criterion of what present tense is all about". As far as we are using an objective methodology we neither understand the internal perspective nor

can we understand how far the internal perspective of our young fellow is different from the one of a cell. Of course, when we take the internal or *hermeneutic* perspective in order to see these differences from the inner perspective we are indeed also taking a distance from life itself. This tension between life and our explicit explanations or interpretations, is inherent to both methodologies. What I am developing right now is a second order hermeneutics.

What happens if we, as Koichiro does, interpret this process of our young fellow in an effort to reconstruct what is going on during the present progressive tense i.e. within the framework of a specific situation? Answer: We see an implicit process in which something is being grasped AS different from something else -- pear instead of apple -- and we see that there is a choice between several possibilities. This is a very accurate example of Martin Heidegger's (1889-1976) existential hermeneutics, who follows the paths opened by Wilhelm Dilthey (1833-1911). The young fellow has a key hermeneutic or practical capability, namely the one of being able to choose between several possibilities without an explicit linguistic reflection about what she is *de facto* doing. This is exactly the structure described by Heidegger in his seminal work „Being and Time" (Heidegger, 1987). He stresses that before we start with a theoretical and objective interpretation of human knowledge, human existence is characterised by the fact of being already practically concerned with specific situations within a horizon of choices. Heidegger argues in favour of a pragmatic turn in epistemology and against cognitivism. Our choices rest upon a pragmatic pre-understanding of our existential needs such as the need of eating and the choice of eating something more pleasant than apple.

Understanding means originally this very fact of being able to answer to possibilities or, as we could also say, to messages. In other words, the capability of *being addressed* by something gives us the opportunity to produce and not just to reproduce life creating a specific network -- Heidegger calls this network „world" --, according to our needs (Jung, 2002). Our young fellow is not just eating a piece of pear but has made her choices considering pear much better than apple. She is in the process of pragmatic understanding i.e. not in the position of a neutral observer but in the condition of constructing her life. Of course, she will be (later on) able of an explicit (linguistic) interpretation of such a pragmatic understanding, as we are doing it right now. Heidegger postulates the primacy of hermeneutic or pragmatic understanding over theoretical interpretation. Our young fellow does not need words, as Koichiro remarks, in order to understand. But why does such explicit interpretation arise at all? Answer: Because we many times deal with situations of breakdown in which our expectations are not fulfilled or something goes wrong. In our case: our young fellow got angry as she saw no pear -- or even apple. This is a strong feeling that gives rise to utterances and (later on) questions about why this is the case. In other words, there is a change-over from the *know-how* into the *know-that* perspective:

(1) situation -> pre-understanding (need) ->
-> choice -> -> situation ->...

Or, in a more general way and modifying the stimulus/response scheme:

(2) message -> release mechanism ->
-> response -> -> message -> ...

into:
(3) know-how -> breakdown -> interpre-
tation -> know-that -> -> know-how ->
...

When needs and release mechanisms are
more or less fixed as in the case of non-
human organisms -- with a great variety of
possibilities concerning this 'more or less' --
we deal with different kinds of responses
to messages on the basis of, for instance,
the genetic code aiming at the literal
construction of form or at the *in-formation*
of an organism. Weizsäcker calls this
process of form generation „objectivised
semantics" (Weizsäcker, 1974).

There is another difference between
the pre-spoken experience of this young
fellow and the one of a cell as she can re-
fer to what is not there. In order to do
this she must have an implicit pre-under-
standing of time that allows her to make a
pre-verbal difference between what she
sees and what she wants and what she
does not see. In other words, our young
fellow must be able to make a difference
not just between beings but also between
being and not being. We, as hermeneutic
observers, may be able to understand not
only the information processes as selective
ones but also to make explicit the basic
difference allowing our young fellow to
refer to what is not there and to analyse
the implicit ontology. We may consider
that for our young fellow the difference
between things that can be eaten and
things that cannot is also a very basic one.
We may infer that what cannot be eaten is
of less importance and has therefore a less
degree of being. In a more fundamental
sense it seems as if the meaning of 'to be'
is being grasped as the difference between
'to be there' and 'not to be there'. But in
some way 'not to be there' is for our
young fellow also a way of being, other-

wise she would not be able to relate to
things that have only the *possibility* of being
there.

With such pre-understanding she is
probably not far from Aristotelian ontol-
ogy! What we do, when we try to interpret
hermeneutically this pre-verbal situation is
thus not just an objective description of
dynamics in time but an interpretation of
what we suppose to be the case within a
dynamics of time which is indeed also our
own. To take such an explicit interpreta-
tive position means thus becoming in-
volved in the process itself. Implicit and
explicit interpretations, to choose between
several meaningful messages and to be
able to reflect on this process, is the very
essence of our own being. We may even
start thinking about being itself as a mes-
sage and on the different possibilities to
interpret it. We then become philoso-
phers!

Koichiro is perfectly right when he
points that in a pre-verbal situation the
global context of the present tense, i.e.,
the viewpoint from 'nowhere' is irrelevant
and that there is no bridge -- just a leap --
between dynamics in time and dynamics
of time. Also the hermeneutic path of in-
terpretation is not a bridge in the sense
that we may be able to switch into another
subjectivity. This would presuppose not
only a kind of magic identification but
would lead into another paradox. In order
to understand this fusion we should be
able to interpret it once again, creating
another fusion and so forth. We may con-
clude that this tension is specific, as far as
we know, to human life and human
knowledge. But we may say that under-
standing creates links between networks
of interpretation.

Heidegger's formula „being-in-the-
world" means to be pragmatically embed-
ded in a network of relations and being

able to answer to the messages things offer to us within specific situations and according to our specific needs. Heidegger calls this way of being „world forming" („weltbildend") in contrast to the world of non-human living beings as „world-poor" („weltarm"), and to non-living beings as „worldless" („weltlos") (Heidegger 1983, Capurro 2002). This means that we can only make hermeneutic interpretations *ex negativo* about, say, the present progressive tense situation of a cell. But, on the other hand, „world-poor" does not mean, as Heidegger remarks,

> „that life („Leben") with regard to human existence („Dasein") is of poorer quality or a lower level. Rather is life a field with an own richness of openness that probably the human world does not know about." (Heidegger, 1983: 371-372).

Heidegger describes this peculiar openness of animal life as a drive („Trieb") to loose its inhibition remaining basically in a dazed state („Benommenheit"). In other words, animals and, more generally, organisms are primarily characterised neither by a multiplicity of parts or organs (Greek *organon* = instrument) nor of isolated drives, but by the unity of a „ring-like" structure. „World-poor" means that organisms do have an openness or a horizon of choices but that this openness is not of the kind of human world-openness. Poor means this 'not having' a world on the basis of having their own kind of dazed ring-like openness. On this premises we can say that the meaning of a message for a living organism and, consequently, for human beings, is basically dependent of the range of choices as well as on the release mechanisms.

The biologist Jerry Chandler remarks:

> „The process of organic communication in natural systems admits multiple dynamics to form (biological plasticity or

adaptability or flexibility). One type of dynamic can be called „error" if one has created a norm that admits a variance from that norm. Thus, organic communication can admit error in the process of generating a message, in the process of transmitting the message or in the process of responding to the message. (...) The natural history of living systems created an efficient form of message transmission. The generating function is one set of organic components. The transmitted message is another organic component. The response generating function is still another set of organic components. All of these functional components collaborate (work together in a thermodynamic sense). The system functions locally. This internal collaboration negates the need for a separate system to generate errors. (From a cynical perspective, one could say modern management methods are foreign to biological design)." (Jerry LR Chandler, FIS 2002, contribution from 6.07.02)

Life proceeds symptomatically on an in-formational and on an angeletical basis. It transforms given forms following rules or by making a difference through abduction. A cell constructs itself through angeletic processes that may make possible for an information or, sit venia verbo, for a form-as-message to inform it in both original senses of the word, namely the ontological (moulding matter) and the epistemological (moulding of the mind) ones. In other words, message phenomena at the biological level are processes of form production (Andrade, 2002).

Conclusion

These few remarks on the concept of message in the social and natural sciences make us aware about the possible road ahead towards an interdisciplinary message theory that takes seriously the hierar-

chical differences and similarities of communication at different levels. The basic questions of such a theory are not new, at least since the rise of cybernetics and system theory. But the main stream discussions so far have dealt mainly with the concept of information and they were often biased by the computer analogy and the digital paradigm (Capurro, 2003). If we take the concept of message as a second-order category we may be able to avoid reductionism and to look for the complexity of the message phenomenon.

The key question is to know, why, when and how some form-as-messages are accepted or denied by a receiver and how the receiver mutates into a sender. The metaphor of the hermeneutic circle is indeed, as Wolfgang Stegmüller with regard to the development of scientific theories in the sciences and the humanities once remarked, an expression that embraces „a whole conceptual family of problems" (Stegmüller 1979, 82). If all our observations are theory-laden this is not less the case with regard to all our actions,

and not only of our actions. This hermeneutic insight seems to be also the core question when we try to understand the hierarchies of communication at the human and the non-human level from an *endo-perspective* (Diebner, 2003).

The *postal paradigm* conveyed by a message theory or angeletics should not be misunderstood as an anthropomorphic theory of living beings or even of human beings as merely signal systems. It is just a marker for a network of questions and theories whose family resemblance can help us to become more acquainted of the fact that the phenomenon of communication implies at least a sender, a receiver, a medium and -- a message. If „the medium is the message" (McLuhan), what is a message?

Acknowledgements

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