Chapter 6

(SELF)-ACTUALIZATION MEANING STRUCTURES AND MEANING FIELDS

This chapter is composed of extracts from different papers written (and mostly published in German) during the last years. The leitmotif was to work out the (self-) actualization of meaning in an interactive context – such as the client-therapist relationship. From my point of view, the underlying theory (the "Person-centered Systems Theory") could serve very well to provide a deeper understanding of this problem because of its multi-level conception, which explicitly considers the interwoven top-down and bottom-up perspectives of complex processes. The conception of fields in particular is just as interesting as it is fundamental for the understanding of some processes involved in an encounter. Meaning fields, structured by order parameters, emerge in a bottom-up fashion from the dynamic of the parts (here: individual interpretations, aspects of understanding, and meaning), while they simultaneously influence and shape the dynamic of these parts in a top-down way. Although a few concepts of systems theory do require further clarified a little more, I tried to keep the text as simple, illustrative, and vivid as possible.

The Meaning Structures of our Lebenswelt: Necessary and Dangerous.

The human Lebenswelt is meaningful and filled with sense. This is because living as a human means finding sense in the world, in the actions of other people, and in one's own expressions of life. As social creatures, humans share this world with others by communicating. What's more, living as a human involves situating oneself "in the present" on the time-line of past-present-future, and placing one's own framework for living in the context of this sense and temporality.

Whatever we do—we can't do otherwise—we interpret and decipher the experiences we have in our life processes in our encounters with the world, with other people, and ultimately with ourselves, and embed these experiences in the meaning structures of our Lebenswelt. This doesn't just apply to the everyday world; it is even true in the context of scientific enquiry—it is only through sense-based encounters that we can find out something about the world, as the physicist Werner Heisenberg emphasized so aptly almost half a century ago. "Natural science does not simply describe and explain nature," said Heisenberg in Physics and Philosophy (1958), "it is a part of the interplay between nature and ourselves; it describes nature as exposed to our method of questioning."

Relationships and encounters are always both *impressive* and *expressive*. People's impressions and expressions are dynamically inter-related to one another. This dynamic connection between impressive and expressive vitality is dealt with, for example, in ideas like the $Merkwelt^{l}$ and

¹ the set of all environmental factors that are significant for a species, whether or not they are actually perceptible. *Merkwelt* is a species'

*Wirkwelt*² (operational world) of J. v. Uexküll's (1920) "functional cycles" or V. v. Weizsäcker's (1940) "Gestaltkreis"³. In the understanding of today's natural sciences, we get nothing more and nothing less from nature than a specific answer to each of our specific questions. Even when we observe the starry sky—which we certainly can't physically influence—what we see and how we see it is not just an impression of the world. It is, instead, simultaneously influenced by the way in which we express ourselves in the world. It's not for nothing that we say, for example, that "the Ptolemaic world view was an expression of medieval Western culture." And the *Talmud* says: "We see the world not as it is. But as we are".

The human ability-or even necessity-to relate to others therefore becomes apparent not just in impressive. but also in expressive encounters with the world. People do not behave in a way that can be formulated from an external "non-human" point of view. Only a thing or an animal is describable in such a way. People, in contrast, act. The entirety of their expression always takes place in the context of a Lebenswelt that is filled with meaning. This Lebenswelt is populated and structured by other human beings who also act in a meaningful way. It is, therefore, filled by our meaningfulness⁴ and by previous generations of structured and modified matter-tools, vehicles, buildings, pictures, books, musical instruments, nuclear power stations, gardens, etc.--and ultimately even with meaningful natural "things", which we enchant with meaning (see chapter 4) through our specific means of observation and through reification alone (see below).

context: the more complex the creature's contextual sensitivity, the more complex its structure

 $^{^{2}}$ the world in which the organism operates.

³ Gestaltic cycle, a cycle of action and perception in the environment

⁴ in other words, the sense of having meaning and purpose

As human beings, it is therefore (according to Watzlawick et al 1967) impossible for us not to act. Even if someone is just "sitting there" without moving, even if he is completely alone, without any other (!) person present in the room, and without any understanding of the possible meanings of this cataleptic stare, this self-reflexive viewpoint of the "lack of understanding" itself gives reasons for an understanding-namely of a person who doesn't understand himself. This is because a person is (as Sartre said) condemned to endow himself and his actions in the world with meaning—and, as the case may be, to existentially suffer from a sense-endowed feeling of senselessness. As long as we see such people not just as biological entities but rather as human beings, we assume that they cannot completely exclude themselves from sense and meaning structures. And then, more than ever, others attribute sense and meaning to such a person's actions. Otherwise, the concept of "catalepsy"which describes something that is noteworthy for people and by this description shapes meaningfully the complex chaos of possibilities of aspects and observations-would not exist.

The impressive and expressive meaningfulness of the human Lebenswelt must by no means remain constantly and extensively in conscious awareness. We can be deep in thought, busy with some fascinating problem or other, and yet still steer a car through traffic. In doing so, we take in road signs, signals, traffic markings, our own position, the movements of other vehicles etc. in a meaningful way; piece them together into a meaningful, complex holistic situation; and act in even more complex, coordinated ways within this situation when we appropriately operate steering wheel, gas pedal, clutch and brake.

Although our conscious awareness may be busy with quite different matters, we accomplish this amazing achievement of being able to act in a coordinated way in largely new complex situations. This shows that our reflexive awareness is not *really* necessary for these kinds of impressions, for the processing of these impressions, and for coordinated behavior (as J. Jaynes, 1988, explained in a more extensive and detailed fashion). Accordingly, parts of our perceptions, of connected thoughts and of feelings and/or actions, can seem strange, incomprehensible or senseless to us—although their meaning is revealed to others. We ourselves, for example by means of therapy, can also open up the true meaning and accordingly learn to better understand "our selves".

These last remarks already lead to the fact that meaningfulness as a necessary basic structure of a human Lebenswelt must in no way be understood only as something positive and favorable. One can even say that everything that leads people to seek psychotherapy is related to the painful aspect of this human ability of wanting and needing to have a Lebenswelt that constitutes a meaningfully structured Gestalt. This expresses itself in two different ways. On the one hand, a felt lack of sense is a great strain. The painful experiences that accompany our life-stories vary from misunderstandings regarding one's own impressive or expressive life processes as just described, to the affliction of living a life that is until now (supposedly) lacking in or completely void of sense (cf. Frankl 1984). Similarly, the struggle between people within a society (and between societies) for sense and for the power to define sense can be seen this way. On the other hand, we are all too often trapped in sense structures that we experience as an oppressive kind of order that restricts and determines the creativity of our life processes.

This is due to the fact that sense and meaning can only be gained by the process of selecting, reducing, and ordering the enormous complexity of the world and of the life processes. Our Lebenswelt is simply not the same world that is thought of by physicists as a world of vast "*streams of stimuli*". Instead, it's a world that is ordered into figure(s) and ground and Gestalts. Our Lebenswelt is also not composed of myriad fragmented single moments (or indeed of a stream of quanta); rather of comparatively few coherent stories.

If we take the visual perception of a stimulus as an example, then-described from an objective external viewpoint—it is an erratic sequence of discrete fixations of 0.1-0.3 seconds in duration, which are interrupted by eve movements of various kinds (particularly by macro saccades, which are larger but unconscious changes in gaze). Our image of the neighbor we meet every morning for a small chat on the way to the bus stop that lasts, for say 10 minutes, is however in no way "made up" of a sequence of around 4 x 20 = 240 fixated images per minute-or 2400 images per morning, or 876,000 per year. Rather, we have a quite stable schematic image that shows this neighbor "sun tanned" in summer, "rather pale" in winter, sometimes casually and sometimes elegantly clothed—an image that possibly allows us to say something more about the neighbor's appearance over the past year. But this is most certainly not just a sequence of detailed impressions that correspond to those 876,000 single images that were projected onto the retina. Indeed, we are not aware of anything of the saccades that occur between the discrete fixations-instead, when we are looking at our neighbor's face and happen to change our gaze without intention or conscious awareness, we have the impression (!) that our gaze is "at rest".

In the same way, the "objectivity" of myriad single utterances of the neighbor, each comprising many words and phonemes, which are further composed of complex and diverse component frequencies, give rise to something that we experience as part of his biographical lifestory. And we arrange this too, into a vague but coherent image of his son, for example, who lives in America.

This detailed example should make it clear how extremely strong this constructive aspect is, with which comparatively simple Gestalts arise from objectively given, enormously complex stimulus configurations. The world of our Lebenswelt is simply not a complex space of incoherent information quanta, rather it is our meaningfully structured, relatively heavily reduced, sufficiently stable, and strongly ordered (by episodes and "stories" or narratives) cognitive domain.

Although this constructive accomplishment is the foundation of the every-day world, it is not normally made a subject of discussion within the every-day world. Instead, it is taken to be unquestionably "self-evident". This changes only if implicit assumptions which underlie this "self-evidence" are impaired at some point, and people's constructions depart from the normal order of this context, so that we experience their expressions also as a "disorder". In the context of the professional reconstruction of the every-day world—which in a way can be seen as the task of psychology, psychopathology and psychotherapy-it is my opinion that we also take this everyday ability far too much for granted. Accordingly, we are amazed by pathological cases and dedicate great attention to them—as was true of Freud over a hundred years ago with his "Psychopathology of Everyday Life" (Freund, 1902, Kriz, 2003). We don't, however, devote much time to the consideration and fascination of how an adequately stable world emerges from the chaos of impressions, and how we manage to agree adequately well with each other in spite of the subjectivity of inner experience(s).

It is therefore just as interesting as the discussion of pathologies to take the highly constructive aspect of our "reality" outlined above into consideration, and to ask the oppositely stated question: "How and to what extent can we actually be sure whether and how much we share the contents of our personal Lebenswelt with others?" Of our daily conflicts and problems with others, we really know how often "differing points of view", controversial "truths", arguments about "how it really was", etc., play a significant role. This is an expression of the contradiction between self-evident reality on the one hand, and the constant scrutiny of this assumed implicitness on the other. How often do we have to laboriously make those apparently implicit aspects of ourselves clear to others and to come to an understanding of them ourselves—and how distressing is it, when these efforts don't succeed, indeed, when we sometimes don't even understand ourselves?

These ordering processes—which can be seen from the perspective of systems theory as an interplay between reductions by attractors or schematizing on the one hand, and completion dynamics on the other hand (see below)—are therefore often distressing because they are not primarily appropriate to that which we really need. Often, they are not suitable to our personal requirements and to the very living of our lives but, on the contrary, they reflect the ordering tendencies of society, families and other social organizations to a great extent. Here consequently, slightly conflicting goals can arise-for example when the need for attention can only be met by de-prioritizing oneself. What's more, in some aspects the ordering structures of another person's Lebenswelt are taken over by an individual. Although these ordering structures are important and adequate for this other person, they don't correspond well enough to the life requirements and processes of the individual. Psychoanalysis speaks here of "introjection".

The necessity of these ordering processes for the establishment of our Lebenswelt has already been explained in "*Chaos, Fear, and Order*" (Kriz, 1997). The kernel of this argumentation was to show how our evolutionarily acquired ability of creating and finding regularities in order to avoid the experience of fear makes human life easier on the one hand, and must therefore be appreciated. On the other hand, unnecessary and distressing meaning structures can arise from the over-application and bias of these ordering tendencies, which can partially—or sometimes greatly—restrict the freedom that is won by creating our world.

According to Sartre, we are always "more" than our situation, and this is the ontological foundation of our freedom. We are "condemned" to be free, due to our creatively understanding of our self against the background of a narrative structured time-line of past, present, and future as ordering categories of our experience. On the other hand, these narratives are pre-structured before we step onto life's stage and take our roles. Moreover, the ordering forces of these narratives are embedded in the ordering forces and comprehensive narratives of our social surroundings.

Self-organization and Fields of Meaning

What are the principles, metaphors and ideas that are useful to refer to in order to understand the multi-level dynamic of meaning structures?

As I have argued in the previous chapters, the principles of mechanistic science are a very suitable framework for the task of repairing the *dis-order* of a defective engine. In contrast, those principles turned out to be rather inadequate for an understanding of what is needed in the case of helping living entities and, particularly, for those living entities who are "condemned to endow themselves and their actions in the world with meaning" (Sartre)—namely, the human beings.

Modern theories of self-organization, however, have not only changed our conception of the world but have also turned out to be a valuable source of much more adequate principles that can be used to understand processes in biological, medical, psychological, psychotherapeutic and social fields. For example, the "six characteristics of working with living beings", summarized forty years ago by Wolfgang Metzger (see chapter 4) earlier discredited by opponents as "lyrical" and "too unscientific" - correspond very well to the principles of modern scientific systems theory as it is described today.

In order to understand the relevance of this perspective for a conception of the actualization of human relationships and a common field of meaning (already mentioned in chapter 5), we first have to make a short detour and take a brief look at Haken's synergetics, which is a particularly fruitful interdisciplinary approach to systems theory and self-organization theory. Again, all mathematical and other technical considerations are omitted as far as possible. However, before we can move on to a discussion of the cognitive and interactive aspects involved in the dynamic of order, we need to at least understand some of the core principles.

Circular causality, order and fields

A central aspect of Synergetics concerns the circular interaction between order parameters on the macroscopic level, and the dynamic on the microscopic level that is enslaved by these order parameters. Typical examples are (without going into much detail here - and omitting examples involving cognitive aspects, which we will discuss in the next paragraph):

- **Laser**: the coherent light wave, which synchronizes the emission of light from the individual atoms in such a way that they contribute to a common light wave;
- **Bénard Instability**: the hexagonal macroscopic, coherent movements in the form of convection "rolls" which "enslave" the movements of the individual molecules in such a way that they contribute to the common pattern of movement;
- **rhythmic applause**: the spontaneously arising common clapping rhythm, which often emerges from the chaos of applause after a concert, synchronizing the individual clapping rhythms in such a way that they contribute to the common rhythm;
- patterns of interaction and interpretations in a "**marriage crises**": the mutual*ly* structured climate of distrust, insinuation, misrepresentations, and allegations which undermines the benevolent trusting interpretation of actions in such a way that this climate (i.e. cognitive-interactional field) dominates and shapes the thinking, perceiving, interpreting, and acting of each partner, enslaves the patterns of interaction, and contributes in turn to this climate of distrust.
- **Corporate Identity**: the common imagination of the goals, values, and principles of a company (or other organization), which shapes the activities of smaller departments or individuals in such a way that they act in the sense of this imagination and thus contribute to it.

All of these examples have something in common: Order parameters on the macroscopic level—which represent a field of structuring forces—are relatively stable (i.e. if at all, they only change slowly) and "enslave" the microscopic dynamics. *This is the top-down perspective of the interrelation*. At the same time, however, the order parameters (and the field which they represent) are nothing other than abstract structural variables, to which all of the elements on the microscopic level contribute by means of their dynamics. *This is the bottom-up perspective of the interrelation*. Accordingly, the coherent wave of the laser is made up of emitted light(waves) of single atoms; the highly ordered "rolls" of movement in the Bénard Instability are made up of the movements of single molecules; the coherent applause rhythm consists of the hand-clapping of many individuals; the climate of distrust is composed of the interpretations and communications of each partner; and the "corporate identity" consists of the imaginations of the individuals.

During the self-organized formation (so-called "emergence"), these order parameters first develop in relation to competing possibilities of order by means of weak fluctuations. Some of these alternatives of possible order, however, do not represent the overall condition of the system and its surroundings as well as others-as a consequence, they lose the competition and their special contribution to the dynamic becomes weaker and weaker. Other alternatives lose the competition just by chancethe same chance that lets the ball go to the left or to the right side in fig. 6.1a. Both sides are equivalent alternatives. However, chance-in the form of the smallest fluctuations or "the butterfly's wing" (to refer to that famous metaphor)-breaks this symmetry of equivalent alternatives. However, when the ball has left the highly instable point of equilibrium and moves-let's sav-a little to the right side by chance, then, by necessity, the ball continues to go to the right side, falling down into the valley, because the forces become stronger and stronger until it reaches the valley. Although in many cases just two alternatives are typical (fig.6.1a), landscapes of many more alternatives are also possible (fig.6.1b).⁵



Accordingly, and also in our examples, the forces of order become stronger and stronger while the order establishes, and at the same time more strongly enslave the dynamics of the parts on the micro-level in a circular-causal manner ("autocatalysis"). Although these order parameters emerge in a self-organized fashion, they nevertheless represent the environmental conditions of the system in such a way that they represent one (of two or many) possible adaptations to these external conditions.⁶ In most cases, this concerns the minimization or maximization of certain variables (or aspects), which coordinate the relations between the system and its environment. In the case of the laser, this concerns the maximization of the flow of energy; in the case of the Bénard instability, the convection movement becomes a maximum. Similarly, the clapping rhythm supposably⁷ concerns the maximization of

⁵ There can be very many alternatives if one takes multidimensional space with many dimensions or variables into account.

⁶ These external conditions are represented by so-called "control parameters".

⁷ The examples of rhythmic applause, marriage crisis, and Corporate Identity serve here only to analogously indicate the transferability of

the expressive group feeling; the marriage crisis concerns the maximization of the caution against harm and even more about "being the fool"; and in the case of corporate identity, it is a matter of the maximization of the feeling of coherence and the clarity, in the sense of belonging to the organization in contrast to competitive alternatives.

In the examples mentioned, the central aspect was that the self-organized orders were just in nascence — a socalled emergence.⁸ In the fields of psychology and social science, however, there are many phenomena for which it makes sense to assume that the order and their order parameters have developed already before the relevant time-frame of observation, and that these order parameters display their effects now, in the current dynamic.⁹ For example, the ordering principles with which an adult structures his relations to the world, to other people, and finally himself can be understood as order parameters, which emerged in early development through self-organization (but, of course, in relation to the environment). Specifically, the structuring principles for human relationships that were discussed within the context of attachment theory (Bowlby 1988) are to be understood in this way.¹⁰

the concepts to such topics. Such a transfer, of course, requires a careful analysis and the definition of the exact processes and operations in order to enable more than mere metaphor. There isn't the space here to do this - I am, however, certain that it is possible, and in the case of the "clapping rhythm" example, this has already been shown to a large extent (see Kriz 1999b, 2004, Néda et al 2000).

⁸ The Corporate Identity example should also be understood in this sense.

⁹ Elsewhere (Kriz 1997), I have pleaded for the differentiation between (a) structure emergence, e.g. formation of attractors, (b) structure representation through a dynamic process, and (c) structure representation through display.

¹⁰ Some structuring principles – like the figure-ground differentiation, for example – have already even emerged in the process of evolution.

Accordingly, the operators that play a central role in various approaches under the concept of "schema" are normally structuring principles which emerged already years ago. In the current processes of perception, cognitive processing, and expression (including actions and movements), these structuring principles actualize and unfold their shaping forces which act on the new material of cognition.

Already in the work of Bartlett (1932), who coined the term "Schema" and introduced it into psychology, the cognitive reception of complex and new material meant assimilation through existing schemata. Moreover, the act of memory requires an active "process of construction". In this process of remembering, existing schemata *are* used to construct compatible details. (This plays a central role in "Person-Centered System Theory" (Kriz 2004a), in the form of "completion dynamics".)

According to Piaget, who took Bartlett's schema concept and differentiated it further for his developmental psychology, every cognitive activity is an interplay between assimilation and accommodation. Assimilation structures a situation according to already existing schemata. Accommodation, on the other hand, means that the environmental conditions are such that the schemata can no longer adequately work and, therefore, they modify themselves in order to adapt the organism to the new conditions. In the terminology of Synergetics, this is a "phase transition": the system's dynamic abandons an established state of order, passes the gate of chaotic instability and creates a new attractor due to modified environmental conditions (i.e. control parameters). Piaget assumed a hierarchy of schemata, whereby higher-order schemata

However, in our considerations here they play no central role, as we share these principles to a large extent with all people, and they lie outside of our time-frame for self-organization processes.

work as structuring operators on lower schemata—and at the same time, again through circular causality, the higher-order schemata emerge from this process.

The schema concept has the problem, however, that two very different aspects and levels of the process dynamic are often confused with one another: "Schema" is understood by some in the sense of ordering forces, thus meaning the operators or order parameters mentioned above. For others, however, "schema" relates to the developed order, thus to the ordered contents.¹¹

For this reason, we prefer the concept of order parameters which defines a field that influences (or even enslaves) the current dynamics. Here, the term "field" is to be understood in purely abstract terms (similarly to the idea of a "variable space" in psychology)-in no way does it require Euclidean space. Accordingly, Gestalt psychology had already referred to Einstein's field definition: "A totality of simultaneously existing facts, which are understood as being reciprocally dependent upon one another, is what one calls a field" (Einstein 1934, after Metzger 1986). The Gestalt psychology of the Berlin School (Wertheimer, Koffka, Köhler) understood "Gestalt" explicitly in the context of such a field conception. This was specifically elaborated by Köhler in the context of his Isomorphy thesis, and by Lewin in the context of (psychological) field theory. These concepts did not only sway Bartlett and Piaget strongly; Haken also explicitly refers to Gestalt psychology in his consideration of psychological phenomena. Accordingly, the connections of these Gestalt aspects with Synergetics are further elaborated in a volume of Tschacher (1997) about "Prozessgestalten" (Gestalt of a Process).

¹¹ Unfortunately, many examples of the misinterpretation of the "schema concept" as ordered "*content*" can be found in the literature.

Order in the Process of Cognitive Dynamics

Haken (1992), with reference to the circular causality between the field (described by the order parameters) and the micro-level dynamics, emphasized that pattern formation and pattern recognition are to be conceived of as two sides of the same coin. If a part of the subsystems (or elements) is already ordered, a field is generated, which "enslaves" the rest of the system—thus completing the order. From this perspective, pattern *formation* takes place.

Orders are "*recognized*" the other way around, in that some features of the order similarly generate a field (or order parameters), which completes the further characteristics of the order (cf. Fig.6.2 with some of the above examples).



Figure 6.2: Circular causality

The concept of "completion dynamics" is also relevant to cognitive processes. The macroscopic order is reestablished according to the field's order parameters. A classical experiment from Asch (1946) can, for example, be newly interpreted from this perspective. Asch was a proponent of the Gestalt psychological view, and therefore pointed out that the overall impression of a situation or of a stranger is not just a collection of various separate pieces of information. Rather, the given information is seen in a context and thus yields an organized whole.

Therefore, when we look at a person, a certain impression of his character emerges immediately in us. This corresponds to the completion dynamic. In one of Asch's richly varied experiments, a description of a person, in the form of a list of six typical characteristics, was read slowly to students. One group was presented with the following list: "intelligent - industrious - impulsive critical - stubborn - envious". Another group was given the same list but in reverse order: "envious - stubborn critical - impulsive - industrious - intelligent". It was shown that the first group had a clearly positive impression of the described person afterwards, while the other group had judged the person in a clearly negative manner.

Often quoted in the literature as a "primacy effect", this finding can also be understood in the light of circular causality or completion dynamics, as shown in Fig.6.2. The first characteristics generate an overall impression, which "enslaves" the interpretation of the further characteristics correspondingly—i.e. each in turn further completing the image of that person. For example, "critically" can be understood in a more positive or in a more negative way—or, more precisely, being part of a positive judged person or part of a negative judged person.



Figure 6.3: Asch's experiment, seen as a completion dynamic in a cognitive field (the directions of the arrows only illustrate the possible main directions of the forces).

These few examples should demonstrate the fruitfulness of the system-theoretical approach and its principles, even when applied to the reconstruction of psychological phenomena, findings, descriptions, and the associated dominant principles. It therefore stands to reason to apply this approach to the investigation of mental and/or affectlogical¹² completion dynamics. To this end, numerous experiments have been conducted in Osnabrück in the

¹² I use "affect-logically" here, because the meaning of "cognitive" in former times included the entire cognitive process (thus, naturally, rational <u>and</u> affective components), but was then absurdly reduced in psychology to "rational-logical" aspects. As a consequence, one now has to readjust this analytical one-sidedness of this view with creative terms like "cognitive affective".

last 15 years, in which the attracting strength of the affect-logical processes was examined in quite different contexts (overviews can be found in Kriz 1999a, 2001, 2004b). Although we cannot go into details here, it should nevertheless be emphasized that in my opinion, an even larger range of psychological problems could be investigated with such experimental designs. An important question deals with the question of how "fields" with structuring operators are created or invoked from single pieces of information in the cognitive dynamic, which then lead in the further process to a clear attracted and completed order, in the sense of an image of "reality".¹³

Order Parameters in the Surroundings of Orders

What then does a meaning field organize? For instance in Asch's experiment: is the interpretation of the "person" organized by the field that came up from the attributes (micro à macro, or bottom-up) or is the meaning of the attributes organized by the field that came up "down" from the impression of the whole "person" (macro à micro, or top-down)? Of course, a great number of influences on meaning are always active, operating in the sense of mutual penetrating and interacting fields. For example, our understanding of meanings is subject to social, familial, biographic and general ongoing influences, among other things. This complexity of the aspects and levels is nothing unusual, however, because self-or-

¹³ It should however be at least mentioned that many further research paths exist for the demonstration of the correspondence between system-theoretical and psychological principles. Today, an increasing number of psychological researchers are involved. Overviews are given in Haken & Stadler (1990); Tschacher, Schiepek & Brunner (1992); Schiepek & Tschacher (1997); or Tschacher & Dauwalder (1999, 2003).

ganization always takes place only relative to the environment of the system. Thus, for example, in the case of patterns of interaction in a family, a variety of influences always take part in the self-organization process—social (including legal aspects); biological and evolutionary; individual biographical; and ongoing. These rules and orders are then predetermined for a family, and (nearly) closed to influence. Of course, these influences naturally play a role when trying to understand a particular interaction pattern in the family. However, it makes sense to focus only on one certain aspect—namely on how such a pattern in the interaction dynamic develops and stabilizes through self-organization (with respect to the influences of the "environment").¹⁴

In the case of fields of meaning there are also influences on different levels. For example, on the societal level certain categorically reduced themes have already been evolved in our culture, which work as very strong "meaning attractors", as was discussed at length elsewhere (Kriz 1997a, 2004a). These attractors enslave the interpretation and bring about a contraction in the space of perceptions and interpretations in the cognitive processes of individuals, couples and families. As a consequence, people end up with a narrow horizon where alternative options are left out of the view. Typical themes, operating as such malignant "meaning attractors" often narrow the options of interpretation and action, are for example "good"-"bad", "true"-"false", "sick"-"healthy", "guilty"-"innocent", "correct"-"incorrect", "right"-"wrong", etc. Theses themes, of course, refer to great and important aspects of orientation in the life of human beings. However, they develop malignant power when they

¹⁴ And, *in the case of a family*, this can be the interpretation and actual conversion and commitment of these given social or biological rules – a distinction *important* for therapy!

are understood in a totalitarian way (Kriz, 2004a). In addition, there are many other fields of meaning in language, culture, and society which cannot be modified a great deal by individuals within a short time.

For the following, it is interesting to analyze how fields of meaning in communication develop through self-organization relative to such fields of meaning and sense attractors that are already in existence. We will take the communication between only two people as a central example (e.g. a couple or a patient and therapist). It is easy to see, however, that these principles can be extended to communications involving more than two people.

Our starting point is the fact that communication always contains two sub-processes: the process of "*incitation*" and the process of "*excitation*", as Nørretranders (1997) puts it. The words which one person says to another represent a very large amount of "meaning information", which exists consciously and unconsciously "in the head" of the speaker, and is "infolded" more or less into the spoken words. In doing so, certain aspects are selected and others discarded and information is condensed. However, at the same time some aspects are simultaneously unfolded and developed and "appropriate" words and metaphors are sought. This information, condensed by "incitation", is now voiced and, in the process of understanding, excited by the listener, i.e. unfolded. This "tree of speech" is roughly illustrated in Fig. 6.4.¹⁵

¹⁵ Here, the structuring rules of the metaphors of speaking and understanding (which are overlooked far too often) should be taken into account. These are very concisely elaborated in Jaynes (1993), with reference to the "characteristics of consciousness": Spatialization, Excerption, the Analog T, the Metaphor 'Me', Narratization and Conciliation (for details, see Jaynes 1993).



Figure 6.4: The tree of speech (after Nørretranders 1997)

Along with all of this ,it must however be considered that "verbalizing " and "listening" as a rule regard a small portion of a longer process, in which both partners are involved by means of diverse feedback loops. As a consequence, that which the "verbalizer" has "in his head" (in the broadest sense) at a particular instant—i.e. the meaning which he would like to communicate and has to incitate—depends on many aspects. Besides the above mentioned common fields of meaning in society (i.e. the rather "general" meanings of the words, for example), it also depends on the preceding course of the communication. This determines what actually comes to his mind, what he assumes to be meaningful to the listener, what he chooses, etc.

Even stronger, though, is the influence of previous experience in the case of the excitation of the listener. Naturally, he doesn't necessarily unfold his meaning according to the meaning in the head of the speaker (inside of which the listener obviously can't see; otherwise one wouldn't need to communicate). Rather, he excitates according to the cognitive ordering processes in his own head—and these often have a lot to do with his own biography—rather than giving consideration to the message or to the meaning in the speaker's head.

As was elaborated elsewhere (Kriz 1997a)—and as it has been similarly described by numerous other authors — even the words of the speaker can often act as a sort of trigger for starting "inner movies". Here then, the excitation is almost stimulus invariant: what is activated (and which will then be responded to), is that which one wants to hear, i.e. the meaning that is *assumed*. And people all too often no longer check back whether this meaning is also seen in the same way by the other person. This process—which almost completely makes up the "daily bread" of couple and family therapists—can be illustrated by the sequence where the therapist asks the woman in a relationship counseling session: "Did you hear what your partner just said?" and she answers "No, I didn't-but by the way he looked at me, I already knew what he would say!".

On the other hand however, a communication that succeeds sufficiently well means that a common field of meaning emerges from the many running feedback loops (including the expectation of the expectation regarding the interpretation of meaning). This field governs both that on which both actually focus the conversation, and the processes of incitation and excitation. During the course of the communication, a more or less exclusive shared field of meaning thus emerges between both partners. This exclusivity perhaps becomes clearest, when it is obvious to both that the whimsical expression of an "Olé!" is an allusion to a bullfight during last summer's holiday in Spain, which may have been followed by a particularly lovely evening spent together. In this example, there are certainly further aspects that both partners unfold in a similar manner. However, there are other aspects that each partner unfolds in their own more private and individual way—connected with <u>non</u>-shared associations.

To the outsider who didn't take part in the development of this common field of meaning, the meaning of the "Olé!" remains largely cryptic. If necessary, he can indeed excitate something from his experience of life that makes sense to him. And when he now communicates this, a common field of meaning develops, to which all three persons contribute. At the same time, however, this example makes it clear that in a field of meaning, different substructures can be active for the individual participants. For example, the third person could probably never participate in all of the commonly excitated meanings of the *couple*. And in the same way, the couple cannot participate in *all* excitated meanings of each individual partner. Communication is just-in the actual sense of the word communio-a larger or smaller participation in a field of meaning that is developed in common. In no way, however, is it the possession of all meanings of the other (and certainly not a possession of "the truth"!).

It should now be clear, that the emergence of a common field of meaning of two (or more) partners and the ordering processes of incitation and excitation, can by all means be described in terms of Synergetics, with its circular causality, order parameters, and completion dynamic. Figures 6.2 and 6.3 can now be modified into Figure 6.5:



Figure 6.5: Two (or more) people develop a common field of meaning

The question, which can again be discussed here only briefly, of when the self-organization processes which generate a common field of meaning are particularly effective, can be answered similarly to the question of the efficacy of order parameters in general. They are more effective the less the dynamic is influenced by other fields. So, for example, the strange forces of fields whose effect we describe as "neurosis" can hardly become effective when the situation is strongly pre-structured. For instance, when one submits a tax declaration to the tax office: The office and the space itself, officials, filled out forms, and the subject-matter (the tax declaration) are so clearly structured that the interaction dynamic will be dominated (one can by all means say "enslaved") by this. Quite contrary to this, in a very unstructured situationfor instance on the psychoanalyst's couch or while getting to know a new partner-it is exactly those neurotic field forces that are effective (and so are open to experience and observation).

Accordingly, the probability is low that a common field of meaning will self-organize when the meanings are already strongly pre-structured—for instance when the conversation is characterized by clear logical deductions, definitions, use of simple facts, etc. (shared by both parties). Then on the one hand, hardly any reduction in complexity is needed, and/or the rules of the incitation and excitation are explicitly and normatively set.¹⁶

Then again, reputed therapists such as Rogers, Erickson or Gilligan pointed out how the emergence of a common field of meaning is necessary in the case of higher polyvalence, uncertainty, and lack of clarity. Such a situation, on the other hand, is often experienced as a very

¹⁶ In terms of Julius Kuhl's (2001) Psi Theory: when left hemispherical object recognition predominates and right hemispherical complex networked processes is less important.

"close" relationship which can develop an almost astonishing power. This is (likewise in agreement with many therapists) only then possible when the complex situation of common development and adjustment of meanings is characterized by openness and mutual high regard—i.e. when neither of the partners has the power to define terms, and no strong hierarchical difference exists¹⁷.

In closing, it should still be pointed out that the development (and modification) of common fields of meaning can be facilitated by means of techniques, which allow communication of aspects of the fields of meaning not only verbally by linguistic incitation and excitation, but rather through visualizing and experiencing. For this, artistic techniques-painting, music, poetry etc.-are equally as helpful, as is visualization in space¹⁸, that is, the various techniques of sculpture-work and psychodrama. In all of these techniques, meanings can be pointed out in a deictic way, so to speak, and the common imagination need not only be employed "in the head", rather it can be looked at. This is not to say that the still important components of the process of incitation and excitation may be underestimated: because naturally, a picture or a sculpture doesn't simply speak "for itself", but only to the people who seek and construct meaning.

¹⁷ Meynhardt (2004), by the way, pointed out these aspects in a similar way through the differentiation of knowledge which concerns facts and objective data on the one hand, and knowledge which concerns values on the other hand. From our perspective, the latter serves as an order parameter in a polyvalent, highly complex, less objective prestructured situation.

¹⁸ This corresponds to the "spatialization" in Jaynes – see footnote 15

References

- Asch, S. (1946): Forming impressions of personality. Journal of Abnormal and Social Psychology, 41, 258-290
- Bartlett, F.C. (1932). Remembering. Cambridge: Cambridge Univ. Press.
- Bowlby, J. (1988). A secure Base. Clinical applications of attachment theory. London: Routledge
- Brunner, E. J. (2002) Organisationsberatung lernen. Freiburg: Lambertus
- Forrester, Jay W. (1961): Urban Dynamics. Cambridge: MIT-Press
- Forrester, J.W. 1972: Grundzüge einer Systemtheorie (Principles of Systems). Wiesbaden: Gabler
- Frankl, V. (1984) Man's search for Meaning. New York: Simon & Schuster
- Freud, S. (1902/54) Zur Psychopathologie des Alltagslebens. Fischer, Frankfurt 1954
- Goffman, Erving (1963): Asylums. Essay on the Social Situation of Mental Patients and Other Inmates. Chicago: Aldine
- Greif, Siegfried (1994): Handlungstheorie und Selbstorganisationstheorien. In: P.Richter & B. Bergmann (Hrsg): Die Handlungsregulationstheorie. Göttingen: Verlag f. Angewandte Psychologie. 89 - 114
- Greif, Siegfried (1996): Teamfähigkeiten und Selbstorganisationskompetenzen. In: S.Greif & H.-J- Kurtz (Hrsg): Handbuch selbstorganisiertes Lernen. Göttingen: Verlag f. Angewandte Psychologie. 161 - 178
- Haken, H. (1981): Synergetics. An introducion. Berlin: Springer.
- Haken, H. (1984): Erfolgsgeheimnisse der Natur. Synergetik: Die Lehre vom Zusammenwirken. Frankfurt/M: Ullstein.
- Haken, H. (1992): Synergetics in Psychology. in: Tschacher, W., Schiepek, G. & Brunner, E. J. (eds): Selforganization and Clinical Psychology. Berlin: Springer, 32-54
- Haken, H. & Stadler, M. (1990): Synergetics of cognition. Berlin: Springer
- Heisenberg, W. (1955): Das Naturbild der heutigen Physik. Hamburg: Rowohlt
- Jaynes, J. (1993): Der Ursprung des Bewusstseins. Reinbek: rororo
- Kriz, J. (1996): Chaos und Selbstorganisation. In: Greif, S. & Kurtz H-J. (Hrsg.): Handbuch Selbstorganisiertes Lernen. Göttingen: Verlag für angewandte Psychologie, 33-43

- Kriz, J. (1997): Attraktoren bei kognitiven und sozialen Prozessen.
 Kritische Analyse eines Mode-Konzepts. In: G. Schiepek & W. Tschacher (Hrsg.) Selbstorganisation in Psychologie und Psychiatrie. Braunschweig: Vieweg, 57-70
- Kriz, J. (1997a): Chaos, Angst und Ordnung. Wie wir unsere Lebenswelt gestalten. Göttingen: Vandenheock
- Kriz, J. (1997b): Selbstorganisation als Grundlage lernender Organisationen. In: Wieselhuber & Partner (Hrsg.) Handbuch lernende Organisation. Wiesbaden: Gabler, 187-196.
- Kriz, J. (1999a): Systemtheorie für Psychotherapeuten, Psychologen und Mediziner. UTB/Facultas)
- Kriz, J. (1999b): On Attractors The Teleological Principle in Systems Theory, the Arts and Therapy. POIESIS. A Journal of the Arts and Communication, 24-29
- Kriz, J. (2001):Self-Organization of Cognitive and Interactional Processes. In: Matthies, M., Malchow, H. & Kriz, J. (Eds): Integrative Systems Approaches to Natural and Social Dynamics. Heidelberg: Springer, 517-537
- Kriz, J. (2003): Kriz, Jürgen (2003): Versagen: Desaster oder Aufbruch? In: B. Boothe & W. Marx (eds.) Panne – Irrtum - Missgeschick. Die Psychopathologie des Alltagslebens in interdisziplinärer Perspektive. Bern: H. Huber, 163 - 176
- Kriz, J. (2004a): Personzentrierte Systemtheorie. Grundfragen und Kernaspekte. In: Schlippe, A.v. & Kriz, W.C. (Hrsg): Personzentrierung und Systemtheorie. Göttingen: Vandenhoeck & Ruprecht, 13 – 67
- Kriz, J. (2004b): Beobachtung von Ordnungsbildungen in der Psychologie: Sinnattraktoren in der Serielle Reproduktion.
 In: Moser, S. (Hg): Konstruktivistisch Forschen. Wiesbaden: VS Verlag für Sozialwissenschaften, 43 – 66
- Kuhl, J. (2001): Motivation und Persönlichkeit. Interaktionen psychischer Systeme. Göttingen: Hogrefe
- Metzger, W. (1986). Gestaltpsychologie. Ausgewählte Werke aus den Jahren 1950-1982. In: M. Stadler & H. Crabus (Hrsg.) Frankfurt/M.: Kramer
- Meynhardt, T. (2004) Wertwissen: Was Organisationen wirklich bewegt. Münster/New York: Waxmann
- Néda, Z., et al. (2000) Self-organizing processes: The sound of many hands clapping. Nature 403, 849 850
- Nørretranders, T. (1997): Spüre die Welt. Die Wissenschaft vom Bewußtsein. Reinbek, Rowohlt
- Piaget, J. (1976). Die Äquilibration der kognitiven Strukturen. Stuttgart: Pieper.

- v.Schlippe, A. & Kriz, J. (1996): Das "Auftragskarussell" Eine Möglichkeit der Selbstsupervision in systemischer Therapie und Beratung. System Familie, 9, 3, 106-110
- Schiepek, G. & Tschacher, W. (1997): Selbstorganisation in Psychologie und Psychiatrie. Braunschweig: Vieweg
- Tschacher, W. (1997): Prozessgestalten. Göttingen: Hogrefe.
- Tschacher, W. & Dauwalder, J.P. (1999): New Jersey: World Scientific
- Tschacher, W. & Dauwalder, J.P. (2003): The Dynamical Systems Approach to Cognition. New Jersey: World Scientific
- Tschacher, W., Schiepek, G. & Brunner, E. J. (1992): Selforganization and Clinical Psychology Berlin: Springer
- Watzlawick P, Beavin JH, Jackson DD (1967) Pragmatics of Human Communication. New York: Norton & Company

Chapter 7

THE EFFECTIVENESS OF THE HUMANISTIC PSYCHOLOGICAL APPROACH

In the last decades, some Nobel prizes have been awarded for concepts dealing with self-organization in the natural sciences. Correspondingly, the interdisciplinary discourse on systems theory has had a growing influence on many disciplines. If we consider psychology to be the science dealing with the most complex system on earth—namely the self-reflexive. creative-imaginative human being, influenced by processes on different levels such as society and its culture, as well as the physiology and biology of the body and, moreover, by the most complex biological system, namely the human brain—then it is quite remarkable to notice that psychology to a great extent uses rather reductive, simple, mechanistic models of cause and effect of the 19th century and refers to principles and metaphors which became obscure in the natural sciences in the 20th century.

Proof was given that some fundamental principles of the mechanistic age are—at least in such general terms