Actualizing Tendency: The link between person-centered and experiential psychotherapy and interdisciplinary systems theory

Aktulisierungs-Tendenz: Das Verbindungsglied zwischen PCEP und interdisziplinärer Systemtheorie

La Tendencia Actualizante: El vínculo entre la psicoterapia centrada en la persona y experiencial y la teoría de sistemas interdisciplinaria

La Tendance Actualisante: Le lien entre la psychothérapie centrée sur la personne et expérientielle et la théorie des systèmes interdisciplinaires

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Abstract. The Actualizing Tendency is a core concept in person-centered and experiential psychotherapy (PCEP). It is neither a belief nor an assumption in Rogers' theory, but a simple description of the consequences of seriously taking interconnectedness and relationships into account. This paper discusses some (sub)concepts of the actualizing tendency as well as terminological problems and looks at notions such as emergence and phase transitions also investigated in modern interdisciplinary systems science. It is argued that utilizing this link between PCEP and systems science is not intended to explain the processes of psychotherapy in terms of the frame of natural science, but enables PCEP to take part in the interdisciplinary discourses and by this, parry accusations that PCEP is not "scientific." Moreover, this

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link can also help to scrutinize the principles and metaphors which we use in PCEP and provide a consistent theoretical basis for our own practice.

Zusammenfassung. Aktualisierungstendenz ist ein Kernkonzept der Personzentrierten und Experienziellen Psychotherapie (PCEP). Es handelt sich dabei weder um eine Glaubensfrage noch um eine Vermutung in Rogers Theorie — sondern schlicht um eine Beschreibung der Konsequenzen, wenn man ernsthaft Vernetzung und Beziehung berücksichtigt. Dieser Beitrag diskutiert sowohl einige (Sub)-Konzepte der Aktualisierungstendenz als auch terminologische Probleme und stellt Phänomene wie Emergenz und Phasenübergänge vor, die auch im Rahmen moderner interdisziplinärer Systemwissenschaft untersucht werden Es wird argumentiert, dass die Nutzbarmachung dieser Verbindung zwischen PCEP und Systemtheorie keineswegs bedeutet, Therapieprozesse im Rahmen von Naturwissenschaft erklären zu wollen. Vielmehr ermöglicht diese Verbindung PCEP die Teilnahme am interdisziplinären Diskurs und damit eine bessere Verteidigung gegenüber Vorwürfen, nicht "wissenschaftlich" zu sein. Darüber hinaus können mit dieser Verbindung auch die Prinzipien und Metaphern, die wir in der PCEP verwenden, kritisch hinterfragt werden, um so eine konsistentere theoretische Basis für unsere eigene Praxis zu schaffen.

Resumen. La tendencia actualizante es un concepto clave en la psicoterapia centrada en la persona y experiencial (PCPE). No se trata ni de una creencia ni de un supuesto en la teoría de Rogers, sino una simple descripción de las consecuencias de tener en cuenta seriamente la cualidad de interconexión y las relaciones. Además, este concepto se refiere a fenómenos, como sobre-estabilidad o transición de orden, los cuales son también investigados en la moderna ciencia de sistemas interdisciplinaria. Este artículo discute algunos subconceptos de la tendencia actualizante, así como también ciertos problemas terminológicos. Se argumenta que la utilización de este vínculo entre la PCPE y la ciencia de sistemas no se propone explicar los procesos de psicoterapia en términos del marco de la ciencia natural, sino permitir a la PCPE formar parte de los discursos interdisciplinarios. Y, de esta manera, rebatir las acusaciones de que la PCPE no es "científica". Además, este vínculo puede también ayudar a examinar los principios y las metáforas que usamos en la PCPE y proveer una base teórica consistente para nuestra práctica.

Résumé. La Tendance Actualisante est un concept fondamental dans la psychothérapie expérientielle et centrée sur la personne (PECP). Dans la théorie de Rogers il s'agit ni d'une croyance ni d'un présupposé mais d'un simple descriptif des conséquences qui prend en compte de manière sérieuse l'interconnexion et les relations et qui examine des concepts comme "émergence" ou "phase de transitions", eux-mêmes également analysés dans la science moderne interdisciplinaire des systèmes. Cet article examine certains (sous)concepts de la tendance actualisante et certains problèmes liés à la terminologie. Il argumente que ce lien entre la PCEP et la science des systèmes n'est pas utilisé pour expliquer les processus de la psychothérapie en termes de cadre des sciences naturelles, mais il offre aux psychothérapies expérientielle et centrée sur la personnes de participer aux discours interdisciplinaires et permet, de cette manière, de déjouer des accusations comme quoi la PECP n'est pas "scientifique". En outre ce lien peut également aider à examiner de plus près les principes et les métaphores que nous utilisons dans la PECP et peut fournir une base fiable pour notre propre pratique.

Keywords: Person-centered approach, actualizing tendency, self-organization, metaphors, systems theory, emergence, phase transition

"What do I mean by a person-centered approach?" Carl Rogers (1979) asked in the fundamental essay "Foundations of the person-centered approach," which was republished one year later (Rogers, 1980). In his answer, he summarized his lifelong work into two central aspects which remain the essence of the person-centered approach (PCA) and person-centered and experiential psychotherapies (PCEP).

Firstly, the basic core of PCA is the healing power of a special person-to-person relationship in psychotherapy and counseling. This special relationship has been described extensively by Rogers and others in many papers and books referring to three *necessary and sufficient conditions* for the therapist's role (and three additional conditions under which the healing power can realize its potential in practice). Although these three conditions for a healing and growth-promoting climate simply describe *one* special relationship and its *attitudinal* qualities, based on a special way of being in and encountering the world, they still seem to be rather general and abstract (see Rogers, 1951, 1957, 1961).

Especially in the case of beginners who need clear guidance in what they concretely should *do* in order to translate this "encounter with a client" into action, the three conditions may not suffice. Similarly, many therapists when confronted with severe symptoms are looking for more concrete and more specific (sub-)concepts. Therefore, a lot of work has been published explaining the meaning of the PCA encounter and its attitudinal qualities on a more practical level, and unfolding some detailed descriptions that seem to be additional conditions. In describing general conditions or principles on a more practical level with respect to the multitude of aspects inherent in various concrete situations, problems or disorders, one always has to unfold the meaning and "add" many (lower-level) conditions and principles.¹ But, without any doubt, the effectiveness of PCEP depends on the quality of a special person-to-person relationship "and is not a result of methods and techniques" (van Kalmthout, 2004, p. 195).

Secondly, the core explanatory concept in PCEP is the *actualizing tendency*. This is the theoretical reference when the question arises: "why does this relationship have such a healing power?" This term, too, is rather abstract and has to be elaborated on more concrete levels by means of detailed descriptions and further explanations in order to allow for a deeper understanding (see Rogers, 1959, 1961, 1963, 1979, 1980).

From the perspective of a more or less mechanistic interpretation of the universe and its related methods — for example, linear analysis of independent and dependent factors, input-output, or stimulus-response relations, applied to all areas of investigation (including the humanities), an actualizing tendency is just incomprehensible. There is still a strong belief in our culture that the only way to come to ordered states or to change order is to impose that (new) order. But Rogers was aware that natural science in the twentieth century, particularly in the field of systems theory, had long since overcome the flaws of such thinking. As a consequence, he often referred to findings of those disciplines in order to explain and discuss the meaning of the actualizing tendency.

^{1.} Therefore, the debate about whether the therapeutic relationship (described by Rogers) is *sufficient* or not focuses upon an arbitrary question. For example, emotion-focused or process-experiential procedures (Greenberg, Rice, & Elliott, 1993) may be regarded as *clarifications* of the therapeutic relationship and not standing in contradiction to Rogers' description.

However this gave and gives rise to many misunderstandings. Some authors from the field of PCEP see a conflict between Rogers' "deeply rooted affinity with natural science on the one hand and, on the other, his equally deeply rooted faith in human potential and the positive process" of human beings (van Kalmthout, 2004, p. 198). They fear that, if the PCA refers to principles which are also discussed in the natural sciences, we might fall into the pitfalls of present-day technological scientism, reductionism, materialism, and objectivism. Therefore, they step back from making use of the explanatory power of the actualizing tendency (or at least its interdisciplinary links). On the other hand, some academic psychologists (and others) accuse the concept of the actualizing tendency of being "unscientific" because so-called "scientific" principles are ignored. Even within PCEP we can read statements such as "the assumptions underlying Rogerian theory are no longer in accordance with recent psychological research ... including the actualizing tendency" (Sachse, 2004, p. 79).

This paper has several intercorrelated aims: (1) to describe and discuss some aspects of the interdisciplinary meaning of the actualizing tendency; (2) to make clear that this concept and its sub-principles can serve as a link between PCEP and modern science without reducing PCEP to the constraint of naturalism or even to the phenomena of the natural sciences; (3) to provide a scientific basis and justification in order to place the powerful PCEP in the interdisciplinary discourse of science, a science quite different from the classical mechanistic one, which is an adequate basis for the repair of machines but an inadequate one for facilitating the actualizing potential in the process of healing.

However, before we can go to the benefits of the link between PCEP and systems theory, we have to do two things. Firstly, we have to face (and then pass by) a terminological problem. Although this section on terminological problems looks rather sophisticated, it is necessary to avoid the confusing traps within some texts concerning self-organization theory in the domain of psychotherapy. Secondly, we have to overcome the seemingly strongest resistance to the link between modern science and PCEP — the confusion between *linking* and *reducing*.

TERMINOLOGICAL PROBLEMS OF "SELF-ACTUALIZATION"

The core concept "actualization," which is discussed in this paper, is called *self-organization* in the interdisciplinary discourse of modern systems theory. This refers to the phenomenon that a system need not be "formed," "ordered" or "structured" by an "organizer" integrating the elements into an organized whole. Instead, given an appropriate environment, it will unfold itself in an orderly way due to inner structural possibilities. This *emergence* of selforganized order in the form of a dynamic pattern can, to a great extent, be treated mathematically in the same way as the *phase transition* of already established patterns into new and more effective or better adapted patterns (due to change in the environment). Without going into details (see Kriz, 2006), it is obvious that the latter phenomenon is more relevant for psychotherapy which typically means the change of a symptomatic or at least problematic pattern (in the processes of perceiving, cognitive and emotive processing, and expressing by acting and behaving). In particular, the interdisciplinary approach of *Synergetics* by Haken (1978, 1983) provides a conceptual basis and framework for facilitating cooperation between those psychologists and natural scientists who are interested in understanding complex autonomous (but not isolated or immune) processes of self-organized order.

It is fascinating how much this notion and world-view of modern interdisciplinary systems theory corresponds with the thought of the Gestalt psychologist Kurt Goldstein who, after his emigration to the USA, became more famous as an *organismic theorist*. Goldstein's fundamental book *The Organism* (1939, German edition 1934) appeared more than three decades before theories of self-organization became an important subject in the natural sciences.

Goldstein coined the term "self-actualization" in order to refer to the self-organizing processes of an organism (because "self-organization" was not a common term at that time). In contrast to the classical dichotomy of imposing order from outside or developing order only from inside, Goldstein stressed the crucial point that self-actualization does not mean that the organism is immune to the events and forces of the external world. Conversely, for the organism, the environment is both a source of supplies and disturbances.

The tasks are determined by the "nature" of the organism, its essence, which is brought into actualization through environmental changes that act upon it. The expressions of that actualization are the performances of the organism. Through them the organism can deal with the respective environmental demands and actualize itself (Goldstein 1939, p. 111).

And, therefore, the healthy organism is one "in which the tendency towards self-actualization is acting from within, and overcomes the disturbance arising from the clash with the world" (p. 305).

Rogers, who like Goldstein spent some years at Columbia, was strongly influenced by the holistic and dynamic concepts of Gestalt psychology. For example, Rogers often described the *self* as a gestalt. However, he made terminological distinctions. Firstly, he made a distinction between the self-organization (actualization) of biological (including human) organisms, and of non-living matter in physics, chemistry, cosmology etc. He referred to the latter with the term *formative tendency*. Secondly, he called the aspect of the self-organizing organism (Goldstein's "self-actualization") as just "actualization." This is because Rogers' approach, unlike Goldstein's, has an elaborated self theory at its core. Therefore, *self-actualization* in the PCA exclusively refers to the actualization of the self of a human being. For example, in a series of nineteen propositions Rogers stated:

VIII) A portion of the total perceptual field gradually becomes differentiated as the self. (Rogers, 1951, p. 497)

and:

IX) As a result of interaction with the environment, and particularly as a result of evaluational interaction with others, the structure of the self is formed — an organized, fluid, but consistent conceptual pattern of perceptions of characteristics and relationships of the "I" or the "me" together with values attached to these concepts. (Ibid., p. 498)

This, however, gives rise to terminological misunderstandings — especially when we refer to PCEP from the perspective of systems theory. In systems theory as well as in Goldstein's

approach, the "self" in self-organization or self-actualization functions as a terminological focus on "self-made" in contrast to "made from outside." By contrast, the "self" in Rogers' self-actualization refers to the psychological process of actualizing a "self" in contrast to the totality of experience or actualization of the organism. Of course, actualizing a "self" by means of self-actualization is the typical and essential capability of the actualization of human beings and their organisms in contrast to the actualization of the organisms of animals or plants (which do not, as far as we know today, develop a "self").

Moreover, seen from the terminological perspective of systems theory, the human process of actualizing a "self" does not happen by imposing order from outside. But this can only be described by the notion of self-organization — and, therefore, terminologically precise, as a "self"-self-organization. This, indeed, looks rather confusing.

In order to avoid such terminological confusion, we will simply use the term *actualization* or self-organization in the following and clarify whether we are referring to the actualization of matter, organism(s), interaction structures, patterns of thought, or "the self."

LINKING IS NOT A REDUCTION

Rogers referred to the actualizing tendency as an *interdisciplinary* principle of explanation (for example, Rogers, 1980, p. 133). For some, deeply rooted in humanistic psychology and stressing (as Rogers did and I do) the essential differences between a person and a biological or even just material entity, this seems to create a conflict or at least a tension. However, we should not mix up two levels. The discovery of attitudinal qualities for a healing process in a person-to-person relationship and, additionally, research about this process, as well as teaching procedures for young therapists, belong to the core domain of psychology and psychotherapy. No other scientific disciplines are interested in these questions. Moreover, the special PCEP approach to psychotherapy is rooted in the ethical position "emphasizing and researching relational dimensions of therapy and rejecting many types of interventions as unjustifiable" (Grant, 2004, p. 156).

In contrast, the development of *principles of explanations* need not be restricted to one discipline. Rather, principles of explanation should correspond to *interdisciplinary* discourses — of course, without being in contradiction to the ethical position. Correspondingly, Rogers also referred to other disciplines which use the actualizing tendency in order to explain and discuss their research and findings. Remarkably, he not only cited "classical" systemic and holistic approaches with similar views, like Goldstein (1939), Angyal (1941) or Smuts (1926), but he also discussed contemporary approaches from the natural sciences — for example Szent-Gyoergyi (1974), a Nobel Prize-winning biologist, and Prigogine (1979), a Nobel Prize-winning chemist.

According to Grant (2004), stressing that we base our "practice on (implicit) ethical concepts and world-views" (p. 156) and that the use of (certain) principles and the disavowal of the relevance of others are both functions of ethical positions, we should be aware of the roots of our everyday understanding. Most people believe in the essential difference between

repairing a defective engine and working with a patient in a psychotherapeutic manner. But what are the concepts, terms, metaphors and principles that we have and use as cognitive tools to grasp, explain and discuss human development, pathogenesis or psychotherapy? After 400 years of great success on the part of classical mechanistic science as an essential basis of today's culture, our world is filled with machines, apparatus, tools, and "things" that have changed the face of our planet. Over many generations, our inner images — the metaphors and principles we use in understanding our everyday life — became, of course, more and more related to the outer images of what we perceive and experience: things and mechanical apparatus. No wonder then that it seemed self-evident to use these metaphors and principles to understand and explain other areas of the "world" — when we are dealing with nonhuman beings, with other humans, and last but not least with ourselves. This tendency seems to be even stronger when we try to give rational or "scientific" explanations. Although modern science has changed its world-view and its explanatory principles tremendously, the informal narratives and metaphors of culture do not adapt as quickly, but instead still convey the "same old stories" of what "science" is. And this still involves the use of a toolbox of mechanistic principles (which are indeed rather adequate in dealing with the restricted apparatus of our technical world).

Therefore, the crucial question is not whether we use or do not use metaphors and principles (also) discussed in the natural sciences. The question is whether we use inadequate (mechanistic) principles or adequate ones, when referring to life and human creativity instead of to machines.²

My experience is that students on their way to becoming PCE therapists often "know" a lot about the relationship, the "three core conditions" or attitudinal qualities. They can repeat a lot of what they *should* do and *want* to do. However, when we listen to the tapes of their first (simulated) steps into "making therapy" we find that what they *really* do is rather different. Analyzing "the situation" and "the patient," finding out "what is really the case" and giving "advice" — in other words, imposing order from outside. Although they know that the attitudinal qualities in PCEP are rather different, they feel much more secure and comfortable with a behavior that mirrors (and is influenced by) the principles of our understanding of "the world."

Not only the thoughts of patients or of my students but also many PCEP texts are full of words, terms and concepts that refer to those principles, because such an approach to the world has been so successful that it now governs the core ideas of everyday life. For example, references to "blocks," "barriers" and "shields" or the use of phrases such as, "he got stuck," "has no self-control," "(don't) want to push him," "he does not function well" etc. are much more adequate for dealing with matter and machines than an encounter with a human being. While these examples (actually taken from PCEP publications) look trivial, the problems concerning other terms and metaphors, for example, the term "coping," seem to be less obvious. We will come to that later.

^{2.} This strong tendency in Western culture towards order, reduction and reification of processes has been analyzed and reported by many researchers from anthropology, social psychology, social science or linguistics. For example, Nisbett (2003) summarizes some dozen studies and emphasizes the marked differences in thinking and in consciousness between peoples of the West (mainly Europeans and Americans) and the East (Japanese and Chinese).

As a consequence, in PCEP the ethical position of believing in the essential difference between matter and a person is good but not enough. Without alternatives we are trapped by the power of our everyday thought in our culture. And by this we link (implicitly and tacitly) our practice to the metaphors and principles of mechanistic science. The link between PCEP and systems theory is meant, therefore, to provide an alternative and not a reduction.

Moreover, understanding some *principles* of encountering the world by way of examples from the natural sciences does not at all entail the reduction of psychological and social *phenomena* and processes to those of natural science. For example, we could use the process of growth in a deciduous tree to explain that the *principle* of growth in PCEP does not mean "more and more" (as in economics) but "die and become" in adaptation to the changing environment (in the case of a tree: the seasons; in case of a human being, for example, the change of expectations of a human leaving childhood and becoming an adult). It is clear that using this example does not mean that we want to reduce personal growth to biological phenomena.

BASIC SUB-CONCEPTS OF THE ACTUALIZING PROCESS

In modern interdisciplinary systems science, interconnectedness and feedback loops are the essence of *emergence* and *phase transitions* of self-organized patterns and order. A core distinction between classical mechanistic and modern systemic approaches is illustrated in Figures 1a and b:



Figure 1a (left) and Figure 1b (right). Mere input-output analysis (left) versus feedback loop (right)

In Figure 1a, an input "I" is given to the box, which *operates* somehow and gives an output "O." This is not only the underlying perspective of stimulus-response psychology and the core of experimental science. It is, moreover, often the everyday understanding disseminated in simple textbooks describing social relationships. A wife asks her husband: "what do you mean by X?" And he gives an answer. The question is identified with "I" and the answer with "O," and the interaction takes place because the wife cannot look directly into the "black box" (the man's mind) but has to investigate this box by input-output analysis. Typically, this is the classical metaphor of experimental input-output analysis applied to human relationship.

However, this description misses the essence of what really takes place. The spouse has a relationship which reflects the history of that couple. Therefore, the man "knows" that certain answers might be interpreted by his wife in a way which he does not want. This belief of course influences the possible answers a great deal. On the other side, "knowing" her husband, and that he tends towards "evasive answers," the wife tries to ask in a way that reflects these tendencies in order to find out what he really thinks. However, the man has experienced that

his wife has developed the tendency to ask him in a special way and, therefore, tries to anticipate what he could do to avoid this. But the wife ...

We could go on telling this story in more and more detail and with more potential loops which reflect the experiences gained during thousands of previous loops (see Figure 1b). But even this rough example shows the flaws of a mere input-output analysis in contrast to taking account of the history of feedback loops in which cognitive patterns of beliefs, expectations, interpretations and so on provide a meaning field that determines the questions and answers. Due to interconnections and history every stimulus is also a response to what happened before, and every response is also a stimulus for the further process. Therefore, what happens reflects the pattern of interaction and meaning which has emerged in the biography of that couple. This pattern is not imposed from outside (although many influences are important: social and language structure, individual biography, personality etc.) but, with respect to these influences, is self-organized.

Interdisciplinary systems theory describes and analyzes how dynamic order or patterns emerge if input and output are not artificially isolated — as is the case in most classical and technical approaches — but if interconnectedness and feedback are admitted. In chemistry, for example, we find self-organizing patterns of movement of a liquid in a bowl due to chemical reactions, or *chemical clocks* where in a test tube the color might change red-blue-red-blue-red-blue In physics, for example, the extremely coherent light wave in a laser can be described by a process of self-organization which synchronizes the emission of light from the individual atoms in such a way that they contribute to a common light wave. Another famous example is the *Bénard Instability*: macroscopic coherent movements (convection "rolls") which typically take on the complicated shape of a honeycomb pattern. In particular, the interdisciplinary systems approach *Synergetics* (Haken, 1978, 1983) is presented in more than one hundred volumes with about two thousand contributions, most of them from physics, chemistry, physiology, biology and other natural sciences — a few from psychology and psychotherapy (see Kriz, 1990, 1992, 1993, 2001).

Amongst the emergence of dynamical order or patterns, the self-organized change, called *phase transition*, is another important sub-concept in systems theory. While in the process of emergence, the self-organized order, called an *attractor*, corresponds both to inherent potentials of the system and general conditions of the surroundings — a small change in the environment will normally not change the structure of the system when the attractor is established. In contrast, the system is over-stable even when the environment changes (to some extent). However, what happens is again not so much dependent on the surroundings but much more dependent on the situation and the history of the system (compare Figure 2b). In stable situations (which are typically for attractors — C or B in Figure 2b) even big change (or *forces*) of the surroundings will only bring *fluctuations* to the system — which the system then compensates and reverts to the attractor. However, when the change (or forces) is too big, the system passes a state of instability (near A in Figure 2b) from which it can reach another attractor (that means another dynamic pattern or order). The same phase transition, i.e. change of the pattern, happens when the system is in a situation near to instability (A in Figure 2b) — at that point very small additional forces are sufficient in order to facilitate that change.

Although it is not possible to describe and discuss these (sub)-principles of self-organization theory in a more detailed manner due to the limited space of a journal paper, it should be clear that *emergence* and *phase transition* are concepts of a science quite different from the classical mechanistic one. The fundamental shift from classical mechanistic to modern systemic science is schematized by Figures 2a and 2b and can be summarized as follows.

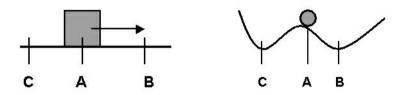


Figure 2a (left) and 2b (right) Schema of classic-mechanistic approach (left) versus systemic-dynamic approach (right)

Classic-mechanistic approach. Core idea: Organisation from outside

Forces — or *interventions* — cause the system (box on a plane, Fig 2a) to move from A to B. Just as easily the system could be moved to any other point (which represents other states of order) between A and B. Moreover, it could be moved in the direction of C, etc. What happens is only dependent on the exact dosage of the forces — that means it is dependent on the size and direction of the forces. Whatever happens is a direct and specific result of the interventions, and by analyzing these cause-effect relations we try to control the further development. Moreover, all points in that plane are "equal" — a homogeneity, totally open to the will of a designer.

Systemic-dynamic approach. Core idea: Self-organisation

Due to non-specific conditions of the environment (forces which form the landscape of potentials) the system (landscape with ball, Fig. 2b) develops a dynamic state of order or an *attractor* (the ball rolls to point B). Order is not inserted or imported from outside but is an inner possibility of the system. The forces can only support landscapes which are specific to the system — and the ball can only roll to C or to B. Therefore, we find discrete states — reflecting the *uniqueness* of the system and its potentials. Instead of openness to a designer one has to respect the peculiarity and characteristics of the system as well as the specific history.

Although these descriptions are not particularly addressed to psychotherapy, it is obvious that medical-like disorder-specific treatments, or the idea of training the right behavior or teaching self-control, is underpinned by the former world-view. PCEP, in contrast, focuses on the actualizing tendency, uniqueness, and the facilitation of inherent potentials by providing a supportive surrounding for the "die and become" of a phase transition. Accordingly, the non-linear relation between the therapist's intervention and the reaction (for example, the "Aha" experience related to the felt sense) is typical for the latter. Rogers, referring to the work of Prigogine (1979), stated, "The transformation from one state to another is a sudden shift, a non-linear event" (Rogers, 1980, p. 131).

Additionally, it should be clear that it is to some extent more a question of values and ethics than of effectiveness and "what works." In many cases both of the principles schematized by Figure 1a and 1b or 2a and 2b work. Take, for example, "rhythmic applause." The common clapping rhythm, which often emerges self-organized from the chaos of applause after a concert, *could*, of course, also be established in the "classical" way of intervention. Imagine a concert for the army. At the end, an officer jumps on stage practicing what he had learned in the army and heard from politicians, teachers, or therapists with a "classical" world-view, namely that order has to be imposed. Shouting "wasn't it a nice concert?" he might make big clapping movements, adding "let's clap — now, now, now!" If the soldiers then follow, it is (again) proven that order *can* be imposed.

However, most cases of rhythmic applause arise spontaneously, synchronizing the individual clapping rhythms into the common rhythm by self-organization. Similarly, in case of the Bénard Instability, there is not any trainer for the "behavior" of the rolls and not any teacher for the "right order" — although (as was typically thought in the classical understanding of "intervention") order could be introduced as "ordering" by external factors, for instance by someone stirring the liquid in such a way as to make the rolling movements. Instead, quite unspecific conditions of the system's surroundings (here: the difference in temperature) lead to the self-organization of this highly differentiated dynamical structure, which must be understood as an inherent ordering structure of the system itself. A designer, for example, may want to see eight-sided rolling movements (instead of six-sided), because he thinks that this would be much more aesthetic or creative — but as eight-sided rolling movements are not in the inherent structure of the system, they cannot be produced.

Therefore, the actualizing tendency in PCEP is neither a belief nor an assumption in Rogers' theory, but a simple description of the consequences of seriously taking interconnectedness and relationships among processes into account. Thousands of examples from systems science and their detailed scientific analyses prove that actualization works as an unfolding of inherent order or patterns with respect to the surroundings. And the principle is not one of *imposing* order from *outside* but *facilitating inherent* possibilities of order.

OVERCOMING THE COGNITIVE TRAPS OF MECHANISTIC SCIENCE

This correspondence between the principles of modern scientific systems theory and of PCEP is remarkable, because these characteristics have been discredited by opponents as "lyrical" and "too unscientific." Even nowadays we can find positions which accuse PCEP of being "unscientific." Today, we can refute such devaluing comments as being pseudo-scientific and pseudo-factual, because they ignore the fact that the so-called "scientific" principles of a mechanistic understanding of interventions become antiquated when viewed from the perspective of modern science.

Using this connection between PCEP and modern science keeps the PCA from utilizing too many terms and metaphors from a mechanistic understanding of the world in our discourses and publications on PCEP. Many of these metaphors are not adequate to describe life processes. I have already mentioned terms such as *blocks*, *barriers* and *shields*, where the metaphors of a mechanistic interpretation of life and the therapeutic process are obvious. However, other questionable concepts (from the perspective of actualization) are not so obvious. An example concerning the term *coping* may illuminate some problems:

Coping is an increasingly important term in the discourses of clinical psychology and psychotherapy and, moreover, is also used by PCEP authors. Webster's Dictionary defines "coping" as: "to deal with and attempt to overcome problems and difficulties."

Seen from the perspective of the actualizing tendency, the idea of coping is confusing and misleading. This becomes clear when we ask: "Can we cope with fever?" There is no simple answer. Because if the fever is very high, let's say 42°C, we have to make an intervention; we have to cope with the fever. However, in most cases we understand the *fever itself as a* coping reaction of the body. Increasing the temperature is an adaptive protection against bacteria. Fever is, therefore, an actualization of the possibilities of the organism and the circumstances of an infection.

Can we cope, for example, with anger? Again, there is no simple "yes" or "no." However, what we call "anger" can be seen as a coping reaction of the person. This perspective opens up the question: What are the challenges or provocations which must occur so that the person actualizes anger? Anger is understood then as a dynamic pattern which represents the inner potentials with respect to the conditions of the surroundings. In contrast, focusing on coping with the anger itself may increase the sensibility of "how to manage these symptoms." Managing symptoms, however, is a typical idea related to Figure 2a. Moreover, managing anger might obscure one's view of the essential meaning of that anger.

This example stands for a multitude of *disorders*. We can always treat the symptoms of a disorder as "something that is just there" and try to cope with these problems. In the case of depression, for example, we can give the patients pills and drugs, or train them to be more active, to control destructive thinking etc. That goes with the classical idea of imposing order. From the perspective of systems science, we can see the symptoms, which we call "depression," as a special actualization of the whole person, coping with, for example, a long-lasting chronic overtaxing of their own resources. This again can be understood from the perspective of personal development, as a specific (part of) actualization, where the self developed in an environment which provided partial regard only under the condition of withholding a "no!" to many overwhelming demands. This was an environment in which the person actualized an attention more to the needs and demands of others than to itself as an organism and its limitation of resources.

From this perspective, no "training" for better "coping," no teaching of "right" reasoning in contrast to "destructive" beliefs, no "control" of any behavior is necessary. Facilitating the understanding of the special (part of) actualization and the awareness of the demands of the person themself in a climate of *un*conditional regard opens up the phenomenal field more and more as it is experienced and perceived by the person and which is, for the individual,

"reality." The whole meaning field (see Kriz, 2006) in which the person interprets himself increases in complexity. Because this is a (partly) new cognitive environment, and the dynamic system (the "person") — like all actualizing and self-organizing processes — always adapts to the whole environment by actualizing inherent possibilities, new cognitive and behavioral patterns will emerge. For example, we will perhaps more often hear a "no!" referring to the growth of self-protection and self-awareness of resources of the person.

Although we need not play "coping" off against "foster and facilitate actualization," we should however be aware that both concepts refer to different perspectives and understandings of the therapeutic process. For some, this example concerning "coping" and other "disorders" might look like a sophisticated discussion of semantics — far away from therapeutic practice. However, I want to claim that this is not the case. Our practice is based on principles of how to encounter the world, other human beings and oneself. Without a clear notion of what the actualizing tendency means we are too often trapped into the metaphors of the order—and-control paradigm of our Western culture. We, then, attempt to "overcome" the problem or "disorder" of the patient, to offer techniques of better self-control or coping skills — particularly, when we are asked to be more "effective" and not to ignore the principles inherent in our culture. It is not only the need for a stronger justification and scientific basis in order to parry the attacks of reductionism and mechanistic ideas. Without clear leading images of alternative principles, we run the risk of losing our orientation in the complex landscape of ideas about "what really helps" and, by this, our own identity as PCEP.

CONCLUSION

While much work has been done to deepen the understanding of a "person-to-person relationship" (Schmid, 1998, 2001) and putting "relationship at the centre" (Barrett-Lennard, 2005), the underpinning concept of actualization is often neglected or omitted, if not misunderstood and devalued. If mentioned at all, actualization often seems to open up a sugar-candy world of benefits, because we read of "fulfillment," "perfection," "enhancing," "realizing full potential," "happiness" etc. — promises that rightly allow people to doubt the seriousness of PCEP and, therefore, weaken its power.

Although there are some valuable contributions to deepen our understanding of the actualizing tendency, for example, by Bozarth and Brodley (1991) or Cornelius-White (2006, forthcoming), and to overcome the danger of reification by a more process-oriented interpretation, for example by Gendlin (1996) or Greenberg et al. (1993, 1998), we need the link to modern systems science. The benefits are of two different kinds: Firstly, it locates PCEP within a scientific community. This is important not only in order to take part in the interdisciplinary discourse concerning a deeper understanding of an alternative encounter with the world but also in order to survive as a significant approach to psychotherapy. Without its explanatory "foundation block" (as Rogers (1980) called the actualizing tendency), it is easy to reduce the PCA to a "method" and to annex it or assimilate it as a "technique" of other approaches. Secondly, by taking part in this discourse on a deeper understanding of the

meaning of "actualization," we can scrutinize the principles and metaphors which we use in PCEP and provide a consistent theoretical basis for our own practice. The misleading interpretations of the mechanistic common sense of our Western culture can be much better detected from an external perspective such as interdisciplinary systems theory. More than a quarter of a century ago Rogers said:

Thus, from theoretical physics and chemistry comes some confirmation of the validity of experiences that are transcendent, indescribable, unexpected, transformational — the sort of phenomena that I and my colleagues have observed and felt as concomitants of the person-centered approach. (1980, p. 132)

We should take this piece of advice seriously.

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