

- McDougall, W. (1908). *Introduction to social psychology*. London: Methuen.
- Miller, T.Q., Smith, T.W., Turner, C.W., Gujjarro, M.L., & Hallet, A.J. (1996). A meta-analytic review of research on hostility and physical health. *Psychological Bulletin*, 119, 322-348.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246-268.
- Polanyi, M. (1958). *Personal knowledge*. London: Routledge & Kegan.
- Roberts, A.H., Kewman, D.G., Mercier, L., & Howell, M. (1993). The power of nonspecific effects in healing: Implications for psychosocial and biological treatments. *Clinical Psychology Review*, 13, 375-391.
- Roediger, H.L. (1990). Implicit memory: Retention without remembering. *American Psychologist*, 45, 1043-1056.
- Rossi, E.L. (1976). *Hypnotic realities: The induction of clinical hypnosis and forms of indirect suggestion*. New York: Irvington.
- Schachter, D.L. (1987). Implicit memory: History and current status. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 13, 501-518.
- Schwanenborg, E. (1993). Suggestion. In A. Schorr (Ed.), *Handwörterbuch der Angewandten Psychologie*. Bonn: Deutscher Psychologen Verlag.
- Simonton, D.K. (1989). Chance-configuration theory of scientific creativity. In B. Gholsen, W.R. Shadish, R.A. Neimeyer, & A.C. Houts (Eds.), *Psychology of science. Contributions to metascience*. Cambridge: Cambridge University Press.
- Wachtel, P. (1993). *Therapeutic communication*. New York: Guilford Press.
- Wagstaff, G.F. (1981). *Hypnosis, compliance, and belief*. Brighton: Harvester Press.
- Wallbott, H.G. (1992). Nonverbal behavior and suggestion. In W. Bongartz (Ed.), *Hypnosis: 175 years after Mesmer*. Konstanz: Universitätsverlag.

Friendliness and Suggestibility: An Ecosystemic Perspective

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■ The concept of suggestibility is often treated as if it refers to some semiconcrete and measurable entity which exists inside an individual. The assumption is that it is relatively stable and relatively independent of the interpersonal context in which the individual operates. This reflects a realist or objectivist view of the world. In this chapter the realist epistemology of science is contrasted with the emerging constructivist perspective. It is shown how a constructivist view, as specified in an ecosystemic stance, brings to the fore a completely different picture of suggestion and suggestibility.

There is the story about the alien spaceship which landed next to a gas station which was closed for the night. Two alien astronauts got out and walked up to the nearest pair of gas pumps. In a courteous way in their alien language they requested the pumps to take them to their leader. No reaction. The aliens then tried some kind of sign language, but again got no reaction. Whereupon they returned to their spaceship and reported to their commander: "Sir, these locals show no friendliness. They refused to talk or even to listen to us; they just stood there with their fingers in their ears."

This story shows that friendliness is a meaning given by a perceiver to perceived behaviour, or to a person enacting such behaviour. Friendliness does not exist objectively inside of the behaviour viewed as friendly, nor inside of the person doing the behaving. However, like the aliens we also often treat the meanings we attribute to behaviour as if they denote entities lurking inside people. This habit flows from an adherence to an epistemology of objectivity or realism. It is the purpose of this chapter to examine this epistemology or way of thinking, and to show that the way we go about examining the concept of suggestibility often reflects our own adherence to such an epistemology. A different, ecosystemic epistemology can bring to the fore a completely different picture of suggestion and suggestibility.

The Epistemology of Realism

Realism is the belief that there is an objective and absolute reality "out there", independent of the observer (Guba & Lincoln, 1988). According to Casti (1989, p.24) this view holds that: "This reality exists solely by virtue of how the world is, and it is in

principle discoverable by application of the methods of science. I think it's fair to say that this is the position to which most working scientists subscribe."

Under the guidance of this assumption, science had reached such heights by the beginning of this century, that it was thought that the picture of the universe was virtually complete. However, from about 1905 the work of physicists such as Einstein, Planck and Heisenberg began to cast doubt on this contention. The complexities of quantum physics required a different way of thinking about the world: the observation, for instance, that whether light consisted of particles or waves was determined by the way it was observed, ran counter to the assumption of objectivity or realism (Capra, 1983).

Since then the evidence against the existence of an objective or fixed reality steadily mounted. As more and more fields of enquiry encountered problems of increasing complexity, the inadequacies of an epistemology of realism became increasingly clear. Criticism of this epistemology has thus come from physics (Capra, 1983; Heisenberg, 1962), chemistry (Prigogine & Stengers, 1984), biology (Maturana, 1975, 1983; Varela, 1979), mathematics (Casti, 1989), medicine (Engel, 1992), anthropology (Bateson, 1972, 1979), and various branches of psychology such as counselling (Cottone, 1988; Ford, 1984), family therapy (Keeney, 1979, 1982) and hypnosis (Fourie, 1991, 1994; Fourie & Lifschitz, 1988, 1989).

Despite these criticisms, the natural and medical sciences by and large continued their adherence to an epistemology of objectivity (Engel, 1992). As seen above Casti (1989) has observed that most scientists, as recently as a few years ago, still subscribed to this view. The rigor of this stance, and the fact that in many instances it led to quite satisfactory answers, kept this way of thinking in vogue.

The social sciences, eager to establish themselves as scientific disciplines, also adopted this mode of thinking. Because human behaviour invariably takes place in complicated social situations, stringent efforts were required to control contextual influences which could obscure the "real" ways in which human beings were assumed to function. Replicability, that is, the ability to find the same results as found in other experiments, became of major importance. Only results which could be corroborated by those of other studies could be taken as indications of the "real" reality.

In order to simplify the complexities of social situations, so as to be able to find the "true" underlying reality, the social sciences used a large number of descriptive concepts. These started off as shorthand ways to describe particular types of behaviour, but through a process of reification, criticized by theorists such as Whitehead (1959), Bateson (1979), and Sarbin and Coe (1972), they were soon treated as if they were semiconcrete entities with particular characteristics. Examples of these are: "personality", the "ego", the "unconscious", "defense mechanisms", "intelligence" and "hypnotic susceptibility". No longer did these hypothetical constructs (MacCorquodale & Meehl, 1948) merely *describe* behaviour, they were now used to *explain* that which they were intended to describe: a person would then, for instance, be thought to act in

a certain (intelligent) way because he/she was "intelligent". Even worse, the person's "intelligence" could be said to cause the intelligent behaviour.

The more these and other concepts were treated as if they were entities of some kind, with explanatory and causal attributes, the more "real" they became for social scientists. It is therefore not uncommon to meet the comment that Freud "discovered", instead of "invented" the unconscious. A good illustration of this type of reasoning is to be found in a description by Havens (1985, p.55) of the work of Milton Erickson "when Erickson referred to the unconscious mind he was referring to a very real, observable, demonstrable, phenomenon. He was not merely using the term as a metaphor or as a construct. He meant that people actually *have* an unconscious mind ... in the same sense that they have an arm or a leg" (emphasis in original).

The way in which the epistemology of realism underlies this statement, is clear. And by designing experiments in such a way as to further investigate (classify or measure) the "properties" of reified constructs, their existence as entities is repeatedly confirmed. "Intelligence" and "hypnotic susceptibility" are two good examples of this: scales for their measurement have been in use for many years and few social scientists doubt their existence.

The Epistemology of Constructivism

Following the early findings in quantum physics, there was a growing realization that objective observation was not possible, especially not in the study of human behaviour (Bateson, 1972, 1979; Engel, 1992; Kenny, 1989). The very act of observation of such behaviour influences the behaviour. Consider, for example, the measurement of "intelligence". It differs from the measurement of weight in that the act of getting on the scales does not appreciably influence the weight, whereas the answers given on an "intelligence" test are determined at least partially by the questions asked and the way and circumstances in which they are asked. Furthermore, the interpretation of human behaviour is done by an observer and is therefore coloured by his/her conceptualization of the behaviour and of the situation. For instance, early family therapists "saw" the operation of family "rules" in therapy, not because such "rules" actually existed, but because the observers thought in terms of "rules" (Hoffman, 1981). This principle probably underlies Havens's (1985) comment on the "observable" nature of the "unconscious mind".

From their studies in perception, Maturana (1975, 1983) and Varela (Maturana & Varela, 1980), two Chilean biologists, came to postulate that perception was determined by the so-called "structure" of the perceiving system and not by the object perceived. This "structure" refers to the way the components of the system are arranged and the way they interrelate (Kenny, 1988). One can also call it the "nature" or the "identity" of the system (Foley, 1988). This "structure" determines how the system will act (Kenny, 1988). The same outside influence has different effects on differently structured systems. To the switching on of an electrical current, for instance, a refrigerator will

react by refrigerating, which is completely different from the reaction of a radio to the same current. Systems can act only in ways allowed by their structures: dogs cannot fly. In a by now classical experiment Maturana and Varela (1980) found that the way a frog catches a fly, was determined by the way the frog's eye functioned, and not merely by the presence of the fly. In human systems this "structure" embodies not only the physical, but also the person's way of thinking, i.e. his/her way of being.

In line with this observation in biology, von Glasersfeld (1984), von Foerster (1981) and others (eg. Efran, Lukens & Lukens, 1988; Feixas, 1990; Watzlawick, 1990) have argued that it is impossible for human beings to observe reality as it really is, even assuming that a fixed reality existed. When an observation is made, what is represented in the brain, is not the object itself, but ideas about the object. These are generated by the perceiver and are therefore coloured by his/her existing ideas and attributions (Kenny, 1989). The notion of an uncontaminated or neutral observation of reality is therefore replaced by the notion of constructivism. From a constructivist perspective, what is observed in living systems, is constructed partly by the observer and partly by the observed (von Glasersfeld, 1984). This construction is done in language, both internally by the observer to him-/herself, and externally, in communication with others (Efran, et al, 1988; Matthews, 1996). Internally, the observer has to make distinctions between what is observed and what is known (Feixas, 1990; Kenny, 1989). This involves the use of personal constructs, i.e. meanings (Feixas, 1990). If one sees an apple, one can only know what one sees by distinguishing it from other known objects. The idea of "apple" and the ideas of all other known objects are meanings, that is language (Loos & Epstein, 1989). Externally meanings are exchanged through verbal and non-verbal communication (Anderson & Goolishian, 1988).

In social systems this exchange of meanings in time leads to the co-construction of a particular shared reality for that system (Feixas, 1990; Loos & Epstein, 1989). This happens in research as well as in clinical practice. However, adherence to an epistemology of realism requires that this be denied. Both researchers and clinicians therefore often act as if their observations reflected a true or fixed reality, while in fact what is observed, is co-created or co-constructed by everybody involved (Fourie, 1996).

All connections between systems are determined by the structures of the systems in question (Kruse & Gheorghiu, 1992). The one system cannot make the other do anything. In connecting or coupling with another system the one may perturb the other, but the reaction is determined solely by the structure of the other system at that moment. From this perspective all systems are closed systems which determine their own actions. They are therefore autonomous, self-organizing and self-regulating (Mascolo, Pollack & Fischer, 1997). This point has been clearly and repeatedly made by Gheorghiu and Kruse (Kruse, 1989) and their co-workers (Kruse, Stadler, Pavlekovic & Gheorghiu, 1992).

An Ecosystemic Approach

Because human systems, from a constructivist perspective, are closed systems, all that can be exchanged between them, are ideas, even though these might be symbolized by concrete objects. And the way an idea is perceived, is determined by the structure of the perceiver, not by the idea itself, nor by the person expressing the idea (Reddy, 1986). No direct or linear influence of one system on another is possible (Dell, 1985).

When two or more human systems couple with each other, the coupling is by means of the exchange of ideas and the structure of the resulting composite system determines how that system will act (Kenny, 1989). In this exchange, however, the ideas do not flow intact from the one system into the other. Reddy (1986) showed from the perspective of linguistics that we often erroneously talk about ideas as if they were packages of information which pass unchanged through the conduit of communication and from which the receiver then extracts the precise meaning of the sender of the package. In contrast, as we saw, the expression of an idea by one system perturbs the other system, which then autonomously forms its own idea(s) following the perturbation. Which idea(s) it will form, is determined by the current structure of the second system. But whatever idea is formed, this means a change in the structure of that system, because this structure encompasses the ideas in the system. The coupling of systems therefore takes place through (verbal and non-verbal) dialogue or narrative (Anderson & Goolishian, 1988; Hoffman, 1990; Loos & Epstein, 1989). In time a network of inter-linked ideas - what Bateson (1972) called an "ecology of ideas" - comes to exist within the composite system. This forms part of the structure of that system.

As the name indicates, an ecosystemic approach focusses on such ecologies of ideas which exist within systems (Auerswald, 1987; Keeney, 1979), ecologies which are formed autonomously by the systems in question. In this sense an ecosystemic approach is a constructivist one, meaning that it views human systems as constructing their own ideas, perceptions and attributions in a process of self-organization. In fact, one can see an ecosystemic approach, with its focus on ideas, meanings and system functioning, as a particular type of constructivist application, of which there are many (Neimeyer, 1997).

Suggestion as Idea

While waiting for a bus one day, a young man saw an old man with a very long white beard. He went up to the old man and said: "Excuse me for the impertinence, Sir, but would you mind telling me whether you sleep with your beard below or above the bedclothes?" The old man, looking taken aback, said: "I really don't know. I've never noticed." The next day, while waiting for his bus, the youngster saw the old man again, but hardly recognized him without the beard. When he asked why the old man had shaved off the beard, the reply was: "After you asked me how I sleep with the beard, I just could not find a comfortable position in bed. I had to get up and shave it off."

Can we say that the beard was shaved off in response to a suggestion from the young

man? At first glance it looks like this is so. But the young man did *not* suggest that the beard be shaven off. He merely asked a question as to the whereabouts of the beard in bed. Can we then say that he presented to the old man the suggestion of discomfort in bed amidst all that hair? Not so, the young man neither said nor implied anything about discomfort. In fact, all we could say that the young man presented to his hirsute acquaintance, was the idea of wondering about the nocturnal position of the beard. Once the old man incorporated this idea into his thinking, the discomfort was generated autonomously by the "new" structure of the old man. The youngster did not prescribe or even suggest the old man's feeling of discomfort, nor his action of shaving off the beard. In fact, it is quite possible that neither of these outcomes have been intended by the young man. Maybe he was simply curious. But for some reason, of which we are unaware, the structure of the old man at that stage was such that the young man's simple question was followed by this particular reaction. In different circumstances, or addressed to a different person, the same idea, presented in the same way, might have been reacted to completely differently.

Furthermore, any causal link proposed between the young man's question and the particular outcome lies only in the mind of the person seeing such a link. To posit this link is implicitly to follow a realist epistemology.

We can therefore say that suggestions are ideas presented by one system to another. However, the idea is not an entity which "arrives" intact, and precisely as meant, at the second system (Reddy, 1986). Neither does the idea cause a particular response to occur.

The Concept of Fit

What does happen when an idea is presented to a system, is that the ecology of ideas - an interlinked network or cluster of conceptions, views and attributions (Bateson, 1972) - already existing in the system, is perturbed. The system will then autonomously respond in some way to the perturbation, even if the response is no response at all, like that of the gas pumps. The response is determined by the structure of the system (gas pumps do not talk) and not by the nature of the perturbation. Even if the aliens spoke perfect English, the response from the pumps would have been the same.

This ecosystemic principle means that, although the idea presented to a system cannot determine the reaction of the system, it can fit (Dell, 1982) with the existing ecology of ideas to a greater or lesser extent. We find the story of the aliens funny, because the idea they presented to the pumps showed such ignorance of the structure of the pumps. The idea they presented, was meant to fit with the manner of thinking of intelligent beings and they did not realize that the pumps were inanimate objects. In contrast, the idea presented as a question to the bearded man, unbeknownst possibly to the questioner, fitted in such a way with the old man's thinking, and maybe indirectly even with that of his wider system, that his sleeping pattern was disrupted.

One can therefore say that, the better the fit between a presented idea and the eco-

logy of ideas in the receiving system, the better the chances are that the response will also fit with the idea presented. But this is so only up to a point. If the presented idea is nothing new to the receiving system, the system will not be perturbed and no "new" response will be made. To say to a freezing person that it is cold, would probably not be followed by behaviour different from that exhibited by the person earlier, such as shivering or the putting on of warmer clothes. The concept of "fit" links with the view expressed by Keeney and Ross (1985) in the field of family therapy that therapist ideas should simultaneously embody messages of both stability and change. Also, the idea of a fit between a suggestion and the ecology of ideas in the receiving system seems to be coherent with Lynn, Neufeld and Maré's (1993) conclusion that the degree of "indirectness" of a suggestion depends on the perception of the recipient thereof. Even Peter's (1996) idea that the difference between a hypnotic suggestion and an ordinary instruction is to be found in the rapport between the parties to the particular transaction, seems to refer to what is here called the fit between a presented idea and the existing ecology of ideas in the receiving system.

An Ecosystemic View of Suggestibility

If a suggestion is an idea presented in verbal and/or non-verbal language by one system to another, and if the response depends on the ecology of ideas existing at that moment in the second system and on the fit between this ecology and the presented idea, then the concept of suggestibility takes on a different perspective.

Some might say that the bearded old man seemed to be very suggestible. Certainly he reacted rather dramatically to the presented idea. But would he have reacted in like manner if the young man had suggested that he sway backward? Possibly not. If not, we could then say that he was very suggestible with regard to the beard and not suggestible with regard to the swaying. The temptation would be to ask how suggestible he then "really" was. However, if we ask that, we imply that suggestibility is some kind of stable entity which exists inside of the individual and which is relatively uninfluenced by the nature of the suggestion, by the manner of its presentation, and by the context in which it is presented. This is precisely a realist perception.

An ecosystemic view of suggestibility would be quite different. Let us for a moment study the concept with which we began, namely that of friendliness, in order to clarify the ecosystemic position with regard to suggestibility. As we saw from the story of the aliens, friendliness is co-constructed by all the parties present in the situation: the structure-determined behaviour of the gas pumps coinciding with the structure-determined behaviour of the aliens, led to the use of the concept of "friendliness" to describe one of the sets of behaviour. This means that, as a co-construction, the level of friendliness can be expected to covary with the behaviour of any of the parties to the co-construction. Seen in this light, it would be nonsensical to say that a particular party (or person) has a relatively stable level of friendliness across situations and across interpersonal contexts. It is in any event common knowledge that people are not equally friendly in

all situations. When talking to a close colleague, for instance, one tends to be somewhat friendlier than in conversation with the traffic inspector who hands you a speeding fine.

There does not seem to be any compelling reason why the concept of suggestibility should be treated differently from that of friendliness. The response to a suggestion is autonomously determined by the structure of the receiving system. Coupling of this structure with that of the system presenting the suggestion depends on both structures as they simultaneously perturb each other, while both are also simultaneously being perturbed by the context in which the transaction occurs. There is very little about this complicated process which can be considered static. Both structures are in continual flux. For an observer now to conclude that the response of the one system depends virtually entirely on a hypothetical static ability of that system, seems hopelessly reductionistic.

Rather, one can perhaps talk about the momentary suggestibility of the larger, composite system of which the presenter and the receiver of the suggestion are subsystems. "Suggestibility" would then refer to the whole interactional situation and not to one person only. Obviously this would mean that suggestibility is anything but stable; like friendliness, it is highly idiosyncratic to a particular situation. For instance, the situation consisting of old man, young man, plus question about beard, could be considered very conducive to suggestion; while the hypothetical situation of old man, young man, plus swaying suggestion, could be seen as not very conducive at all.

In a way this is not a radical idea. The measurement of suggestibility is usually conducted in a "standard" manner and in a "standard" situation precisely because it is realized that suggestibility scores will vary in different contexts. But what would then be the aim of attempting to measure it, if it is always different? The aim would be the same as the aim of measuring friendliness. Ecosystemically seen, there would be no aim in measuring either of these two concepts, especially since concepts, per definition, exist only in the mind of the observer and are not measurable. From a traditional perspective, of course, there is an aim to the measurement of suggestibility, if not friendliness. This aim is to study the "real" level of suggestibility of an individual, independent of contextual fluctuations. It is the thesis of this paper, however, that there is no such "real" level of suggestibility at all, we are looking at a construction of the observer through the means of keeping the context invariant. Measurement of this supposedly "real" level of suggestibility is therefore nothing but the repeated measurement of the same or similarly defined interactional situations. High test-retest reliabilities would in effect merely confirm the similarities between contexts, while traditionally such reliabilities have been interpreted as "proof" of the stability of suggestibility and therefore of its existence as some kind of semiconcrete entity (trait or skill). The nonexistent clothes of the emperor clearly come to mind. We made this same point some years ago with regard to the concept of hypnotic susceptibility (Fourie & Lifschitz, 1988) and the point seems as applicable to suggestibility as it is to hypnotizability.

Conclusion

The traditional approach to suggestibility reflects an adherence to an epistemology of realism. Many researchers and theorists seem to think of suggestibility as something concrete which exists inside a person and which is relatively stable across situations. Based on this perception, measurement takes place in such a way as to ensure, as far as possible, that this "something" does not change. Then it is concluded that the "something" is "really" stable, i.e. that it "really" exists. In this way the "reality" of suggestibility as more than just a concept is repeatedly confirmed. This in turn confirms the assumption underlying the whole process, namely that of realism.

In this way one can argue that the epistemology of realism conserves itself through a process of continual self-recursion. This is in spite of the internal inconsistency, namely that, in the process of measurement contextual elements are kept as constant as possible because it is realized that they influence contextual suggestibility scores, but the concept of suggestibility is treated as if it is uninfluenced by these elements.

Fortunately the situation regarding suggestion is no longer dominated by the epistemology of realism to the extent described above. There seems to be a growing realization in the field of suggestion that adherence to a reductionist epistemology, such as that of realism, obscures, rather than elucidates data. A paper by Gheorghiu and Wallbott (1994) on the role of attribution of meaning in suggestion is a good example of a movement away from realist thinking, as is a paper by Kruse et al. (1992) on self-organization.

An ecosystemic view of suggestion takes the move away from realism one step further. It does so by means of its focus on whole systems, rather than on the designated recipient of the suggestion only. In this process, it opens up new and potentially exciting areas of enquiry.

References

- Anderson, H., & Goolishian, H.A. (1988). Human systems as linguistic systems: Preliminary and evolving ideas about the implications for clinical theory. *Family Process*, 27, 371-393.
- Auerswald, E.H. (1987). Epistemological confusion in family therapy and research. *Family Process*, 26, 317-330.
- Bateson, G. (1972). *Steps to an ecology of mind*. New York: Ballantine Books.
- Bateson, G. (1979). *Mind and nature: A necessary unity*. New York: Dutton.
- Capra, F. (1983). *The turning point Science, society and the rising culture*. London: Flamingo.
- Casti, J.L. (1989). *Paradigms lost. Images of man in the mirror of science*. London: Scribners.
- Cottone, R.R. (1988). Epistemological and ontological issues in counselling: Implications of social systems theory. *Counselling Psychology Quarterly*, 1, 357-365.
- Dell, P.F. (1982). Beyond homeostasis: Towards a concept of coherence. *Family Process*, 21, 21-41.
- Dell, P.F. (1985). Understanding Bateson and Maturana: Toward a biological foundation for the social sciences. *Journal of Marital and Family Therapy*, 11, 1-20.
- Efran, J.S., Lukens, R.J., & Lukens, M.D. (1988). Constructivism: What's in it for you? *The Hypnosis International Monographs* 4, 2000

- Engel, G.L. (1992). How much longer must medicine's science be bound by a seventeenth century world view? *Psychotherapy and Psychosomatics*, 57, 3-16.
- Feixas, G. (1990). Personal construct theory and systemic therapies: Parallel or convergent trends? *Journal of Marital and Family Therapy*, 16, 1-20.
- Foley, R. (1988). Kelly and Bateson: Antithesis or synthesis? In F. Fransella & L. Thomas (Eds.), *Experimenting with personal construct psychology*. London: Routledge.
- Ford, D.H. (1984). Reexamining guiding assumptions: Theoretical and methodological implications. *Journal of Counseling Psychology*, 31, 461-466.
- Fourie, D.P. (1991). The ecosystemic approach to hypnosis. In S.J. Lynn & J.W. Rhue (Eds.), *Theories of hypnosis: Current models and perspectives*. New York: Guilford.
- Fourie, D.P. (1994). *Hypnose: Ein ökosystemischer Ansatz*. Munich: Quintessenz.
- Fourie, D.P. (1996). The research/practice gap in psychotherapy: From discovering reality to making sense. *Journal of Contemporary Psychotherapy*, 26, 7-22.
- Fourie, D.P., & Lifschitz, S. (1988). Not seeing the wood for the trees: Implications of susceptibility testing. *American Journal of Clinical Hypnosis*, 30, 166-177.
- Fourie, D.P., & Lifschitz, S. (1989). Ecosystemic hypnosis: Ideas and therapeutic application. *British Journal of Experimental and Clinical Hypnosis*, 6, 99-107.
- Gheorghiu, V.A., & Kruse, P. (1991). The psychology of suggestion: An integrative perspective. In J. Schumaker (Ed.), *Human suggestibility: Advances in theory, research and application* (pp. 59-75). New York: Routledge.
- Gheorghiu, V.A., & Wallbott, H.G. (1994). Suggestion and attribution of meaning: A cognitive and social psychological perspective. *Comunicazioni Scientifiche di Psicologia Generale*, 12, 117-140.
- Guba, E.G., & Lincoln, Y.S. (1988). Do inquiry paradigms imply inquiry methodologies? In D.M. Fetterman (Ed.), *Qualitative approaches to evaluation in education. The silent scientific revolution*. New York: Praeger.
- Havens, R.A. (1985). *The wisdom of Milton H. Erickson*. New York: Irvington.
- Heisenberg, W. (1962). *Physics and philosophy*. New York: Harper & Row.
- Hoffman, L. (1981). *Foundations of family therapy. A conceptual framework for systems change*. New York: Basic books.
- Hoffman, L. (1990). Constructing realities: An art of lenses. *Family Process*, 29, 1-12.
- Keeney, B.P. (1979). Ecosystemic epistemology: An alternative paradigm for diagnosis. *Family Process*, 18, 117-129.
- Keeney, B.P. (1982). What is an epistemology of family therapy? *Family Process*, 21, 153-168.
- Keeney, B.P., & Ross, J.M. (1985). *Mind in Therapy: Constructing systemic family therapies*. New York: Basic Books.
- Kenny, V. (1988). Autopoiesis and altermativism in psychotherapy: Fluxtuations and reconstructions. In F. Fransella & L. Thomas (Eds.), *Experimenting with personal construct psychology*. London: Routledge.
- Kenny, V. (1989). Life, the multiverse and everything; An introduction to the ideas of Humberto Maturana. In A.L. Goudsmit (Ed.), *Self-organization in psychotherapy. Demarcations of a new perspective*. Berlin: Springer.
- Kruse, P. (1989). Some suggestions about suggestion and hypnosis: A radical constructivist view. In V.A. Gheorghiu, P. Netter, H.J. Eysenck & R. Rosenthal (Eds.), *Suggestion and suggestibility: Theory and research*. Berlin: Springer.
- Kruse, P., & Gheorghiu, V.A. (1992). Self-organization theory and radical constructivism: A new concept for understanding hypnosis, suggestion and suggestibility. In W. Bongartz (Ed.), *Hypnosis: 175 years after Mesmer*. Konstanz, Germany: Universitäts-Verlag.
- Kruse, P., Stadler, M., Pavlekovic, B., & Gheorghiu, V.A. (1992). Instability and cognitive order formation: Self-organization principles, psychological experiments and psychotherapeutic interventions. In W. Tschacher, G. Schiepek & E.J. Brunner (Eds.), *Self-organization theory and clinical psychology*. Berlin: Springer.
- Loos, V.E., & Epstein, E.S. (1989). Conversational construction of meaning in family therapy: Some evolving thoughts on Kelly's sociality corollary. *International Journal of Personal Construct Psychology*, 2, 149-167.
- Lynn, S.J., Neufeld, V., & Maré, C. (1993). Direct versus indirect suggestions: A conceptual and methodological review. *International Journal of Clinical and Experimental Hypnosis*, 41, 124-152.
- MacCorquodale, K., & Meehl, P.E. (1948). On a distinction between hypothetical constructs and intervening variables. *Psychological Review*, 55, 95-107.
- Mascolo, M.F., Pollack, R.D., & Fischer, K.W. (1997). Keeping the constructor in development: An epigenetic systems approach. *Journal of Constructivist Psychology*, 10, 25-50.
- Matthews, W.J. (1996). Ericksonian approaches to psychotherapy: From objective to constructed reality. *Journal of Cognitive Psychotherapy*, 10, 205-218.
- Maturana, H.R. (1975). The organization of the living: A theory of the living organization. *International Journal of Man-Machine Studies*, 7, 313-333.
- Maturana, H.R. (1983). What is it to see? *Archivos Biologia Medicina Experimentales*, 16, 255-269.
- Maturana, H.R., & Varela, F.J. (1980). *Autopoiesis and cognition: The realization of the living*. Boston: Reidel.
- Neimeyer, R.A. (1997). Problems and prospects in constructivist psychotherapy. *Journal of Constructivist Psychology*, 10, 51-74.
- Peter, B. (1996). Normal instruction or hypnotic suggestion: What makes the difference? *Hypnosis International Monographs*, 2, 157-170.
- Prigogine, I., & Stengers, I. (1984). *Order out of chaos*. New York: Bantam Books.
- Reddy, M.J. (1986). The conduit metaphor: A case of frame conflict in our language about language. In A. Ortony (Ed.), *Metaphor and thought*. Cambridge: Cambridge University Press.
- Sarbin, T.R., & Coe, W.C. (1972). *Hypnosis: A social psychological analysis of influence communication*. New York: Holt, Rinehart & Winston.
- Varela, F.J. (1979). *Principles of biological autonomy*. New York: Elsevier/North Holland.
- Von Foerster, H. (1981). *Observing systems*. Seaside, California: Intersystems Publications.
- Von Glasersfeld, E. (1984). An introduction to radical constructivism. In P. Watzlawick (Ed.), *The invented reality*. New York: Norton.
- Watzlawick, P. (1990). *Münchhausen's pigtail or psychotherapy and "reality"*. New York: Norton.
- Whitehead, A.N. (1959). *Science and the modern world*. London: Cambridge University Press.

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