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## SECOND-ORDER CHANGE

*The way out is through the door. Why is it that no one will use this exit?*

—CONFUCIUS

*What is your aim in philosophy?—to show the fly the way out of the fly-bottle.*

—WITTGENSTEIN

Change: Principles of  
Problem Solving  
Problem Solving  
Paul Watzlawick, Liehard Forker  
Watzlawick (1974)  
Nathan

MYTHOLOGIES die hard, and the mythologies of change are no exception. With change such a pervasive element of existence, one might expect that the nature of change and of the ways of effecting it should be clearly understood. But the most immediately given is often the most difficult to grasp, and this difficulty is known to promote the formation of mythologies. Of course, our theory of change is yet another mythology; but it seems to us that, to paraphrase Orwell, some mythologies are less mythological than others. That is, they work better than others in their specific life contexts.

In the course of our work with human problems, as we became increasingly dissatisfied with the established mythologies and more interested in examining change for ourselves, we soon discovered what we should have expected from the outset: if anybody had bothered to look at the most obvious source for the understanding of change, he did not leave a written record. This source is spontaneous change, by which we mean the kind of problem resolution that occurs in the ordinary business of living

without the help of expert knowledge, sophisticated theories, or concentrated effort. In more than one way, this absurd situation reminded us of a famous piece of scholastic enquiry into the nature of things: at some time during the thirteenth century the University of Paris attempted to answer the question of whether oil left outside in a cold winter night would congeal by searching the works of Aristotle, rather than by looking at what real oil would really do under these circumstances.

When all this began to dawn on our Aristotelean minds, we started to spend considerable time talking to people who seemed most likely to have some practical knowledge in one or more of the three following areas: 1) the phenomena of spontaneous change; 2) the methods of effecting change employed by people less encumbered by mythologies or other professional "expertise" than we ourselves; and 3) the kinds of changes, brought about by professionals, which are unaccounted for and unexplainable by their professional theories. Our contacts thus included barmen, store detectives, spontaneously recovered neurotics, sales personnel, credit counselors, teachers, airline pilots, policemen with a knack for defusing potentially explosive situations, a few rather likable crooks, unsuccessful suicides, therapists like ourselves—and even some parents. The idea seemed good, but the results were meager. We found what in retrospect seems fairly obvious, namely that a talent for unorthodox problem resolution seems to go hand in hand with an inability to clarify in one's own mind, let alone to others, the nature of the thinking and acting that go into successful interventions. Our next discovery was that we had ourselves been using similar techniques of change, which suggested to us that there had to be some body of implicit assumptions that we were operating on. It was common for us to observe the initial session of a case and, without discussion, arrive independently at the same strategy for treatment—a strategy greatly puzzling to the frequent visitors to our Center. In trying to make ourselves clear to them, we found that we, too, were strangely

unable to state the theoretical basis of our choices and actions.<sup>1</sup> But even though our informants did not contribute directly to a theory of change, their examples were frequently quite useful in confirming our suspicion that spontaneous change is often a far cry from what it is supposed to be according to existing theory. For example:

On her first day of kindergarten a four-year-old girl became so upset as her mother prepared to leave that the mother was forced to stay with her until the end of the school day. The same thing happened every day thereafter. The situation soon grew into a considerable stress for all concerned, but all attempts at solving the problem failed. One morning the mother was unable to drive the child to school, and the father dropped her off on his way to work. The child cried a little, but soon calmed down. When the mother again took her to school on the following morning, there was no relapse; the child remained calm and the problem never recurred.<sup>2</sup>

<sup>1</sup>Eventually we realized that this state of affairs was directly linked to the hierarchical structure of all language, communication, learning, etc. As we pointed out in Chapter 1, to express or explain something requires a shift to one logical level above what is to be expressed or explained. No explaining can be accomplished on the same level; a metalinguage has to be used, but this metalinguage is not necessarily available. To effect change is one thing; to communicate *about* this change is something else: above all, a problem of correct logical typing and of creating an adequate metalinguage. In psychotherapeutic research, it is very common to find that particularly gifted and intuitive therapists think they know why they are doing what they are doing, but their explanations simply do not hold water. Conversely, many gifted writers are astounded and even annoyed at the deeper meanings that others read into their works. Thus, while the former believe they know, but apparently do not, the latter seem to know more than they are willing to acknowledge—which brings us back to Laing: "If I don't know I don't know, I think I know; if I don't know I know, I think I don't know."

<sup>2</sup>The obvious question arises: What would have happened if the school psychologist had had a chance to start working on this problem? In all likelihood the case would have been diagnosed a school phobia, and, depending on the psychologist's professional mythology, the dependency needs of the child, the overprotectiveness of the mother, the symbiotic aspects of their relationship, a marital conflict between the parents causing the child's behavior problem could conceivably have become the object of therapy. If at age twenty-one the daughter had run into emotional difficulties of some kind or another, she would already have had a psychiatric record reaching all the way back into childhood, and this in turn would define her prognosis as worse than otherwise. Of course, all kinds of objections can be raised about this example. The most predictable is the circular argument that the case with which the change occurred proves that no "real" phobia was involved here. The reader who is interested in this argument is referred to Salzman (82).

The next example is that of a married couple whose love-making had become less and less frequent until they had had no sexual intercourse at all for several months preceding the following incident: They were on vacation and spent the night in the home of a friend. In the friend's guest room the double bed was pushed into a corner and could thus be approached only from one side and from the foot end, while in their own bedroom the bed touched the wall only with its headboard, and they could therefore get in from their respective sides. Some time during the night the husband, who was lying next to the wall, had to get up; he bumped against the wall on his side, then realized where he was and started to climb over his wife. As he did so, he—in his own words—"realized that there was something of value there," and they had intercourse. This somehow broke the ice, and their sex relations returned to an adequate frequency. Let us not get embroiled here in the *why* of this change, but for the purpose of our exemplification merely appreciate the fact that the change occurred as a result of a very fortuitous and apparently minor event—certainly one that would hardly have been part and parcel of a professional attempt at solving the problem.

The third example is that of a middle-aged, unmarried man leading a rather isolated life compounded by an agoraphobia; his anxiety-free territory was progressively diminishing. Eventually this not only prevented him from going to work, but threatened to cut him off even from visiting the neighborhood stores upon which he depended for his purchases of food and other basic necessities. In his desperation he decided to commit suicide. He planned to get into his car and drive in the direction of a mountain top about fifty miles from his home, convinced that after driving a few city blocks his anxiety or a heart attack would put him out of his misery. The reader can guess the rest of the story: he not only arrived safely at his destination, but for the first time in many years he found himself free from anxiety. He was so intrigued by his experience that he wanted it to be known as a possible solution for others who suffered from the same problem,

and he eventually found a psychiatrist who was interested in spontaneous remission and therefore took him seriously (3). The psychiatrist has maintained contact with him for over five years and thus has been able to ascertain that this man has not only not fallen back into his phobia, but has helped a number of other phobics with their problems.

A last example, on a different scale: During one of the many nineteenth-century riots in Paris the commander of an army detachment received orders to clear a city square by firing at the *canaille* (rabble). He commanded his soldiers to take up firing positions, their rifles levelled at the crowd, and as a ghastly silence descended he drew his sword and shouted at the top of his lungs: "Mesdames, m'sieurs, I have orders to fire at the *canaille*. But as I see a great number of honest, respectable citizens before me, I request that they leave so that I can safely shoot the *canaille*." The square was empty in a few minutes.

Is there a common denominator to these examples? On superficial examination there is not. In the first two examples the agent of change seems to be a minor, fortuitous event; in the third example an act of desperation; and in the fourth a clever piece of mass psychology. But if we apply the concept of second-order change, these seemingly disparate incidents reveal their affinity. In each case the decisive action is applied (wittingly or unwittingly) to the attempted *solution*—specifically to that which is being done to deal with the difficulty—and not to the difficulty *itself*:

1. "The mother stays on, day after day, as the only "solution" open to her to avoid the child's tantrum. Relatively successful as this is, it is a typical first-order change and leaves the overall problem unchanged and unchangeable. In the process the child's difficulty in adapting to kindergarten is compounded into a "problem"; the mother's absence on that one morning also produces an absence of the avoidance behavior, and the system reorganizes itself along a new premise.

2. The couple presumably began to encounter difficulties be-

cause of the routine nature of their sex life. Their frequency of intercourse decreased; they increasingly avoided each other; the lesser and lesser frequency worried them and led them to engage in more of the same (i.e., more avoidance). The situation arising in the friend's guest room produced a second-order change by interfering with their "solution," that is, their pattern of mutual avoidance, but this change had no bearing whatsoever on what would traditionally be considered their "real" problem.

3. In the case of the agoraphobic it becomes particularly evident that his "solution" is the problem. When, contrary to common sense, he stops trying to solve his problem by staying within his anxiety-free space, this termination of his problem solving solves his problem.

4. The officer is faced with a threatening crowd. In typical first-order change fashion he has instructions to oppose hostility with counter-hostility, with more of the same. Since his men are armed and the crowd is not, there is little doubt that "more of the same" will succeed. But in the wider context this change would not only be no change, it would further inflame the existing turmoil. Through his intervention the officer effects a second-order change—he takes the situation outside the frame that up to that moment contained both him and the crowd; he *reframes* it in a way acceptable to everyone involved, and with this reframing both the original threat and its threatened "solution" can safely be abandoned.

Let us recapitulate what we have so far discovered about second-order change:

a. Second-order change is applied to what in the first-order change perspective appears to be a solution, because in the second-order change perspective this "solution" reveals itself as the keystone of the problem whose solution is attempted.

b. While first-order change always appears to be based on common sense (for instance, the "more of the same" recipe),

second-order change usually appears weird, unexpected, and uncommonsensical; there is a puzzling, paradoxical element in the process of change.

c. Applying second-order change techniques to the "solution" means that the situation is dealt with in the here and now. These techniques deal with effects and not with their presumed causes; the crucial question is *what?* and not *why?*

d. The use of second-order change techniques lifts the situation out of the paradox-engendering trap created by the self-reflexiveness of the attempted solution and places it in a different frame (as is literally done in the solution of the nine-dot problem).

As far as these four principles go, enough has been said about the first; Part II of this book is devoted to it in its entirety. The second principle, the uncommonsensical nature of second-order change, has been dealt with in Chapter 2. The third principle is the one that, at least in our experience, is most strongly rejected by those professionally engaged in effecting change; it must now be dealt with in some detail.

The question *why?* has always played a central, virtually dogmatic role in the history of science. After all, science is supposed to be concerned with explanation. Now, consider the sentence: "We are not competent to explain *why* scientific thinking conceives of explanation as the precondition for change, but there can be little doubt *that* this is the case." This statement is both about the principle under examination and at the same time an example of it. The awareness of the *fact* that the question *why?* is being asked and that it determines scientific procedures and their results is not predicated on a valid explanation of *why* it is being asked. That is, we can take the situation as it exists here and now, without ever understanding *why* it got to be that way, and in spite of our ignorance of its origin and evolution we can do something with (or about) it. In doing this we are asking *what?*

i.e., what is the situation, what is going on here and now?<sup>31</sup> However, the myth that in order to solve a problem one first has to understand its *why* is so deeply embedded in scientific thinking that any attempt to deal with the problem only in terms of its present structure and consequences is considered the height of superficiality. Yet in asserting this principle within our theory of change we find ourselves in good company. It certainly is not our discovery; all we can claim is that we stumbled over it in the course of our work. Only gradually did we realize that it had been enunciated before, albeit in different contexts.

One source is Wittgenstein, whose work we have already mentioned. In his *Philosophical Investigations* he takes a very strong stand against explanations and their limits. "Explanations come to an end somewhere. But what is the meaning of the word 'five' used" (106), he states initially, and later in the same work he returns to this theme in a formulation which goes far beyond the abstractions of the philosophy of language into territory that appears very familiar: "It often happens that we only become aware of the important facts, if we suppress the question 'why?'; and then in the course of our investigations these facts lead us to an answer" (109). For the later Wittgenstein, what becomes questionable is the question itself; this is an idea that has great affinity with our investigations into change, and one that he had touched upon in his most important early work, the *Tractatus Logico-Philosophicus*: "We feel that even if all possible scientific questions be answered, the problems of life have still not been touched at all. Of course, there is then no question left, and just this is the answer. The solution of the problem of life is seen in the vanishing of this problem" (103).

<sup>31</sup>It is amazing how rarely the question *what?* is seriously asked. Instead, either the nature of the situation is taken to be quite evident, or it is described and explained mainly in terms of *why?* by reference to origins, reasons, motives, etc., rather than to events observable here and now.

We need mention mathematics only very briefly. It, too, does not ask *why?* and yet is the royal road to penetrating analyses and imaginative solutions. Mathematical statements are best understood as interrelated elements within a system. An understanding of their origin or causes is not required to grasp their significance and may even be misleading.

Another area in which causal explanations or questions of meaning play a very subordinate role is cybernetics. To quote Ashby once again on the general subject of change and the concept of transformations in particular: "Notice that the transformation is defined, not by any reference to what it 'really' is, nor by reference to any physical cause of the change, but by the giving of a set of operands and a statement of what each is changed to. The transformation is concerned with *what* happens, not *why* it happens" (12).

And finally, proceeding from the most abstract to the more concrete, we find support for the *what?* instead of *why?* basis of observation, analysis, and action in what may loosely be termed the Black Box approach in electronics. The term, which originated in World War II, was applied to the procedure followed when examining captured enemy electronic equipment that could not be operated because of the possibility of destruction charges inside. In these cases the investigators simply applied various forms of input into the "box" and measured its output. They were thus able to find out *what* this piece of equipment was doing without necessarily also finding out *why*. Nowadays the concept is more generally applied to the study of electronic circuitry whose structure is so complex (though still much less so than the brain) that it is more expedient to study merely its input-output relations than the "real" nature of the device.

As mentioned already, resistance to a devaluation of the *why* in favor of the *what* seems greatest in the study of human behavior. What, it is usually asked, about the undeniable fact that a person's present behavior is the result of his experiences in the

past? How can an intervention that leaves past causes untouched have any lasting effect in the present? But it is these very assumptions that are most clearly contradicted by the study of actual—particularly spontaneous—changes. Everyday, not just clinical, experience shows not only that there can be change without insight, but that very few behavioral or social changes are accompanied, let alone preceded, by insight into the vicissitudes of their genesis. It may, for instance, be that the insomniac's difficulty has its roots in the past: his tired, nervous mother may habitually have yelled at him to sleep and to stop bothering her. But while this kind of discovery may provide a plausible and at times even very sophisticated *explanation* of a problem, it usually contributes nothing towards its *solution*.<sup>4</sup>

We find that in deliberate intervention into human problems the most pragmatic approach is not the question *why?* but *what?*, that is, what is being done here and now that serves to perpetuate the problem, and what can be done here and now to effect a change? In this perspective, the most significant distinction between adequate functioning and dysfunction is the degree to which a system (an individual, family, society, etc.) is either able to generate change by itself or else is caught in a Game Without End. We have already seen that in this latter case the attempted solution is the problem. We can now also appreciate that the

<sup>4</sup>Such empirical findings are not out of line with general considerations, if these are thought through to their logical conclusions. There are two possibilities: 1) The causal significance of the past is only a fascinating but inaccurate myth. In this case, the only question is the pragmatic one: How can desirable change of present behavior be most efficiently produced? 2) There is a causal relationship between the past and present behavior. But since past events are obviously unchangeable, either we are forced to abandon all hope that change is possible, or we must assume that—at least in some significant respects—the past has influence over the present only by way of a person's present interpretation of past experience. If so, then the significance of the past becomes a matter not of "truth" and "reality," but of looking at it here and now in one way rather than another. Consequently, there is no compelling reason to assign to the past primacy or causality in relation to the present, and this means that the re-interpretation of the past is simply one of many ways of possibly influencing present behavior. In this case, then, we are back at the only meaningful question, i.e., the pragmatic one: How can desirable change of present behavior be produced most efficiently?

search for the causes in the past is just one such self-defeating "solution." In psychotherapy it is the myth of knowing this *why* as a precondition for change which defeats its own purpose. The search for causes—by therapist, patient, or both—can lead only to more of the same searching if the insight gained thereby is not yet "deep" enough to bring about change through insight. But neither the little girl going to kindergarten nor her parents acquired or even needed any understanding of the problem which they had for a while. Similarly, the spontaneous remission of the agoraphobia occurred without any insight into the origin and meaning of the symptom either before, during, or after the change; nor, apparently, did this man ever arrive at a deeper understanding of the theoretical nature of the help he was then able to extend to his fellow sufferers.

We can now formulate some first practical instances of second-order change. To return once more to the example of the insomniac: We have already mentioned how he became a patient by mishandling an everyday difficulty and how this mishandling placed him into a self-imposed "Be spontaneous!" paradox. Many of these sufferers can be helped quite rapidly by some seemingly absurd, paradoxical injunction, such as to lie in bed and not to close their eyes until they are fast asleep. Obviously, such an intervention does not get at the original sleeplessness, but effects a change at the *metalevel* where the insomniac's counterproductive attempts at solving the problem have created his "Be spontaneous!" paradox (and where it is perpetuated additionally by medication and all sorts of "common-sense" measures). Unless the insomniac is proficient in self-hypnosis (in which case he probably would not be an insomniac), he cannot *not* wish to fall asleep, just as it is impossible *not* to think of a given thing deliberately, and this mental activity then paradoxically prevents sleep. The goal of the second-order change intervention, therefore, is to prevent him from willing himself to fall asleep, and not, as common sense would suggest, to make him fall asleep.

Or let us consider the example of a phobic who cannot enter

a crowded, brightly lit department store for fear of fainting or suffocating. Originally he may have experienced nothing worse than a temporary indisposition, a fortuitous hypoglycemia, or a vertigo as he went into the store. But when, a few days later, he was about to enter the store again, the memory of this incident may still have been fresh, and he probably "pulled himself together" to brace himself against a possible recurrence of the original panic; as a result, the panic promptly struck again. Understandably, such a person experiences himself as being at the mercy of internal forces of such overwhelming spontaneity that his only defense seems complete avoidance of the situation, probably accompanied by the regular use of tranquilizers. But not only is avoidance no solution, not only does it merely perpetuate the conditions against which it is used, it is the problem, and he is caught in a paradox. He can be helped by the imposition of a counter-paradox, for instance by telling him to walk into the store and to faint on purpose, regardless of whether his anxiety is at that moment actually overwhelming him or not. Since he would have to be somewhat of a yogi to accomplish this, he can next be instructed to walk as far into the store as he wants, but to make sure to stop one yard short of the point where his anxiety would overwhelm him.<sup>5</sup> In either case the intervention is directed at the attempted solution, and change can then take place.<sup>6</sup> Similarly—although nobody can as yet present any evidence for this—it is a fair guess that the legalization of marijuana (whose ill effects are not certain, but probably not worse than those of many other widely used drugs) might not only decrease its use, but would

<sup>5</sup>We wish to mention only in passing that patients not only accept such absurd and often outlandish behavior prescriptions, but often do so with a big smile, as if somehow they had caught on to the essentially humorous—yet, of course, deeply serious—nature of paradox.

<sup>6</sup>It may seem a somewhat far-fetched comparison, but the avoidance behavior of the phobic is essentially analogous to the prohibition of pornography: both make a "problem" out of a difficulty, and in both cases the "problem" disappears together with the "solution."

eliminate almost overnight the complex and counterproductive consequences of its legal suppression, which many experts feel has turned into a cure that is worse than the disease.

The elusive interpersonal phenomenon of trust provides another example of the technique by which second-order change can be applied. For example, the ideal relationship of a probationer to his probation officer should be one of complete trust since, again ideally, the probation officer is supposed to be his helper, and to fulfill his function he needs to know exactly what sort of life his client is leading. But they both know only too well that the probation officer also represents the authority of the State and thus has no choice but to report the probationer in case the latter violates any of the conditions of his probation. This being so, it would create little credence if he told his client, "You should trust me." Obviously trust is something spontaneous that one can neither obtain nor produce on demand. In training probation officers in the use of paradoxical techniques for problem resolution we have found it very useful to have the probation officer tell his probationer: "You should never fully trust me or tell me everything." The reader will readily see the similarity between his injunction and Epimenides' statement, or the claim by the sophist that he entered the kingdom to be hanged, except that in this case the outcome is not an infinite regress of assertion and denial, but the pragmatic resolution of an otherwise hopelessly paradoxical state of affairs. The probation officer's statement makes him trustworthy to the extent that he has declared himself untrustworthy, and the basis for a workable relationship is laid.

Another variation of the theme of trust and of the problem caused by the wrong handling of a difficulty can be found in Khrushchev's (perhaps apocryphal) memoirs, where he describes the defection of Stalin's daughter. After complaining how wrong it had been for her to run away to the West, he points to the other side of the story:

She did something stupid, but Svetlanka was dealt with stupidly, too—stupidly and rudely. Apparently, after her husband's funeral she went to our embassy in New Delhi. Benediktov was our ambassador there. I knew him. He's a very straightlaced person. Svetlanka said she wanted to stay in India for a few months, but Benediktov advised her to return immediately to the Soviet Union. This was stupid on his part. When a Soviet ambassador recommends that a citizen of the Soviet Union return home immediately, it makes the person suspicious. Svetlanka was particularly familiar with our habits in this regard! She knew it meant she wasn't trusted.

And Khrushchev then shows that he knows a good deal about how to handle such problems of trust in a paradoxical way:

What do I think should have been done? I'm convinced that if she had been treated differently, the regrettable episode would never have happened: When Svetlanka came to the embassy and said that she had to stay in India for two or three months, they should have told her, "Svetlana Iosifovna, why only three months? Get a visa for a year or two or even three years. You can get a visa and live here. Then, whenever you are ready, you can go back to the Soviet Union." If she had been given freedom of choice, her morale would have been boosted. They should have shown her that she was trusted. . . . And what if we had acted the way I think we should have and Svetlanka still hadn't returned home from India? Well, that would have been too bad but no worse than what happened (56).

All these examples have an identical structure: an event (*d*) is about to take place, but *a* is undesirable. Common sense suggests its prevention or avoidance by means of the reciprocal or opposite, i.e., not-*a* (in accordance with group property *d*), but this would merely result in a first-order change "solution." As long as the solution is sought within this dichotomy of *a* and not-*a*, the seeker is caught in an *illusion of alternatives* (99), and he remains caught whether he chooses the one or the other alternative. It is precisely this unquestioned illusion that one *has* to make a choice between *a* and not-*a*, that there is no other way out of the dilemma, which

perpetuates the dilemma and blinds us to the solution which is available at all times, but which contradicts common sense. The formula of second-order change, on the other hand, is "not *a* but also not not-*a*." This is an age-old principle that was, for instance, demonstrated by the Zen master Tai-Hui when he showed his monks a stick and said: "If you call this a stick, you affirm; if you call it not a stick, you negate. Beyond affirmation and negation, what would you call it?" This is a typical Zen *koan*, designed to force the mind out of the trap of assertion and denial and into that quantum jump to the next higher logical level called *satori*. This is, presumably, also what St. Luke meant when he wrote: "Whosoever shall seek to save his life, shall lose it; and whosoever shall lose his life shall preserve it." Philosophically the same principle is the basis of Hegelian dialectics, with its emphasis on the process that moves from an oscillation between thesis and antithesis to the synthesis transcending this dichotomy. The way out of the fly bottle, to return to Wittgenstein's aphorism (108), is through the least obvious opening. On the poetic level we find a particularly clear example of this principle in Chaucer's tale of the wife of Bath: a young knight finds himself in worse and worse predicaments as the result of having to choose again and again between two unacceptable alternatives, until he finally chooses not to choose, that is, to reject *choice itself*. The knight therefore finds the way out of the fly bottle and achieves a second-order change by switching to the next-higher logical level; instead of continuing to choose one alternative (i.e., one member of the class of alternatives) as the lesser evil, he eventually questions and rejects the whole idea that he *has* to choose and thereby deals with the class (*all* alternatives) and not just one member (95).

This is the essence of second-order change. The most amazing thing about this kind of problem resolution is that it is possible even—or especially—where the concrete facts of the situation are immutable. To illustrate this, we must now turn to the fourth principle of second-order change mentioned earlier, namely the technique of *reframing*.