



RESEARCH ARTICLE

Structural Change and its Assessment

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Abstract

The concepts of structure and structural change and their use in psychoanalytic discourse are explored. It is argued that, when these concepts are not used merely as rhetorical devices, the concept of structure essentially refers to stable, unobservable mental organisations and that these may only manifest themselves as consistency across time in their behavioural derivatives. The concept of structural change may refer to three different forms of change in structures so defined. It is argued that psychoanalytic treatment is neither necessary nor strictly sufficient to bring about such changes. Particular attention is paid to the concept of symptom in the context of structures and structural change. When assessment is concerned, it is concluded that structures and structural change do not reside in certain functions or instruments as such but may only be assessed through repeated observations of structure indicators.

It is not exactly clear who first used the concept of structural change in psychoanalytic discourse. There is no entry for it in *The Language of Psycho-Analysis* [1] and none for any reasonable synonym or alternative rendering. Correspondingly, the exact word is entirely missing in the General Subject Index in the Standard Edition of Freud's [2] work. One may assume that it was implied for the first time in the famous formula "Wo Es war, soll Ich werden". However, there may have been structural change notions around much earlier, in terms of the topographical model. In view of the fact that Freud, at the time, considered the conscious and the unconscious as systems, the system Cs. and the system Ucs., the formulation to make unconscious conscious may be taken to imply, too, the idea of structural change.

In our times the concept has become what Weinschel [3] has called a psychoanalytical shibboleth, a slogan or rhetoric to distinguish psychoanalytic change from the forms of change-presumably less genuine and valu-

able-in other kinds of mental treatments. Werman [4] and Blum [5] bluntly suggest that the concept represents a mere idealization among psychoanalysts, "an article of faith in the superiority of analysis", as Abend [6] put it. And Weinschel argues [3], "We should at least consider that our long-held claim that 'structural change' is the sacrosanct province of psychoanalysis may be a somewhat solipsistic one". The purpose of this paper is to follow Weinschel's suggestion and analyze the structural change concept with the following kinds of questions in mind:

1. What are the essentials of the kind of change that may be called structural (in contradistinction from non-structural kinds of change)?
2. Is the structural kind of change specific to psychoanalysis or may it come about in other ways, that is, is psychoanalysis necessary to bring about structural change?
3. Is psychoanalysis sufficient to bring about structural change?
4. How may structural change be properly assessed?

In response to these questions my argument is, in outline:

1. A psychic structure is an unobservable stable organization of psychic function or content, manifested by the consistency of behaviour deriving from that organization. Structural change is reflected in the consistency of such behaviour (structuring or destructuring) or in the patterning of consistent behaviour (restructuring).
2. Psychoanalysis or psychoanalytic treatment may be expected to bring about structural change, but they

are not sufficient conditions in the sense of always doing so.

3. Neither psychoanalysis nor psychoanalytic treatment is a necessary condition for structural change.
4. Assessment of structural change requires the demonstration of change in the consistency of a function or in the pattern of consistent behaviour. This presupposes repeated observations. Therefore, structural change cannot be defined merely in terms of a specific function or “content”, nor of an instrument assumed to assess that function or “content”.

After critically reviewing typical attempts to define structural change in psychoanalysis, I will elaborate on these four propositions.

The Notion of Structural Change in Psychoanalysis

The easy way to define structural change is to claim that it is the kind of change that occurs in psychoanalysis. This is a primitive definition, saying merely that whatever change occurs in a psychoanalysis is called “structural”. It is not a meaningless definition, rather one rendering meaning to the concept, in the sense of stipulating how or when the term “structural change” may be used. A variation and, in fact, much stronger rendering of the idea is that structural change is the kind of change that may occur *only* in a psychoanalysis. At once, this becomes a bit more complicated, because there is the hypothesis implied that there is something, which we shall call “structural change”, that will happen in psychoanalysis, *exclusively*. Therefore, it may be tested empirically, by trying to demonstrate what is really specific to change in psychoanalysis.

As there are changes found in psychoanalysis that people would not like to call “structural change” on any intuitive definition of the term, some have chosen to link the concept to another concept, that of *psychoanalytic process*. Thus, they will argue that structural change is the kind of change that occurs-may *only* occur and possibly *always* occurs-if or when there is a psychoanalytic process. Needless to say, “psychoanalytic process” is a vague concept, too, in fact rather a term than a concept, and there are different explications of it, depending, probably, on theoretical standpoints [7,8]. Whatever the definition, in the context of structural change it offers various kinds of circular reasoning. If such work as we choose to call “psychoanalytic process” seems to have been going on, we may take any change that has taken place to be structural. And if there has been some change that we like to consider structural, we may take this to mean that there has been a genuine psychoanalytic process. Contrariwise, if there has not been any structural-like change, we assume that no psychoanalytic process has been established, and if it is our impression that little or no genuinely psychoanalytic process has been going on in a clinically successful case, we

conclude that whatever change there may have been has not been structural. Indeed, such arguments are not really scientific, in any sense of the word.

Some scholars have tried instead to define the concept by listing the kinds of change that they think should be considered structural. Probably, Dewald’s contribution [9] is the most thorough. He offered a vast number of examples of what he considered clinical indicators that structural change has been taking place, and he clustered them according to different phases in the psychoanalytic treatment. For instance, he suggested that, before the transference neurosis is well established, structural change shows itself by “how the patient applies himself to the task of psychoanalysis” (p. 309). By that he meant that the psychoanalytic situation becomes established, that a therapeutic alliance is developing, that the ego is split in observing and experiencing parts, that the analysand develops the ability to regress in the service of the therapeutic task, that the analysand identifies with the analytic function of the analyst, that the analysand’s tolerance for frustration and anxiety is increased, that his or her defences become less rigid, that infantile repressions are lifted, and that he or she develops an increasing ability for uninhibited and effective free association.

There are more such catalogues of clinical inferences to signify structural change, Weinschel [3] citing one by Compton, and Shane and Shane [10] one by Firestein. Firestein’s is concise: “insight achieved; full genitality attained; penis envy in women modified; castration anxiety in men mastered; reality testing improved; acting out eliminated; anxiety tolerated and other unpleasant affects reduced to signals; gratification delay tolerated; sublimations strengthened; capacity to experience pleasure without guilt or other notable inhibitions gained; and ability to work improved” [10].

Obviously, these examples in most cases do not refer to empirical observations but are mere theoretical inferences that would themselves have to be defined. Indeed, one may ask what is really contributed theoretically to them by invoking another and still more distant theoretical inference, such as structural change. Also, of course, we still have to ask ourselves what it is about these changes that makes them structural, what it is about other kinds of change that will make them non-structural, and finally, provided they might be observed unequivocally, if they may only come about in a psychoanalysis. Indeed, we still lack a definition of the concept of structural change that will help us make such distinctions that we might decide whether an instance of change in a patient is structural or not.

What is a Structure?

One might begin some refinement of the concept by assuming that structural change has something to do with structures and that, if we want to develop a concept of structural change we have to begin with the

concept of mental structure. The classical formulation by Rapaport [11,12] was further elaborated by Applegarth [13], thus: "A structure is often defined usefully and generally as 'something' which is the means by which a given function is carried out and which has a relatively slow rate of change compared to other processes ... That is, it has a degree of permanence in psychological functioning. Under this definition, then, fall a wide group of processes with quite different levels of organization, degrees of permanence, and other varying qualities" (p.1099).

Carrying Applegarth's ideas further, the following definition is proposed: A mental structure is; 1) A system or organization, by which is meant that it is a set of elements that are interrelated in the sense of associating with, communicating with, or even influencing each other; 2) This system is relatively stable or permanent and; 3) Does some kind of mental work, that is, has a function in the mental life or; 4) Organises some kind of mental content, that is, organises products of such functions; 5) It may be conscious or unconscious, and; 6) It is itself not observable but will leave observable products or derivatives in the form of human actions; 7) A mental structure, by virtue of its stability, regulates a mental function or organizes mental content so as to bring about some degree of consistency in its products. A structure will thus reveal itself by the consistency of such derivatives. Finally; 8) Structures may themselves be organized in systems or organisations. Thus, there are structures superordinate to sets of subordinate structures, structures inhibiting or facilitating other structures, unconscious structures influencing conscious ones etc.

Now, such a definition allows for a variety of mental structures but, equally important, does not include all mental phenomena. Thus, we would call the different memory systems mental structures, because they perform the mental functions to lay down, hold, and retrieve or reconstruct memories across time spans of different lengths. But, although they are products of these functions, we would not call single memories structures *unless they were stable*. This would exclude iconic memories and short-term memories but include long-term memories, episodic, procedural, semantic or whatever. For example, one's internal object world is a very extensive long-term memory or system of memories, which is reflected in a certain consistency of feeling, thinking, and acting in one's relations to self and other people. At a lower level the specific internal objects are structures, too, again provided they are stable. Think of the super-ego as such a memory structure to which we have assigned specific significance. Also, the self may be such a structure, although it may be too unstable for some persons to qualify in their cases.

The qualities of stability and consistency are central in the definition and may therefore require some explanation. Although these concepts are not synonymous,

nor completely tautological, they are strongly related. The relation is this: Consistency presupposes a stable structure, whereas a stable structure will be expected to produce consistency. Whereas stability refers to a quality or existence of a formation in continuous time, behavioural consistency refers to the repetition or replication of acts at different points in time, on different occasions or in different situations. It has to be understood that we are *not* talking here of consistency as the repetition or replication of mere movements or motions but rather assume equifinality or equicausality of different actions. Consistency is thus taken as the manifestation of an unobservable structure, stable across the time it takes to observe consistency. In fact, the degree of consistency observed may be taken as a measure of the coherence of a structure or its "structurality".

So, we may conclude that any action or way of acting that is observably recurrent, consistent, or predictable reflects an underlying, itself unobservable mental structure. Because not all human actions are recurrent, consistent, or predictable, it follows that not all actions are derivatives of mental structures^a. Therefore, the single most critical component of the definition of a structure is *that a mental structure is defined or indicated by its relative stability, as indicated by the relative consistency of its derivatives*.

Talking of human behaviour it is important not to lose sight of the fact of individual differences. A mental function that is structured, that is, stable, in one person may not be so in another person. Thus, in principle, a function may never be considered a structure in itself. No dimension of human behaviour is consistent by definition. It may with some persons, not with others. So we have to reckon with a complex interaction between psychic functions, persons, and time. Across situations or occasions in shorter or longer stretches of time some persons will be more consistent than others on some dimensions of behaviour, but who these persons are may differ across dimensions and also from time to time.

Dispositional Concepts

Structure thus turns out to be a dispositional kind of concept. By a dispositional concept is meant a concept about animate beings or inanimate things that refers to qualities that are immanent or inherent with the being or thing as a permanent and inseparable quality or attribute. For instance, the fragility of glass is a disposition making the glass sensitive to stones,

^aOne might argue, of course, that inconsistency, impermanence, instability and unpredictability themselves may be recurrent, consistent, and individually predictable, as has been said about the borderline personality. Some, regarding it as a kind of defect pathology, would take this as reflecting lack of structure, whereas others would consider it a conflict-based structure built with splitting. We need not decide whichever in order to proceed with our argument.

footballs etc., if thrown at the glass. Likewise, taking a human example, we may consider a person who easily feels hurt or provoked as having a sensitive disposition.

Considering the concept of structural change it may be particularly instructive to elaborate somewhat on the idea of disposition. Five things, at the least, are important. First, a disposition is something that we cannot really see or observe as such in any way direct. This has made the concept a critical issue in modern philosophy, as there are philosophical schools that do not accept reduction to unobservables. Because it is itself unobservable, we have to infer a disposition on the basis of observations or indications of it, in the case of mental dispositions on the basis of observations of peoples' actions.

Second, as its main *raison d'être*, the notion of a disposition is called for to account for the degree of consistency that one may observe in these indications. Taking the example of glass, once again, there would not be any need for invoking the fragility disposition if glass, unpredictably and inconsistently, sometimes broke and sometimes did not break when shot at. Likewise, observing the actions of a person we feel inclined to infer a disposition or use a disposition as explanation only when we consider the actions consistent.

Third, it is in the nature of a disposition to be a stable or permanent quality. This does not necessarily mean that it may not change at all. In a weak rendering, the permanence assumption may rather be taken to mean that the predisposition does not change spontaneously, on its own, but may change through different kinds of interventions. Thus, the weakness of an unpractised limb may not change without physical training of it. So, the stability assumption is made primarily to make consistency possible or plausible, not to rule out change.

Fourth, we may never know whether a disposition has changed or not unless we have the object with the disposition in question under continuous or repeated observation across occasions or situations. Thus, if, on a single occasion we notice that a football does *not* break a window, we do not assume that the disposition of fragility of glass has changed. Rather we are apt to think that the shot was not hard enough. But if, on repeated occasions, we would observe that the window does not break despite being shot at by footballs, tennis balls, stones and other hard things, we would probably begin to believe that there has been some process to harden glass, thus changing its disposition of fragility. But, again, we need more than one observation to make that plausible, and the more observations, the more certain we would be that the disposition had changed, that glass has become less fragile-or, if you will, that glass no longer has the disposition of fragility.

Fifth, in its application to human personality the concept of disposition has again to be considered in an in-

dividual differences perspective. Assuming that persons will vary on dispositional dimensions like extraversion, impulsivity, conscientiousness etc., some being high, some low, and the majority presumably somewhere in-between, it is important to realize that whether these qualities of their behaviour are structured does not depend on these positions of the persons on the dimension in question. Rather, it relies exclusively on whether the position of a person is stable or permanent or not, that is, whether there is any trans-situational and temporal consistency in the person's behaviour relating to that dimension. It is as meaningful to say that a person has a disposition to highly extraverted behaviour as it is to say that a person is disposed to un-extraverted (or introverted) behaviour, but it makes not sense to say that a person is *sometimes* disposed to extraverted behaviour and *sometimes* to introverted behaviour. That person is not at all disposed but plainly inconsistent.

Some Qualifications and Distinctions

Dewald [9] suggested that "[t]he concept of a change in psychic structure implies ... that some or all of the functions of the mind have undergone a persistent change" (p. 302). This raises the question whether *change* in structures, not only the structures *themselves*, has to be permanent in order to be structural. The idea seems to make the best sense if taken to mean that what has changed structurally is changed for good, more or less, that the change itself is relatively stable in the sense that it is *not* momentary, temporary, or automatically reversible, as when a surface bent under pressure recoils when the pressure is withdrawn. Thus, we should demand that the new structure is stable enough to reveal some manifest consistency. In this sense, the product would itself have structural properties. This should not exclude, however, that this changed structure, once formed, may be less rigid or cohesive or closed than before and therefore, in a sense, less structural, nor that it may change some other way in the future. Further, although the product might be a structure, we should not take Dewald's "change in psychic structure" to mean that there necessarily had to be a cohesive structure before, because that would rule out one particular type of structural change that is quite important in sub-neurotic conditions.

Another consideration is that Rapaport's idea of slow rate of change sometimes is taken to imply that structures change only slowly. That is probably a misinterpretation of Rapaport, because it would exclude cases of rapid and radical change as in sudden insights and conversions. What Rapaport might have had in mind was more likely the simple idea that structures cannot be expected to be *completely* stable or permanent. Completely stable formations are inanimate. Thus, when humans are concerned, we have to think of structures as *relatively* stable. Mental structures are open systems and may therefore have slow process proper-

ties or change very slowly or gradually without losing their identity, much like the human body does while aging. The slow rate of change is therefore a characteristic of a structure as such, not of structural change.

However, it might seem that its very stability or relative permanence would itself prevent a structure from changing rapidly. Indeed, it is in the nature of a structure that its elements are interconnected and thereby stabilizing each other, so that small changes are countered or compensated in order to preserve the structure as it was. We may therefore have to think about mental structures as likely to change in small steps, perhaps accumulating during a long period of time to produce more radical change. Internalization and identification are probably slow gradual processes rather than instantaneous ones. On the other hand, we tend to think of insight as a rather rapid process, sudden and unexpected and radical enough to be felt to make a whole lot of difference. Sometimes also external influence, in the form of crisis, persuasion, suggestion, interpretation etc. may have rapid, radical, and permanent effects. So, low or high speed alone will not tell whether change is structural or not.

A theoretically important issue is whether there are deeper structures and less deep ones. Many analysts seem to assume that some structures are “deeper” than others and therefore more “genuine”, more fundamental, and psychoanalytically more interesting and important. It is generally assumed, for instance, that unconscious processes are deeper than conscious ones. Also, some would argue that although symptoms might be regarded as structures at a superficial level, there are other structures with more fundamental and psychoanalytically more “interesting” functions or content underlying and determining them. It seems that these beliefs in levels are essentially based on concretizing interpretations of metaphors like the topographical iceberg and some location “sub” or beneath something “conscious”. However, the concept of depth has never been defined in any empirically defensible way. Just as mental structures may only be inferred on the basis of indicators in the form of their derivatives, the attribution of depth to structures has to be based on a set of indicators. This may or may not be done, but it has not been done yet. Therefore, the distinction between deep and surface structures is merely an unproven assumption-and, exactly therefore frequently used rhetorically in the evaluation of different instances of change.

Three Kinds of Structural Change

Now, it is possible to distinguish between three basically different types of structural change-and there may be more, specific ones. Previously, Dewald’s [9] formulation, “change in psychic structure” was taken to allow both change from less to more structured formations and from more to less structured ones. This was in order now to make a distinction between *structuring* and

destructuring. Structuring is one of the ways in which structures may change. It means, simply put, that a formation that previously had less structurality, that is, less stability and less of system-properties, has now more of it. For instance, a number of pieces of a jigsaw puzzle cast on a table are a less structured system than the completed Gestalt of the puzzle. For another example, a number of pieces of furniture when the movers have just left one’s new apartment are a less structured system than the layout of the chairs and tables and lamps etc. when they are at their proper places in relation to each other. If, for a moment, we accept the energy metaphor of the economic point of view, an increased capacity of the ego to bind energy through increased impulse control would be a psychoanalytic example of structuring. We may consider normal human development partly as a process of differentiation and integration, where one of the first tasks is to differentiate between self and object. Basically, this is a structuring process, and *differentiation* and *integration* may be thought of as the prime mechanisms or subprocesses of structuring. Let it be assumed that such changes have to be more or less stable or irreversible if they are to be considered as structural change. By the qualification “more or less” we have to allow for temporary reversals, as in regressions. Parenthetically, there are also regressions that become permanent regressive organisations, thus structures, as the Sandler [14] have pointed out.

The concept *destructuring* is introduced for a second kind of structural change. All analysts have met with analysands who are over-controlled, inhibited, compulsive, or simply much too predictable. What we would wish is for these persons to become less inhibited or controlled and more spontaneous or impulsive, to not always consider or calculate their plans before acting, to break with personal or social conventions and traditions and so on. Whereas structuring may be the kind of change we would try to help with a so-called borderline personality or, more generally, deficit pathology [15], destructuring may be the kind of goals we are striving for together with a so-called neurotic personality organization or with a case of so-called character neurosis. For example, it comes natural to regard the obsessive-compulsive neurosis as a model case for destructuring. We should probably need a way to talk about these alternatives in other terms than diagnostic categories, however. The term “closed mind” may be a suitable alternative, coined by social psychologist Rokeach [16], to describe cases where destructuring might be desirable. Thus, we may talk of opening up closed mental systems, of achieving an increased mental motility and openness, of turning rigidity in feeling, thinking, or acting into flexibility.

One may now ask if destructuring is not simply the opposite of structuring. Again, let us take regression as an example. An acute regression in the form of seemingly unorganized speaking and acting during sickness,

intoxication, strong affect etc. might be regarded as destructuring. But we would probably not regard an acute regression as a case of structural change unless it became stable, at least for considerable time, or in principle permanently. In other words, in order to call a process “destructuring” we should demand that stable, maybe rigid, structures are dissolved and replaced by new, more open and flexible structures. So, for destructuring we demand that there should be structures both before and after, but for structuring we may accept that un-structure is superseded by structures. It follows that structuring and destructuring are not strictly opposites.

Finally, we should distinguish between structuring, destructuring, and *restructuring*. A structural change in the form of restructuring, simply put, is when there are changes in the layout or composition or looks of a structure. By a change in “looks” is implied content or meaning changes, as in the familiar reversible figures in the psychology of perception: Necker’s cube is turned inside out, Freud’s face turns into a nude woman, a cute girl becomes an ugly hag etc. Moving around the chairs and tables in a room is a restructuring, revising a text may be a restructuring. In general, to restructure means to place a number of elements in a new constellation or configuration. There are plenty of examples of intrapsychic restructuring. It has been suggested [17] that learning and development involves the replacement of old functions (and constellations thereof) by new ones. This is what we call qualitative change. The classical type of conflict resolution in psychoanalytic theory is restructuring: When a non-adaptive solution of a conflict is replaced by an adaptive solution, by rebalancing the poles of the conflict in a new compromise formation. In terms of object relations, a rebalancing may come about when a person’s persistent or frequent identification with an aggressive introject is substituted by more frequent identification with a supportive one-or vice versa, in unhappy cases. In mental development restructuring is essential inasmuch as there are conflicts between new structures and earlier ones that have to be solved, as the Sandler suggest, by superimposition, inhibition and integration [14].

Is Psychoanalysis Sufficient and/or Necessary for Structural Change?

The next issues are: Is the structural kind of change specific to psychoanalysis or may it come about in other ways, and are all changes during a psychoanalysis structural? That is, is psychoanalysis sufficient and/or necessary to produce this kind of change?

Whether psychoanalysis is sufficient for structural change to occur is a question of the outcome of psychoanalytic treatments. Surely, there must have been at least some psychoanalytic case somewhere sometime that showed no such effect that we would consider structural, which would suffice to prove that psycho-

analysis is not sufficient to bring about stable change. But the decisive issue is whether psychoanalysis *may be expected* to produce stable, that is, structural, change. That is a statistical inference. On the evidence collected in the Stockholm project, for instance, it may and often does [18]. And so may psychoanalytic therapy, under certain conditions. This argument is not trivial, because some varieties and conditions of psychotherapy may not be so expected, according to the limited number of psychotherapy outcome studies with long-term follow-up.

Now, to the question whether psychoanalysis is a necessary precondition for structural change. To begin with, there are psychological concepts outside psychoanalysis that have the qualities of structure and structural change. One of the central concepts in personality psychology is that of *trait*, as used by Cattell, Guilford, Eysenck and, more recently, Costa and McCrae [19]. As defined, a trait is a so-called intervening variable for whatever accounts for consistency in some aspect of individual behaviour, like conscientiousness or openness. Thus trait, like structure, is a dispositional type of concept. In other words, a trait would pass the stability criterion of a structure, also the unobservability criterion, and also the conscious-or-unconscious criterion. Perforce, a change in a trait has to be a structural change.

However, insofar as the attribute in question is not stable or consistent, by definition it is not a trait. Thus, a quality that may be a trait for some persons may only be a transitory state for others. So, apart from one’s position on a trait dimension on a particular occasion, another individual factor is the degree of consistency of this position across different occasions or situations. Some people are more stable or consistent than others, and this may itself be a general or a trait-specific quality that has more to do with structurality than the positions of the persons. These complexities were the very issues in the so-called person-situation controversy in the 1960s [20-22].

Attitude is another widely used structural concept in psychology. Like traits attitudes are structures, in so far as they are stable, and they are stable by definition, because temporary sympathies and antipathies are called something else than attitudes, just like temporary states are not called traits. Becoming stably more or less for or against something, thus changing attitudes, has therefore to be regarded as structural change, like the modification of object representations or cognitive schemata. Again, however, we have to reckon with individual differences, not only on the pro-contra, positive-negative dimension but also on the stability or consistency dimension.

Correspondingly, another type of disposition, habit in Hullian learning theory is a structural concept. Developing a habit is structuring, changing it restructuring,

and breaking it destructuring. We may conclude, on the basis of these examples, that psychoanalysis is not the exclusive province of psychic structures.

Several psychoanalysts who have written on the subject seem to take it for granted that change of the kinds that we must regard as structural may occur outside psychoanalysis, or without it. Boesky [23] says, "... cures effected by manipulation of the transference or even by crude suggestion in some forms of psychotherapy also represent an alteration in compromise formation and therefore another kind of structural change". And he adds: "... so do the spontaneous remissions of neurotic symptoms ... as well as exacerbations of symptoms or the appearance of new symptoms" (p. 311). Abend [6] exemplifies extra-psychoanalytical structural change with "identifications and responses to suggestion, or other forms of transference influence" and argues for their structurality by adding that these types of change are "not necessarily ones of a transient nature at that" (p. 532). Considering the distinction between supportive and interpretative interventions, Kris [24] suggested "that support can lead to enduring (structural) psychic change" (p. 112). Parenthetically, note Kris' equating of "structural" with "enduring", in agreement with the present argument. For other important examples, consider the radical, profound, and stable effects that a traumatic experience may have on the psyche, whereas the normal, undisturbed spontaneous development, as mentioned before, must be regarded as a process of slow structural change. More generally, Werman [4] is very clear in his position that structural change is not limited to psychoanalysis. Structural change is, thus, not a psychoanalytic speciality.

Wallerstein is probably the psychoanalyst who has thought and written most on the subject. Repeatedly, he has interpreted findings from the Menninger project to the effect that structural change is not a psychoanalytic speciality. Referring to "[t]he distinctions made so regularly in psychodynamic literature between true structural change in personality organization and functioning, presumably based on the interpretive resolution of underlying intrapsychic conflict, and mere 'behavioral changes' or changes in 'manifest behavior patterns' that are invidiously considered just 'altered techniques of adjustment', presumably all that could come out of other noninterpretive change mechanisms", [25], he found that changes through the latter, supportive measures "provided often enough just as much structural change and proved just as stable and enduring as the changes achieved through our expressive-analytic therapies" [26]. Therefore, Wallerstein questioned the distinction to begin with and also the idea to tightly link the kind of change to the mode of intervention: "... we must accept that the expressive-analytic approach is not exclusively capable of inducing structural change" (p. 203). Applebaum [27] formulates this Menninger finding, thus, "Conflict resolution cannot be considered

essential to structural change and may be independent of it in some instances". One may conclude that structural change takes many forms, within as well as without psychoanalysis, also forms that psychoanalysts have learnt to belittle as non-psychoanalytic or non-genuine.

Are Symptoms Structures, and is Symptom Change Structural?

These are generally dismissed as "behavioural change" or, for the sake of emphasis, "mere behavioural change". The notion implied, behaviour without a determining mental process, should in fact be absurd to any psychoanalyst, unless symptoms are considered at the level of spinal reflexes. A specific form of such alleged "mere behavioural change" is symptom change. Indeed, contrary to the common view that symptoms are the exclusive territory of behaviourists, this concept rather reflects a non-behavioural way of thinking, psychoanalytic or generally psychodynamic. Thus, "symptom" refers to a manifest sign or indication, or cluster of such, of something underlying, in a relation that is probably somewhat less than one-to-one. It is not that a certain symptom is a structure. Rather, a symptom is a *derivative* compromise formation, and therefore an indicator, of an underlying, unobservable pathological structure, under the conditions that; 1) It is recurrent (which means that it has a stable structure underlying it), and; 2) If it manifests itself in different specific acts, these are mutually consistent. The same goes for symptoms combining in syndromes.

Reading psychoanalyst scholars on symptoms yields a somewhat confusing and contradictory picture. On the one side, Applegarth [13] suggests, "One could make a reasonable case that symptom formation and character formation, normal and abnormal, are complex adaptational structures [*sic*] involving learning under the strong influence of affective states and unconscious fantasies, where the reward is pleasure and the avoidance of pain". But, says Dewald [9], "The status of the patient's symptoms [...] are notoriously unreliable as criteria of structural change, particularly during the early and middle phases of treatment". But later he adds, "Nevertheless, after exposure and working through of nuclear conflicts has occurred, the disappearance of manifest symptoms becomes a more reliable indicator of structural change, particularly if the patient can now remain symptom-free". But, one may well ask, how does one know that nuclear conflicts have been worked through, if not by the stable disappearance of the symptom? Yet, Blum says [5], "Analysts are not content with more symptom relief or magical transference cure, without evidence of deep-seated clinical change in the course of analytic work". As noted above, however, levels of depth or "deep-seatedness" in the psyche are but a presupposition cast in metaphorical form. Weinschel [3], in contrast to Blum, holds that "there does appear to be general agreement that clinical analysis aims at symp-

tom relief based on increased self-awareness". Share and Shane express the confusion thus, "Most analysts view symptomatic improvement as a reliable indicator [for termination] only when such change follows working through of the transference neurosis". Yet, "[w]hile analysts do not regard symptom removal as necessarily significant, patients most certainly do, even those convinced of the power of transference reactions. [...] The point is that symptomatic improvement is held in high esteem by the patient, regardless of the level of his analytic sophistication. Furthermore, in child analysis, the analyst may more openly use symptom removal as an indication for consideration of termination. [...] We suspect that adult analysts, too, are moved to thoughts of termination when symptoms disappear, even though they may not consciously acknowledge it because it does not quite fit the analyst's ideal of the treatment process; that is, symptom removal itself may not reflect 'deep structural change'" [10].

Wallerstein has offered some real data to shed light on the issue of symptoms and structural change [26,28]. He regards structures, in Rapaport's sense, as "determiners of behavior and symptom" and suggests "a plausible definition of intrapsychic change as resulting from modifications in the intrapsychic conflicts that determine the symptoms" [29]. Unfortunately, the comprehensibility of Wallerstein's various writings on this issue is hampered by his use of undefined terms like "clinical improvement", "therapeutic change", "behavioral change", "structural change", "intrapsychic change", "insight", "conflict resolution"-and, simply, "change" or "outcome" and capricious changes between such terms. In view of such unclarities, one can only assume that Wallerstein by "structural change", "intrapsychic change", "insight", and "conflict resolution" refers roughly to a common cluster, representing the process of conflict resolution by making unconscious conscious. We may also assume that he refers to another cluster by terms like "clinical improvement", "therapeutic change", and "change" (including symptomatic and syndromal change in this category). For reasons of convenience, let us use the term "insight" for the first group and "improvement" for the second. If we look, now, at the findings in the Menninger project, the critical results were; a) That improvement was at least proportional to insight, although there were cases with more improvement than there was insight; b) That insight was neither necessary nor sufficient for improvement, and; c) That changes brought about by supportive measures (presumably behavioural change) were in many cases indistinguishable from changes brought about by insight-producing means (presumably structural change) [26].

So improvement and insight seemed to be largely independent of each other. There are two ways, at least, to look at this relation. From a *descriptive* point of view, there are conscious and unconscious structures,

and from that point of view "insight" is the name given to the process in which an unconscious structure becomes conscious. But insight as such is itself not a structure but, exactly, a process, sometimes slow, sometimes rapid, and unconscious structures may become conscious without changing as structures. From the *dynamic* point of view, we have to assume two kinds of structures involved in a symptom. a) There are structured ideas that underlie, or are related to, the symptom in question, and; b) There are structures keeping them from becoming conscious. We call the former kinds of structure "unconscious phantasies" and the latter kinds "defence mechanisms". The reason to call and consider both structures is of course that they perform mental work stably enough to account for some degree of consistency of action. When defence structures are concerned, just like other structures, they may change by structuring-when a defence is set up; by destructuring-as when a repression is lifted or dissolved; and by restructuring modifications. However, the defence structures and the structured ideas and phantasies are not the same, and we have to assume that they may change independently. Wallerstein is certainly not the only analyst to have noticed this independence, and the only reason to be astonished is if one ascribes to the classical theory that symptoms change through insight. If that were so, there should be an orderly dependence and succession between insight and symptom change, and that is exactly what Wallerstein's observations did not show. The most parsimonious rendering of what the observations did show is that structural change was in some patients symptomatic in its form of manifestation and in some other patients of other kinds and that these kinds of structural change manifestations did not correlate. Thus, if we consider all kinds of stable change in consistent action patterns as evidence of structural change, there will be nothing surprising or inconsistent about Wallerstein's observations.

And how may we presume Freud looked on this issue? He used the word "Ersatzbildung", "substitute-formation", to designate symptoms in the form of which the repressed returns as compromise formations or reaction formations, a process called "Symtombildung", "symptom-formation". As Laplanche and Pontalis [1] point out, the German word "Bildung" means the process as well as its product. Thus, the notion of a formation implies a structure, or an arrangement or a disposition, and it is also so explained in Webster's Dictionary. In *Hemmung, Symptom und Angst* Freud [30] suggests that this formation has two aspects-and both are structural in their nature: "one, hidden from view, is the alteration in the id in virtue of which the ego is removed from danger; the other, presented openly, shows what has been created in place of the instinctual process that has been affected [by the defences]-namely, the substitutive formation". If these processes are structural, the reverse processes must be, too. Thus, symptom remis-

sion, as much as symptom formation, has to be considered indicators of structural change, too.

The Assessment of Structural Change, in Everyday Life, in the Clinic, and in Research

How, intuitively, in everyday life, do we infer that something mental is stable, that is, structural? Take a person O as an example. Common reason suggests that we may infer that O is stable, in a certain respect, when we have been able to observe O repeatedly and found O acting consistently in that respect, or relatively so, and our inference is strengthened the more instances we have of such observations. We use formulations such that O is so, *usually, generally, typically, consistently*, etc., or that O is so-and-so, unconditionally. We imply, thereby, that it is in the nature of O to be like that. Exceptions may be tolerated as happenstances or random fluctuations until, again, we have observed enough exceptions. We then begin gradually to form a new inference that O has changed, that O used to be another way than O is now. For some time we may fail to notice any new regularities or consistencies, or we may gradually notice some new regularity, usualness, typicality, or consistency that appears to have replaced an old one or appears to develop where there seemed to be none at all before. In this way we may recognize deletions, inclusions and replacements of patterns in O's behavioural repertoire, and we may-or may not, if we are behaviourally inclined-take these to indicate changes in what we take to be O's personality. The important lesson to draw from this example is that inferring structurality cannot be based on a single observation of whatever function is assumed to be structured but is rather an observational process that takes time, across a series of observations.

So, given that a structure is characterized by its stability, time is a crucial factor in assessing structurality. That is, we shall have to make sure that stability is indeed the case, across time, before concluding that we do have a structure. But, given that a stable structure, as such, is unobservable, we shall have to use the consistency of its derivatives as an indicator. Thus, we shall have to make sure that consistency is indeed the case, *across repeated occasions during a reasonable period of time*, before concluding that we have in fact a structure.

In consequence of these arguments, we cannot define structure and structural change by pointing to some psychoanalytical function or functions and claim that these, but not others, are structural *per se*. Whatever the function, the criterion of structurality is its stability, and the critical consequent of its stability is the consistency of the manifest behavioural derivatives of the function, and for most functions this will vary among persons. When Dewald [9] suggested that the splitting of the ego in an observing and an experiencing part indicated structural change, it is very likely that he took it for granted that this splitting in turn would

be repeatedly indicated by some manifestations in the analysand's discourse. Likewise, inferring that the analysand now identifies with the analytic function of the analyst could not be based on a single occurrence of some self-reflection or self-interpretation on his or her part but would have to have its basis in a series of acts to that effect. And the same argument applies to Dewald's other examples, like regression in the service of the ego, frustration and anxiety tolerance, flexibility of defences, etc. So, tacit or implicit as this notion may have been, individual stability is the critical quality, not the particular function. Again, there may be some functions that are more interesting or more valuable from a psychoanalytic point of view, but that does not automatically make them structures.

Whereas this may surely seem self-evident or trivial to most analysts, public psychoanalytic discourse often appears to take the opposite position. Particularly obvious examples of this emerge when we move from the clinic to empirical or systematic psychoanalytic research. This is because research has to make explicit and operational the meaning of concepts studied. Now, several instruments or scales have been suggested as measures of structures or of structural change, but interestingly enough, only on account of their content, not on the basis of any research design. Thus, methods like the Scales of Psychological Capacities [SPC; 25,31-34], the Assimilation Integration Scale [35,36], the Developmental Profile [37], the Reflective Functioning Scale [38], the Adult Attachment Interview [39] may all focus on clinically important functions of particular psychoanalytic interest, but they all seem to be based on the idea that higher scores indicate "more structure" and, therefore, that increased scores from one occasion to another indicates structural change. But the fact that a person may score high on a single occasion does not necessarily show that he or she is more structured in that particular respect than a low-scoring person, nor that he or she is this time more structured than on some other occasion when the scores were lower. The same argument of course applies to other instruments that address functions that may be important from a psychoanalytic point of view and that might be interesting from the point of view of structure and structural change, like Bellak's Ego Function Assessment [40], Karush, Easser, Cooper and Swerdloff's [41] ego strength scales, the Karolinska Psychodynamic Profile of Weinryb and Rössel [42], and the Object Relations Inventory of Blatt [43-46].

Taking the SPC as an example, qualities like Optimism, Suspiciousness, Bullying and others are obviously not stable or consistent by definition. Some people will be very optimistic etc., and some less so, and some people will be so all the time and others only sometime. So just as different peoples' positions on these dimensions at a given point of time will vary, the positions may vary across time for some persons, just as the stability and consistency of these positions across points of time

will vary between persons. So, for some persons there is highly stable high optimism, for others highly stable not-so-high optimism, for some fairly consistently high (or low) optimism, for some sheer inconsistency in terms of optimism. One simply cannot tell on the basis of one single test, whether the general level is high or low, and certainly not on the basis of the belief that optimism is a structure. Thus, for any person, one would have to make sure by repeated assessment that he or she is stable on a defined dimension over a reasonably long time interval without any systematic attempts to change. That is a so-called test-retest situation, not in order to estimate reliability but to estimate stability or consistency. That consistency in personality traits cannot be taken for granted has long since been shown, by Hartshorne and May [47], Guilford [48], Mischel [21] and others.

When structural change is concerned, despite the claim to do so, the SPC in fact do not, as such, offer any measure of *change* at all, because they are all state measures. This means that the assessment refers to the person's level of functioning at some particular point or period of time. So, given that their structurality has been tested-retested initially, if one would like to assess structural change on the SPC following some systematic treatment, one would have to have yet another round of test-retest in order to estimate possible change and the current stability of the phenomenon. That such assessment of change is psychometrically problematic is outside the scope of this article, but see the classical discussions by Bereiter [49] and Lord [17].

These complications and these requirements do not apply only to the SPC. All state measures which are used to test for structural change would have to use the same assessment design. And no state measure can claim to be measuring a structure by merely assuming that it is stable, as such, or stable for all people. Thus, the scales as such are not measures of structures or of structurality. Consequently, there are no particular measures or scales or instruments that, per se, specifically address structures or structural change. I want to emphasize this argument: The structurality of a function-its stability and consistency-does not reside in, or is not immanent in, the function, and therefore structurality, too, does not inhere in any scale purporting to measure that function. *Structure and structurality cannot be defined in terms of content. They can only be defined through an assessment design. Whether in the clinic or in research the assessment of structure requires repeated observations. Consequently, the assessment of structural change requires repeated observations repeatedly.*

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