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Individual, Group and Inter-Group Processes*

This paper is an attempt to apply to individual and group behavior a system theory of organization normally used for the analysis of enterprise processes. The use of such a theory will inevitably concentrate on the more mechanistic aspects of human relationships, but I hope that the approach will help to clarify some of the differences and similarities among individual, group and inter-group behavior and throw some light on the nature of authority.

The Individual

The theories of human behavior and of human relationships are in many ways analogous to those of system theory as applied to institutions. Like an institution, an individual may be seen as an open system, existing and capable of existing only through processes of exchange with the environment. Individuals, however, have the capacity to mobilize themselves at different times and simultaneously into many different kinds of activity system, and only some of their activities are relevant to the performance of any particular task.

The personality of the individual is made up of biological inheritance, learned skills and the experiences through which he or she passes, particularly those of early infancy and childhood. A baby is dependent on one person—and gradually assimilates father and any brothers and sisters into his or her patterns of relationships. The growing child includes other members of the extended family and of the family network. The first break with this pattern is usually made when the child goes to school and encounters for the first time an institution to which he or she has to contribute as a member of a wider society. It is the preliminary experience of what, in later years, will be a working environment.

The hopes and fears that govern the individual's expectations of treatment by others, and the beliefs and attitudes on which to base a code of conduct

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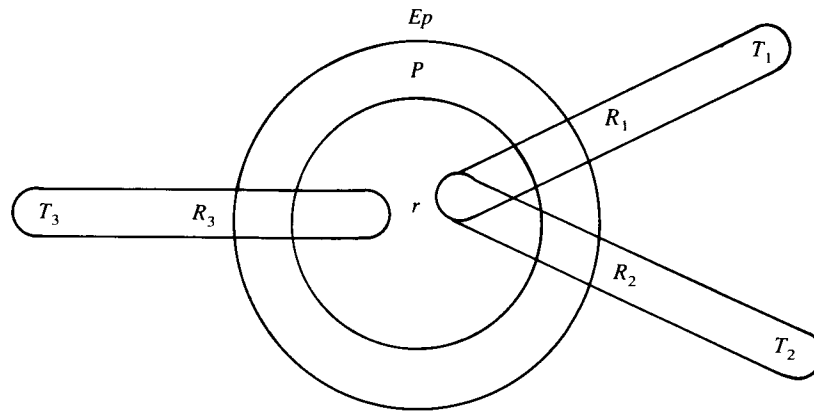
derive from these relationships and are built into the pattern that becomes one's personality. They form part of the internal world. It contains, besides the skills and capabilities as developed, the primitive inborn impulses and primitive controls over them that derive from the child's earliest relations with authority, together with the modifications and adaptations incorporated in growing up.

In the mature individual, the ego-function mediates the relationships between the external and the internal worlds and thus takes in relation to the individual a "leadership" role and exercises a "management" control function. The mature ego is one that can differentiate between what is real in the outside world and what is projected on to it from "inside," between what should be accepted and incorporated into experience and what should be rejected. In short the mature ego is one that can define the boundary between what is inside and what is outside and can control the transactions between the one and the other. Diagrammatically the individual can be represented at any one time, therefore, as a system of activity. The ego-function is located in the boundary control region, checking and measuring intakes, controlling conversion activities and inspecting outputs. It uses the senses as instruments of the import system; thinking, feeling and other processes to convert the intakes; then action, speech or other means of expression to export the outputs.

The individual is not just a single activity system with an easily defined primary task, but a multi-task system capable of multiple activities. The activities become bounded and controlled task systems when they are directed to the performance of a specific task, to the fulfilling of some specific purpose. The difficulty then is the control of internal boundaries and dealing with activities that are not relevant to task performance. And these controls are the result of the built-in attitudes and beliefs, born of previous experience, which may or may not be relevant to the specific task or system of activities required for its performance.

To take a role requires the carrying out of specific activities and the export of particular outputs. To take a role an individual could be said to set up a task system; and the task system to require the formation of a project team composed of the relevant skill, experience, feelings and attitudes. Different roles demand the exercise of different skills and different outputs. The task of the ego-function is then to ensure that adequate resources are available to form the project team for role performance, to control transactions with the environment so that intakes and outputs are appropriate, and to suppress or otherwise control irrelevant activities. When the role changes the project team has to be disbanded and reformed.

The individual as a multiple task enterprise is shown in simplified form in Figure 1. Task systems *I* (T_1) and *II* (T_2) require the individual to take roles 1 and 2 (R_1 and R_2). R_1 and R_2 overlap to the extent that they use some, but not all, of the capabilities of the individual. The task systems are related to



Ep = external environment of individual
 P = ego function
 r = internal world of individual
 T_1 , etc. = tasks
 R_1 , etc. = roles

Figure 1. The role system of the individual

different but neighboring parts of the environment. The management controls required will also therefore be similar, but not necessarily the same. In contrast, task system III (T_3) requires the individual to take role 3 (R_3). This requires quite different capabilities, is related to a quite different part of the environment and hence requires a different kind of managerial control. In practice, such complete splits are not usual (except in the schizophrenic), but it is possible to recognize, on the one hand, those individuals who are always the same no matter what the situation is or with whom they are in contact; and, on the other, those who appear to be quite different people in different situations.

More generally we can say the ego-function has to exercise different kinds of authority and different kinds of leadership in different roles and in different situations. Dislike of the role and of the activities or behavior required in it, and the demonstration of the dislike by attempts to change the role or modify the behavior, or the intrusion of feelings or judgments that contradict role requirements, inevitably distort intakes, modify conversion processes and can only result in inappropriate outputs. It is as though the management of a multiple task enterprise were to set up a project team for the solution of a particular problem but not only could not be sure whether the team was working on the right problem but could not even control membership of the team or the resources they used or squandered.

In effect, I wish to suggest that the general conception of a project type organization can be used, however crudely, to represent the individual as a role-taking but sentient being. In the individual, the sentient groups and resource pools of the enterprise become the repositories of the capacities of the individual to fill different roles. The resource pools hold the intellectual power, cognitive and motor skills, experience and other capabilities; the sentient groups the attitudes, beliefs and feelings—the world of objects and part objects—resulting from up-bringing. In effect, because a role demands specific skills and the exercise of specific authority in a particular context it is unlikely to require every personal attribute of a given individual. Some attitudes and some skills will always be unused by any given role. Maintaining a role over a long time leads, therefore, either to the atrophy of unused attributes or to the need to find other means of expressing them.

I recognize, of course, that for human beings the many import-conversion-export processes cannot be so easily defined as the previous paragraphs might suggest, and that “productivity” is seldom a simple measure of the difference between known intakes and known outputs. I hope, however, that this way of thinking about an individual will help to clarify some of the problems of role-taking when we have to consider group and intergroup processes.

The ego-function has therefore to control not only transactions across the individual/environment boundary but also between role and person. When the ego-function fails to locate boundaries precisely and fails to control transactions across those boundaries, confusion is inevitable—confusion in roles and in the authorities exercised in roles. Authority and responsibility appropriate in one role are used inappropriately in other roles. To be continuously confused about the role/person boundaries or completely unable to define and maintain boundaries is to be mentally sick.

The Group

“Individual” has little meaning as a concept except in relationships with others. He or she uses them and vice versa to express views, take action and play roles. The individual is a creature of the group, the group of the individual. Individuals, according to their capacity and experience, carry within themselves the groups of which they have been and are members. Experiences as infant, child, adolescent and adult, within the family, at school and at work, and the cultural setting in which one has been brought up will thus affect, by the way in which they are molded into one’s personality, the contemporary and future relationships made in family, work and social life.

A group always meets to do something. In this activity the members of the group co-operate with each other; and their co-operation calls on their knowl-

edge, experience and skill. Because the task for which they have met is real, they have to relate themselves to reality to perform it. The members of the group have, therefore, to take roles and to make role relationships with each other. The work group is now a task system. It may or may not have very much sentience depending on the extent to which its members are committed to each other. Even as a sentient system it may, or may not, support task performance. Controls are then required:

- to regulate transactions of the whole, as a task system, with the environment and of the constituent systems with each other
- to regulate sentient group boundaries
- to regulate relationships between task and sentient groups

But, in the discussion of the individual, I wrote that the role taken by each member of a group is also a task system, and that the management of each of these (the ego-function) has to control the relations between the task and sentient systems of the individual. So long as the role taken by each individual member is supported by that member's own individual sentient system, the task group and sentient group tend to coincide. But individual members may not be aware of all the elements either of their own individual or of total group sentience, even if such exists. To put this another way: task roles are unlikely to use all attributes of every member's personality; the unused portions may or may not support role-, and hence group-task, performance, but neither individual member nor group may be aware of the discrepancies between individual and group sentience or of changes over time.

More importantly, the unused attributes of individuals may themselves have such powerful sentience attached to them that they have to be expressed in some way. That is, an individual, though a member of a task group, may be unable to control those personal attributes that are not relevant to task performance and may seek other outlets for the emotions and feelings that the unused attributes and the inability to control them gives rise to. This represents a breakdown in the management control of the individual so far as role performance is concerned. Group-task leadership may still so be able to control group sentience, as not only to overcome individual discrepancies but also to harness group emotions and feelings in favor of group-task performance. The charismatic leader, for example, can be said to attract to him- or herself as a person the unused sentience of group members and, being concerned with task performance, can thus control any group opposition to that performance. If task leadership cannot either harness group feelings in favor of task performance or contain opposing feelings by personal leadership, then other groups consisting of some or all of the task group members may be formed to express opposing sentience. Such groups may seek and appoint other leaders. If the other group gets support from all other members of the task system, however

unaware they may be of this support (since individual management control has broken down), then the other group can become more powerful than the task group.

In the basic assumptions Bion (1961) describes the situation in which the sentience of the roles taken by the members of a group in the task system may or may not be stronger than other possible sentient systems. If the sentient systems of the individual members coalesce, that is, individual members find a common group sentience, then the group can be said to be behaving as if it had made a basic assumption. If the common group sentience is opposed to task performance, that is, the control is not maintained by task leadership, other leaders will be found.

I now feel that Bion's concepts describe special cases which are most easily observable in small groups, because they are large enough to give recognizable power to an alternative leadership, and yet are not so large as to provide support for more than one kind of powerful alternative leadership at any one time. As Bion points out, the capacity for co-operation among the members of a task group is considerable; that is, role sentience in a task group is always likely to be strong. Hence, while the group maintains task definition the strength of the sentience supporting task performance at the reality level makes the life of leadership opposing task performance precarious.

A pair who have met to perform an agreed task can hardly provide alternative leadership and remain a task system. With three, an alternative leader is rapidly manifest and either immediately outnumbered or at once destroys co-operation in task performance, i.e., the three cannot easily remain a task group. (Two is company, three is none.) A quartet can provide some support for alternative leadership by splitting into pairs, but cannot sustain the split for very long without destroying the quartet as a task system. In groups of five and six, the interpersonal transaction systems are still relatively few and task leadership can be quick to recognize alternative leadership, usually before it can manifest powerful opposition to task performance. Above six, the number of interpersonal transactions becomes progressively larger, and hence it may be more difficult to detect their patterning.

In general, the larger the number of members of a group, the more members there are to find an outlet for their non-task related sentience, and hence the more powerful can be its expression, and the more support can an alternative leader obtain. Equally, because of the large number, the more futile and useless can group behavior appear when there is no sentient unanimity among the membership either in support of, or in opposition to, group task performance. In other words, the larger the group the more opportunities members have to divest themselves of their unwanted or irrelevant sentience, by projecting it into so many others.

But the individual is a multiple task enterprise, and his various sentient

systems can be in conflict with each other. When he joins a group to perform a group task, he must, by his very joining, to some extent commit himself to take the role assigned to him, and hence to control irrelevant activities and sentience. Mature individuals thus find themselves distressed and guilty when in any attempt to reassert “management control” over their own individual boundaries they recognize, however vaguely, the number of different hostages they have given to so many conflicting sentient groups.

The situation of the group can be roughly approximated symbolically:

Let the members of a group be: $I_1, I_2, I_3, \dots, I_n$.

Each is capable of taking many roles: $R_1, R_2, R_3, \dots, R_n$.

Each role, in the way the term is used here, is a task system in itself. It comprises a number of specific activities together with the necessary resources for its performance. The resources should include not only the skills, but also the appropriate attitudes, beliefs, and feelings derived from the individual’s sentient groups. But not all individuals are capable of taking all roles, and role performances by different individuals in the same role also differ.

If the role performance is represented by IR , then

$$I_1 R_1 \neq I_2 R_1 \neq I_3 R_1, \dots \quad \text{and} \quad I_1 R_1 \neq I_1 R_2 \neq I_1 R_3, \dots$$

Ideally a task system requires only activities and we could then write

$$T = f(R_1 + R_2 + R_3 + \dots + R_n) \\ = f\Sigma (R)$$

But because roles are taken by individuals, we have to write

$$TP \text{ (task performance)} = f(I_1 R_1 + I_2 R_2 + \dots + I_n R_n) \\ = f\Sigma (IR) \tag{1}$$

if we assume R_1 to be taken by I_1 , R_2 by I_2 , etc. But when an individual takes a specific role not all his or her aptitudes are likely to be used, and performance in any specific role is likely to be reduced by the amount of “energy” devoted to other aptitudes and to other sentience. If we represent these other irrelevant activities and their related sentience by $R^{\circ}_1, R^{\circ}_2, \dots, R^{\circ}_n$, then any given role performance R_1 by an individual I_1 will have to be written as

$$I_1 R_1 - I_1 (R^{\circ}_1 + R^{\circ}_2 + \dots + R^{\circ}_n)$$

in which R°_1, R°_2 , etc. can have zero or positive values so far as they do not affect or oppose $I_1 R_1$. (I assume that all task supporting sentience is included in R_1 .) Equation (1) therefore has to be written:

$$\begin{aligned}
TP &= f[\Sigma(IR) - I_1(R_1^\circ + R_2^\circ + \dots + R_n^\circ) \\
&\quad - I_2(R_1^\circ + R_2^\circ + \dots + R_n^\circ) \\
&\quad - \dots - I_n(R_1^\circ + R_2^\circ + \dots + R_n^\circ)] \\
&= f[\Sigma(IR) - \Sigma(IR^\circ)] \tag{2}
\end{aligned}$$

Even if $\Sigma(IR^\circ) \neq 0$ and has a positive value, it can still be small enough to be controlled, either because of the discrepancy between the many different roles taken by the different I s or because the combinations of different numbers are themselves small. Nevertheless, the sentience invested in the R° s can still produce such disagreements between I s that a sense of futility can grow as I s spend more time and energy trying to find agreement between themselves in roles irrelevant to TP than in R_1, R_2 , etc., that are relevant. If overtly or covertly they all agree on a role that is irrelevant to TP (say R_m°) then equation (2) becomes:

$$TP = f[\Sigma(IR) - R_m^\circ \Sigma(I)] \tag{3}$$

Writing out equation (3) more fully gives

$$\begin{aligned}
TP &= f[(I_1 R_1 + I_2 R_2 + I_3 R_3 + \dots + I_n R_n) \\
&\quad - R_m^\circ (I_1 + I_2 + I_3 + \dots + I_n)] \tag{4}
\end{aligned}$$

It can be seen that because R_m° is taken by all group members it can become a considerable threat to TP , which requires different members to take different roles. If R_m° is large enough and is a consciously agreed role, there is revolt; if members are unaware both of their agreement and of the role they have agreed upon, they are then behaving as if they have made a basic assumption opposed to task performance.

It can also be seen that the more I s there are the greater the threat of $R_m^\circ (I_1 + I_2 + \dots + I_n)$ but, at the same time, the more difficulty there is likely to be in getting agreement on R_m° . It can also be seen why, with smaller numbers, alternative leadership is difficult to sustain without immediate destruction of task performance. From equation (4), $TP = f[(I_1 R_1 + I_2 R_2) - R_m^\circ (I_1 + I_2)]$ for a pair. If now R_m° has a large value, and is reinforced by $I_1 + I_2$, it will almost certainly give TP a negative value.

Inter-Group Process

I have tried to show that all transactions, even the intra-psychic transactions of the individual, have the characteristics of an inter-group process. As such they involve multiple problems of boundary control of different task systems and

different sentient systems and control of relations between task and sentient systems. Each transaction calls into question the integrity of boundaries across which it takes place and the extent to which control over transactions across them can be maintained. Every transaction requires the exercise of authority and calls into question the value of and sanction for that authority.

In the examination of a simple inter-group transaction between two groups in which individuals represent the two groups, account has to be taken, therefore, of a complex pattern of inter-group processes: within the individuals who represent their groups, within the transactional task system, between the groups and their representatives, within the groups and within the environment that includes the two groups. Even a simple inter-group transaction is, therefore, affected by a complex pattern of authorities, many of which are either partially or completely covert. If I now extend the analysis to more than two groups, each with more than one representative, the pattern becomes still more complex. A meeting of pairs of representatives from four groups is illustrated in Figure 2. It will be seen that in the meeting of representatives alone transactions across seventeen different pairs of boundaries have to be controlled: four pairs for each pair of representatives and one pair for the group of representatives as a group.

To understand the nature of the authority of a representative, or of a group of representatives, appointed to carry out a transaction on behalf of a group, involves, therefore, the understanding of multiple and complex boundary controls. In other words, the appointment of a representative or representatives is never just a simple matter of representing a task system to carry out a task-directed transaction with the environment. To put the same thing more colloquially: representatives are invariably chosen not only to carry out the specific transaction, but also to convey the mood of the group about itself and about its representative, and its attitude, not only to the specific part of the environment with which the transaction is intended, but to the rest of it as well. And not all the "messages" are explicit and overt; many, if not most of them, are implicit and covert.

But the representatives have their own intra-psychic processes, and their own intra-psychic groups have had to make inter-group relations with the groups they represent. The same mixture of transactions, overt and covert, have, or should have, taken place before he or she starts the inter-group transaction for which he or she has been appointed. The results of these transactions can seldom endow the representative with personal attributes that he or she did not previously possess, at least latently. The choice of representative(s) therefore offers important data about the group attitude, not only towards its task, but also towards itself and its environment. Further important data can be gathered from the extent to which the representative is given the authority to commit the group, and by his or her status within the group.

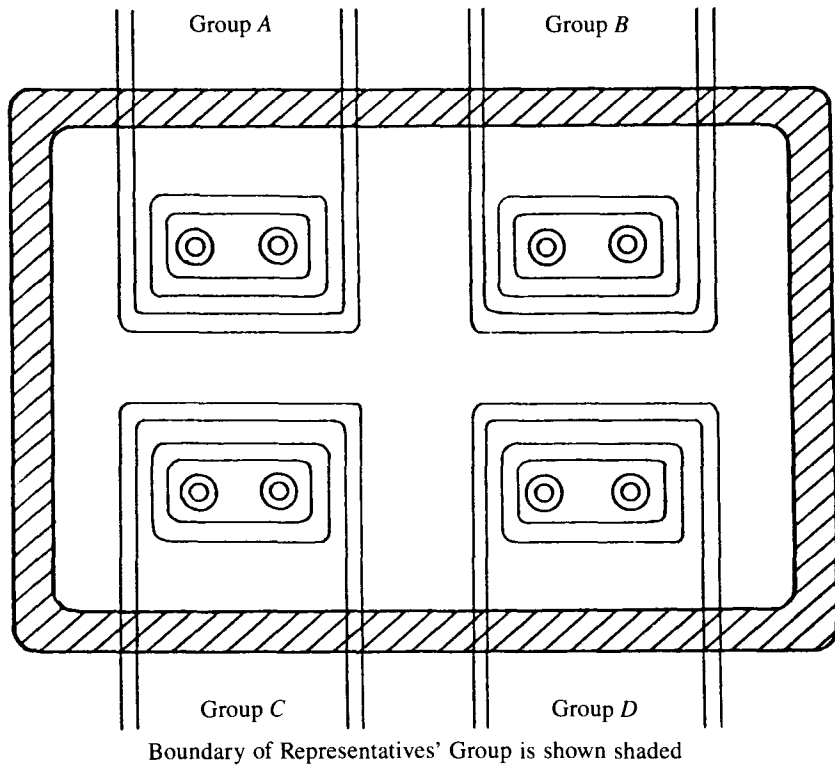


Figure 2. Meeting of representatives' groups—one pair from each of four groups

Another dimension of complexity has to be mentioned: time. I have spoken about the problems of the control of the representative's own boundaries, of the boundaries between the representative and the group and of the relative strengths of the individual, group and transactional task system boundaries. It is surely rare for them all to be perfectly controlled in the interests of task performance. Even if they are, a transaction takes time, and during the transaction the representative cannot be in continuous communication with the group, not, that is, if he or she is anything more than a relay system. During the transaction the individual, group and task system sentiences may change. Indeed, in any critical negotiation they are almost bound to change, as hopes and fears of the outcome increase and decrease.

The past, during which decisions were made, attitudes formed and resources collected, is always the past; a transaction is the present and, if it is to have any meaning, must determine a future. Individuals, and even groups with

strongly defended boundaries can, by staying firmly within them, occasionally live in the past; inter-group relations never.

The number and complexity of the boundary controls required for even comparatively simple transactions between groups might make one wonder how any negotiation is ever successful, how any salesman ever got an order for anything. The reality is, of course, that the preponderance of inter-group transactions takes place in settings in which the conventions are already established and mutual pay-offs understood. Nevertheless, I suggest that it is this complex authority pattern, imperfectly comprehended, together with the need to defend each of the boundaries in the multiple transactional systems against uncertainty, chaos and incipient disaster, that gives rise to the futility of so many negotiations and to the unexpected results that often emerge. The conventions and pay-offs for the majority of inter-group transactions are defenses against chaos and disaster. In new kinds of negotiations without established defenses, the fear of chaos and disaster often makes procedure more important than content.

There is perhaps small wonder that international negotiating institutions find it so difficult to satisfy the hopes of their creators. Indeed, unless the boundary of the negotiating group itself becomes stronger than the boundaries that join the representatives and those they represent, there seems little hope of successful negotiations. But this means that not only the group of representatives but the groups they represent have to invest the representative task system with more sentience than they invest in their own groups. The United Nations cannot, in other words, be fully effective until not only the members of its Council but the nations they represent invest more sentience in the United Nations than they do in their nationalisms.

The Role of Leadership

Finally, I turn to the role of leadership, which can be conceived of as a special case of representation: representation with plenipotentiary powers. Conceptually, it is irrelevant whether the role is taken by an individual or by a group. For convenience, I shall discuss it in terms of an individual leader.

As a member of a task group every individual has to take a role and through it control his or her task transactions with colleagues individually and collectively; the leader as a person also has to control his or her own person/role transactions as well as interpersonal relationships with colleagues. In addition to these, a leader has to control transactions between the group and relevant agencies in the environment in the interests of task performance; without such control task performance is impossible. In this sense, the role taken by the leader and the boundary control function of the group must have much sen-

tience in common. For the leader, at least, sentient group and task group *must* reinforce each other. So far as task performance is unsatisfactory, by reason either of inadequate resources or of opposing group sentience, transactions with the environment are likely to be difficult and the task sentience of the leader weakened if not destroyed.

Using the earlier notation and letting R^L represent the role of leader taken by an individual I , leadership task performance can be written:

$$\begin{aligned} TP &= IR^L - I(R_1^\circ + R_2^\circ + R_3^\circ + \dots + R_n^\circ) \\ &= I(R^L - \Sigma R^\circ) \end{aligned}$$

For the leader at least, ΣR° must be close to zero. What he or she has to provide is an IR model that is task oriented. The model, however, must be a credible one. A leader who puts too much energy into IR^L (with $\Sigma R^\circ = 0$) is hardly credible and gives no reinforcement to group members in controlling their own ego boundaries; on the other hand, a leader who puts too much energy into ΣR° encourages followers to do the same; their $\Sigma(IR^\circ)$ may only temporarily take the same form as the leader's, with consequent detriment to task performance.

More generally, since transactions with the environment can only be based on adequate task performance, the leader's authority has to be based on sufficient group sentience that is supportive of such performance. It follows that the mobilization of group sentience for any other reason than task performance—for example, personal loyalty, friendship or ideology—always leaves a task group vulnerable. It also follows that any change in the group task, by change either in the environment or in the group, changes not only the internal transactions between the members but also those with the environment, and hence the role of leadership and the appropriate sentience that has to be mobilized.

In practice, groups use all kinds of feelings and attitudes to maintain cooperation in task performance: love, affection, friendship, hatred, dislike and enmity as well as commitment to the group task. So far as a group is committed to its task, contrary sentience, including leadership's own, can be contained and controlled within the group; so far as commitment is tenuous, so far will the group find it impossible to control the contrary sentience. Under such circumstances, task leadership is castrated, the task redefined or irrelevant transactions with the environment have to be used to cope with the discordant feeling and attitudes.

Reference

Bion, W.R. 1961. *Experiences in Groups and Other Papers*. London: Tavistock Publications; New York: Basic Books.