

TENSING ASSOCIATIVE NETWORKS TO CONTAIN THE FRAGMENTATION AND EROSION OF COLLECTIVE MEMORY*

by Anthony J N Judge

Introduction

As with many other social phenomena, never has there been a period of history in which so much occurred under the term «communication». There has been little interest in attempting to see how the many different forms of communication are related and in determining the significance of the resulting pattern. In general it is clear that these processes are vital to the future evolution of world society, but it is far from clear how they relate to the pattern of societal institutions and to the increasing problems they attempt to resolve. These are the preoccupations of this paper which also attempts to clarify the nature of some of the inherent limits which must be taken into consideration if the pattern of future communication is to contribute significantly to any response to the emerging world crisis - and if the quality of individual and collective life is to be enhanced.

Miscommunication about communication

There seems to be no adequate overview of the range of forms of communication. On the one hand, it is a topic which too easily lends itself to generalities of little operational value. But on the other hand, communication-related projects stressing concrete issues of importance too easily misrepresent the full range of communications by creating the impression that the aspect of concern is the principal one and others are negligible - although usually no reference is made to them.

The best example of this is the much publicized International Commission for the Study of Communication Problems which has just completed its work (1). Its mandate from Unesco was: «to study the totality of communication problems in modern societies». But Sean Mac Bride in his introduction to the final report states «ours is not simply a report on the collection and dissemination of news or on the mass media» but nevertheless «the major problems in these areas were starting points for our discussion». It so happens

that most members of the Commission were directly connected with the media as were the working documents prepared. Furthermore in the final report Sergei Losev (USSR) notes:

«The term «communication» - was not properly defined and this tended to mar our Report terminologically. Communication and information, communication and mass media are often mixed up. It is especially regretful that due to this too wide a definition of the term «communication» the problems of information were not adequately dealt with... And it would be incorrect to translate the word «communication» into Russian otherwise than «information» in too many cases» (1. Appendix).

The report does not clarify what aspects of communication have been excluded. Seemingly as a response to some omissions in Unesco's venture, the International Telecommunication Union has agreed to act as the lead agency for a UN World Communication Year proposed for 1983. Having excluded «transportation» from the scope of the Year, the hardware-oriented proposal is that: »*It would take into account communication services such as public correspondence (telephone, telegraph, telex etc.), telecommunications services including space telecommunications and data transmission, telecommunications for the press, sound and television broadcasting, telecommunications for civil aviation and for shipping, and postal services. The Year would focus on the progress of communications technology and its contribution to development*» (2, para. 9) (*).

But again, even after combining the Unesco and ITU approaches, what aspects of communication are quietly neglected? How easy it is for initiatives such as these to misrepresent the scope of communication.

Towards an overview of communication

There is little point in striving for some objective definition for «communication». Like the United Nations attempt to define aggression, this would require many years and have little final value. What would be

of much greater value would be to establish some kind of «map» on which were located all the different forms of communication. Hopefully this could be done in such a way that communication «problems» and the domains of organizations concerned with communication could both be located. Such a map - even if crude - would clarify what was included in any discussion or project on «communication» - and what was excluded. In addition to the Unesco study, three valuable broad-based sources to guide the construction of such a map are:

- communication-related organizations (whether governmental or nongovernmental) as listed amongst the 10,000 bodies in the *Yearbook of International Organizations* (4)
- communication-related problems as listed amongst the 2,600 «world problems» - in the *Yearbook of World Problems and Human Potential* (8) (*)
- forms of presentation as currently under review in a sub-project of UN University's project on Goals, Processes and Indicators of Development. (**)

At a June 1980 meeting of this sub-project some steps were in fact taken towards clarifying useful dimensions for such a map. A first draft, necessarily crude, is given as Diagram 1. The map includes varieties of communication which are easily neglected but a test for the value of including any particular item is whether an aspect of communication is lost by excluding it. It is preferable that the map should contain items which raise doubts rather than include only those on which there is widespread consensus. An important characteristic of such maps is precisely that a horizon effect makes it difficult for people preoccupied with distant domains on it to recognize the communication significance of each other's domain.

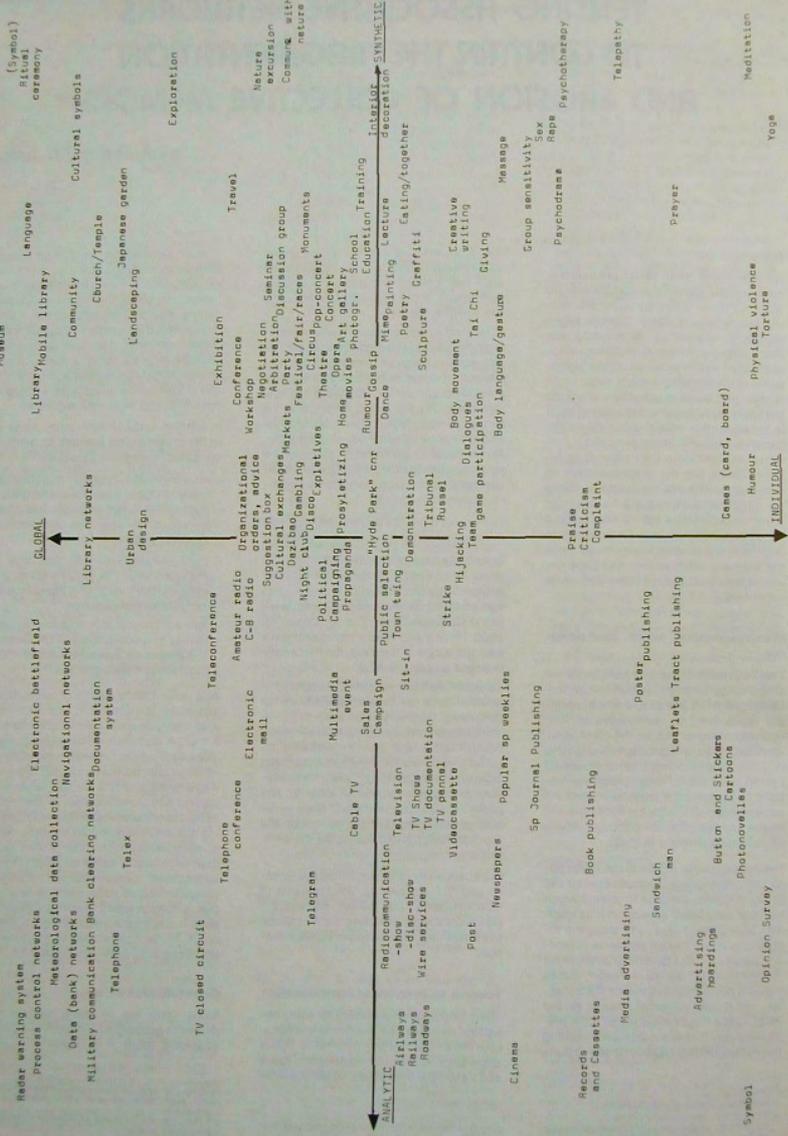
Communication for what?

Since there are so many barriers and problems associated with communication in society today, it is important to look

(*) Prepared for *Communication III (Role of associations in transnational communication) of the World Forum of International/Transnational Associations Brussels, 23-27 June 1980*

(*) A final decision on the Year has been deferred to an ECOSOC meeting in July 1980.

(*) Some 200 communication-related problems have already been extracted from this publication by L. S. Harms (9) (**)
(**) The Union of International Associations is participating in this sub-project.



carefully at the consequences of removing them - if that were possible. It is too easily assumed that the « free flow of information » would lead automatically to an improved condition of society and to view that as a valid goal.

There are however certain inbuilt limits connected with the communication process which will be discussed in more detail below. But the fundamental question is the social significance of communication. Perhaps the following main kinds of communication can be usefully distinguished :

- communication to maintain the social fabric and the sense of community, namely a socialising process largely independent of content (to some extent « communication for communication's sake ») reinforcing the sense of identity of the communicators
- communication in response to recurring problem situations through known procedures possibly requiring some adaptation
- communication with new content demanding new patterns and completely new procedures
- focused communication orienting new communication patterns in terms of some overriding pattern of concerns.

The second of these may be associated with the « maintenance learning » process identified in the recent Club of Rome report (5) as faltering when faced with the unexpected. The third corresponds to the - innovative participatory » learning process which that report stresses as the important complement to maintenance learning. But whilst the innovative communication needs of specific new situations are relatively easy to comprehend, their iconoclastic characteristics are precisely those which resist any tendency to weave them together into an overriding pattern of communication capable of responding to a « crisis of crises ». This additional level of focused communication has received almost no attention. It is the corrective to excess at the third level whether of the form « innovation for innovation's sake » or the isolationism of fiefdoms each characterized by an innovative approach.

The dilemma posed by this fourth level becomes evident to some participants in exciting new communication environments, whether highly supportive group environments or those created by computerconferencing (7). When the obstacles have been removed, what is the purpose of communication ? It quickly becomes apparent that the obstacles conceal from awareness a widespread fundamental incapacity to build new conditions collectively through communication. Any recognition of this tends necessarily to be repressed and leads to a preoccupation with any of the other three types of communication. (Both the second and third conveniently create the impression that something purposeful is being achieved).

Containing significance

Achieving this fourth level of communication may be seen in terms of « containing » significance. At the three other levels this is not of major importance. In each such case communication can take place *without* great concern for whether significance is accumulated, concentrated and focused. As a result it tends to fade away rapidly as other matters well up into awareness. This does not mean that information is not registered and stored, rather that what is stored is not easily accessible to memory-it is not « active » information. Significance has to be imparted to it in some separate operation.

Whilst these remarks are relevant to the individual, it is the societal implications which are the prime concern of this paper.

The Club of Rome report cited has achieved much in stressing so eloquently the importance of « societal learning » as distinct from individual learning. How does society « learn » ? How is significance « contained » in society ? How does information of significance get built into a configuration of knowledge whose recognized significance is greater than the sum of its parts ? How does a society fail to « get its act together » or keep it together?

As a first step towards answering these questions, it is necessary to look at what is known about « collective memory » and its limitations. This is explored in a separate paper (6). Note that these limitations are limits to learning - a perspective contrasting with that of the Club of Rome report entitled « No Limits to Learning » (5) (*).

Groupware configurations as containers : constraints

Returning to the map (Diag. 1), it might be assumed that this constitutes a crude impression of a pattern of communication activity which does effectively contain significance. But as argued elsewhere (6), our society is more than just a « forgetting society », it is one in which collective memory is becoming progressively more fragmented and eroded. The fact that a more adequate map has not been produced is an indicator of the fragmented nature of society's communication processes.

The limits noted there (6) seem to preclude any centralized form of collective memory such as has been imagined in visions of a « world brain » (H G Wells). Even in the best endowed intelligence agencies, no amount of computer technology can overcome the individual human limitations to grasping and comprehending the larger patterns of significance - or the difficulty that individuals have in linking together with others those portions of the

pattern which they have each comprehended (even if they can justify the attempt). There is no way that such a society can respond, other than spastically and ineffectually, to the problems by which it is seized. Efforts by major intergovernmental institutions to grasp the world problematic through their hierarchical structures have been of little success - even when coordinative bodies are used to link their programmes. They amount to a - maintenance - level approach, using the Club of Rome terminology. National Governments have exhibited similar incapacity within their countries. The vital importance of this « learning capacity of nations » was stressed in 1978 by Ambassador Soedjatmoko, currently Rector of the UN University :

« The capacity of a nation - not just of its government, but of society as a whole - to adjust to rapidly changing techno-economic, socio-cultural and political changes, on a scale which makes it possible to speak of social transformation, very much depends on its collective capacity to generate, to ingest, to reach out for, and to utilise a vast amount of new and relevant information. This capacity for creative and innovative response to changing conditions and new challenges I would like to call the learning capacity of a nation. This capacity is obviously not limited to the cognitive level, but includes the level of institutional and organisational levels of society as well » (3).

Whilst technically it may shortly be possible to recall by computer any item of information, the problem lies with how the user is to use such a facility given the limited processing capacity of the brain. And, more specifically, how is he to learn from it and to what extent will it facilitate social learning in relation to the world problematic ?

This basic constraint emerges more clearly in the Dakar Declaration (1979) of Informatic pour les Tiers Mondes : « *The key element of human communications - the ordering and transmission of information - is tending to become a source of mis-communication. The scientific and technological breakthroughs which have led to the informatics revolution are way a head of the learning process of human society. This cultural lag is the most serious challenge to a comprehensive view of the implications of informatics. It is a matter of values, of organizational capacity and transformation in mental structures ».*

Groupware configurations as containers : possibilities

A fresh approach to the problem is offered by Yona Friedman in a study of the critical groupsize above which groups cease to be able to function effectively. This study emphasizes that an individual, or a collective body for that matter, can only maintain a very limited number (« valency ») of effective contacts thus forcing the communication pattern into the form of a network (possibly linking conventional hierarchical bodies) :

(*) With the recent publication of the French edition of the Club of Rome report under the title: « On ne Unit pas d'appréhender », it becomes apparent that there is a somewhat trivial mention to the Club of Rome argument. Equally significant reports could be produced bearing titles such as « No Limits to Forgetting » or « On ne finit pas d'oublier ».

" I think, personally, that a « centress » network, a society with « weak communication » might be a goal worth striving for, as it might offer better tools for survival than in our actual society. I also think that the effects of critical size drive us in this direction, but much more study is necessary before we are able to speak out with certitude - (18, p. 27). (See Annex).

But, expressed in this way, there is no possibility of moving beyond the first three levels of communication. Friedman's centress network does not have any overriding pattern which would be the vehicle for a new level of societal response to the world problématique. It reflects diversity without any degree of coherence or unity. It is difficult to argue that existing networks give evidence of constituting a viable new level of structure - at best they are a complement to conventional hierarchical bodies. As argued elsewhere, they tend to « flabbiness » lacking necessary « tension » (19). Such flabbiness is symptomatic of inability to maintain any level of collective attention or awareness (*).

There is a little-known form of centress network which exists in a state of tensed dynamic equilibrium. This is the tensegrity (derived from tensional integrity) whose overriding, non-hierarchical pattern is essential to its integrity (13, 16). The modes of the network respect Friedman's condition of limited communication valency (usually 3 to 5). But the tensegrity network is usually curved, as a whole, as though forming (approximately) the surface of a sphere. Thus it is finite but unbounded unlike networks conceived on a two-dimensional surface. And the more complex the network, the closer it approximates to a sphere. There is no privileged centre on this surface network. But the sphere centre, with respect to which the network is curved, does focus as a common reference point about which dynamic equilibrium is maintained. The sphere volume is however empty and its centre is not - occupied » by any super-privileged coordinating node. In this sense the network is doubly « centress ». Such tensegrities are not simply theoretical configurations. They may be constructed. But to do this a most important additional feature is required, for by itself any such network would simply collapse (like a string shopping bag). The configuration is maintained by the presence or separators which keep some adjacent nodes apart

(*) This may often be well illustrated in the microcosm of a conference. One group of participants will agree that viewpoint A is valid, subsequently another group will agree that an opposing viewpoint B is valid. This progression

and abandonment of opposing viewpoints (e.g. A-B-C-D-A, or M-N-O-P-Q-R-S-M), it might even be hypothesized that the length of such cycles (or the complexity of the network) is unconsciously chosen by the group so that the pattern cannot be encompassed by the collective attention span of those present. Subjection to such cycles bears a strong resemblance to the situation identified by the well-known Peter Principle. This states « People are promoted to the level at which they become incompetent ». A conference group would thus necessarily be incompetent in that collectively it cannot sustain the attention span to encompass the cycle it engenders and is consequently governed by the linear sequence of viewpoints through which it progresses as well as the dynamics between them.

and tense the network connections between them. Thus a tensegrity is a configuration of dynamic equilibrium between two counter-balancing forces which together maintain the integrity of the sphere (20).

How can such a configuration « contain significance » ? It must be remembered that significance is conventionally associated with hierarchical structures and is considered as concentrated in, or focused into, the highest element in the hierarchy (e.g. the highest office or the most general concept). But for a hierarchy to function as an adequate container :

- the relative insignificance of the lower elements in the hierarchy relative to the higher must be accepted by all concerned
- significant interaction between the lower elements can only take place if mediated by a higher level element
- an external force is required (an enemy or a problem) against which the hierarchy acts thereby « recharging » its own significance.

Such characteristics do not match the complexity of the modern problématique. In the tensegrity, however, there is no higher or lower element in any conventional sense. Interactions between adjacent elements are governed by the dynamism of the counterbalancing forces. And the externality of the enemy or problem is transmuted into an internal structuring force (**).

It is worth noting that human beings are seemingly unable to comprehend significance except in terms of difference. This is especially evident in the physiology of vision (eye scanning movement) or hearing (**), and is probably equally true in the realm of values, if the difference is externalized, humankind will forever need an external « enemy » to recharge its significance. If it can be internalized in tensegrity-type containers, then there is a possibility of transforming the dynamics into a more fruitful and more significant pattern. This approach has been explored in more detail elsewhere (10, 20).

Interdisciplinary illusion

Friedman's notion of maximum valency for a node in a network may be usefully extended to the realm of concepts and intellectual disciplines. If it is recognized that each concept or discipline can only effectively be related to a very limited number of « adjacent » concepts or disciplines, then the much desired goal of meaningful interdisciplinarity emerges in a new light.

It is no longer a question of establishing a « United Nations » of sovereign disci-

plines (*), possibly with « Specialized Agencies ». This conception of hierarchical interdisciplinarity is an illusion. The question is rather whether the overlapping pattern of relationships between concepts of disciplines (***) can be perceived as a spherical tensegrity network in which the very real incompatibilities between some concepts or disciplines are recognized as the vital structuring factor to maintain the integrity of the whole at a new level of significance. The tragedy of our civilization is not so much that these incompatibilities are the basis for so much irrational emotional hostility between those who should collectively be providing guidance in response to the world problématique. The real tragedy is society's inability to make use of these incompatibilities, recognizing them for the structural and energizing resource they represent. It is the wedding between the rational and the irrational which needs to be brought about.

Associative network

How then is all this relevant to the role of associations in transnational communication ? Given the inability of any one body to contain the range of significance relevant to the world problématique, it becomes necessary for society to depend upon the communicating network of bodies (***) each aware of some portion of the relevant pattern of significance. Each such body becomes the active guardian of some portion of collective memory. With each such body are associated those individuals for whom that portion of collective memory is an active preoccupation.

But, as argued above, it is far from enough to rely on the network simply as a network. The inadequacies of this strategy are evident in the manner in which crises are progressively exceeding society's control. If, once again, it is recognized that each body can only relate meaningfully to a very limited number of other bodies, then the challenge is to see whether this network cannot be perceived as a tensegrity network.

In such a tensegrity, once again, the very incompatibilities between some bodies in it would be an essential structuring feature to ensure the dynamism and integrity of the whole at a new level of significance.

In this way the widest possible spectrum of perspectives is reflected in (or contained by) the consensual network-without attempting simplistically to arrive at total consensus on particular issues (which would distort the network or rip it apart). Once again, the unbounded curved network does not have an - occupied cen-

(*) « An essential difference today is that contemporary complexity is caused predominantly by human activities...

Global problem s. current y the chief manifest ations of

complexity, are first and foremost human problems. They are only secondarily attributable to natural causes. (p. 5-7).

(**) « Learning research should be re-oriented, interdisciplinarity should help to overcome the detrimental « sovereignty » of the individual disciplines » (5, p. 134). (**) This recalls the so-called « fan-scale » model of knowledge.

(***) Simplistic distinctions such as between intergovernmental and nongovernmental no longer reflect the complexity of society or the bodies active in it.

(***) « we are always comparing one sound with another. We can appreciate only the differences in sound (21, p. 23).

tre ». The centre of the sphere is inaccessible to the surface network which defines it. It is this centre which is effectively the unsteatable common reference point for the network - unsteatable because no formulation from any particular local surface position would lead to « agreement around the whole surface ». It is its « emptiness » which is effectively an indication Of its utility (*). (See Annex).

Areas of the surface of the sphere then indicate possible common interest groups (e.g. at a « coordinating » conference). But as the area increases, the « horizon effects » of the sphere prevent the more distant points from appearing relevant or significant to each other - they have different external referents (**). This situation suggests the possibility of moving away from « resolutions » based on unanimity or a « democratic majority » towards *variegated* consensual outcomes. It provides a stabilized (spherical) « platform » on which new forms of organized action can then be based and interrelated. It is no longer possible to depend optimistically upon *managing* action based on *agreement* (and the associated variety reduction). The network cannot be « organized » by any central body although recognition of its emerging pattern can be facilitated. Solutions have to be found to the more challenging problem of the self-management of (partially ordered) configurations of *disagreement* - and benefiting from the variety of perspectives thus encompassed.

« Resolutions » necessarily tend to give rise to simplistic hierarchical structures to implement them. By contrast, this approach delineates the pattern of the decentralized organizational network needed to operationalize the complex range of tasks reflected in the contrasting perspectives of the bodies in the network - and yet the integrity of the whole is maintained (see Annex).

World problem network contained

The same approach can be applied to ordering society's perceptions of world problems. In preparing the Yearbook of World Problems and Human Potential (8), documents of international bodies led to the description of some 2,600 such problems in a network of 13,000 relationships. It is possible that this could be usefully perceived as a curved *tensegrity* network structured by the incompatibilities between certain perceived problems.

Once again the full significance of the network as a whole cannot be comprehended from any one part of it. But this approach reflects a major step beyond the easy use of the term « world problematique », and offers avenues of comprehension lacking in a compilation like the above Yearbook.

Of special significance in this case are the symmetry properties of any such world problem *tensegrity*. These are the major factors behind the dynamic equilibrium of the *problématique*. As unseen « negative » forces they merit the symbolic labels attributed to them in religious pantheons, as does the empty centre of such a problem *tensegrity*. For it is not the « surface features » of the *problématique* which would be the focus of concern, but rather those dynamic patterns which govern the manifestation of such features. These are necessarily difficult to comprehend - most difficult being the significance of the empty centre and the fundamental challenge it constitutes to our current civilization.

This problem network can be « contained ... (*) » if it is melded into the associative network discussed above. This process is however a continuing challenge to comprehension which at the moment far surpasses our collective ability, and where comprehension fails elements of the *problématique* will literally spring out of containment (**). Much needs to be investigated in this domain.

Encouraging more relevant communication patterns

It is one thing to note real possibility for society to give birth to a new overriding *tensegrity* communication pattern appropriate to the containment of the world *problématique* and whereby collective perception of society's condition is transmuted into a new framework. But it is quite another thing altogether to discover what specific communication pathways need to be opened up, and how this can be encouraged. Strangely enough society knows little about building communication networks, other than under hierarchical initiatives. Who could indicate the relationships between the forms of communication in the map in Diagram 1 ? One macro-level approach would be to undertake a continuing experiment with information on all international bodies such as the 10,000 identified in the Yearbook of International Organizations (4).

The aim would be to move :

- beyond two-dimensional matrices of such bodies (on the basis of experiments in matrix organization)
- to three-dimensional interlocking categories constituting a *tensegrity*-type communication pattern (20).

In practice this might take the form of a computer-generated « Transnational Action Yellow-pages » on which initial tests have already been made with funding from the Commonwealth Science Council. The mapping and interactive dimension of this project has not as yet been able to attract funds.

One micro-level approach would be to experiment with communication between participants at large-group conferences. This possibility was opened up at the 1979 conference of the Society for General Systems Research (17). A further development of this « *metaconferencing* » experiment took place at the 1980 World Forum of Transnational Associations (22). Much more work is required however before participants can be helped to construct *tensegrity* groups (at a conference) which those involved perceive as having a new order of significance. And even more will be required before *tensegrity* communication patterns can emerge to provide the basis for *tensegrity* conferences (15). But the nature and practicality of what needs to be done is very clear.

Through such participatory exercises hopefully the practical outlines of a new macro-level strategy will emerge in a comprehensible form capable of focusing the diversity of perspectives relevant to the containment of the world *problématique*.

Role of the individual

Although communication clearly involves human beings, it is too easy to neglect the human factor and treat individuals as communicating « units ». This is no longer an adequate perspective as the Club of Rome report points out :

« Not only is a critical element still missing from most discussion on global problems, but the most striking analyses of the world problematique are diverting attention from a fundamental issue. What has been missing is the human element, and what is at issue is what we call the human gap... We call it a human gap, because it is a dichotomy between a growing complexity of our own making and a lagging development of our own capacities » (5, pp. 6-7).

The key to a better integrated fourth level of focused communication in response to the world *problématique* lies in enhancing the individual's ability to comprehend more subtle patterns. The limits to integration lie in the individual's limited ability to « put things together » in more complex ways. But these limits may be artificially reinforced by widespread emphasis on the most obvious and least subtle forms of integration. Integration needs itself to be « liberated ». In a paper exploring this possibility (11), it was concluded that : «... more elegant forms of integration might not only be desirable but also necessary for effective integration to be achieved. But whilst our values now stress the importance of centring social development on the human being... It would appear that, to bring out the kind of integration which is required by the conditions of our society, it is essential that integration be embodied, transmuted and expressed through the individual in movement. The individual is in this sense the *dynamic* « keystone » to an integration relevant to *human* social development ».

(*) This paragraph, and those following in this section, have been adapted from (17).

(**) The possibility that global organization should reflect

(*) « Encountered » might be a more appropriate term from a Jungian perspective. The world problematique is the planetary « shadow ».

(**) As is well modelled in the process of constructing a *stok-and-string tensegrity*.

the constraints on communication networks around a spherical planet should not be neglected. Hierarchical structures cannot be mapped effectively onto spheres.

A NEW GLOBAL ORGANIZATIONAL ORDER

Principles essential to widespread response to world crises. Prepared for the planning meeting of the Planetary Initiative for the World We Choose (Stony Point, January 1981)

1. People and groups (small or large) tend to disagree on basic issues when faced with complex problems and opportunities. Such disagreement often takes the form of unrestrained mutual hostility or perceived mutual irrelevance.
2. Preoccupation with achieving or imposing consensus absorbs considerable energy, alienates or represses many willing to contribute to a solution, and necessitates oversimplifications which are ultimately dangerous. Such consensus when achieved is usually of a taken nature and can seldom be satisfactorily operationalized.
3. Social development is both the consequence and catalyst of individual human development which, although essentially undefinable, is characterized by increased ability to seek out and respond harmoniously to both diversity and challenging adversity.
4. Complex problems may be understood and approached in different and seemingly contradictory ways - and the variety of such approaches tends to be essential to adequate containment and transmutation of the problem complex.
5. When coalitions can be formed on the basis of some degree of consensus this will and should be done. However, where there is resistance to such coalitions, or considerable resources are wasted on competition between coalitions, a « New Organizational Order » is vital to further success.
6. Conventional organizations, whether hierarchies or networks, achieve limited success by relying on performance at focal centres within domains over which consensus is maintained. The focalizing task at any such centre becomes virtually impossible, however, when the full range of harmonies and dissonances in the real world has to be encompassed. A « virtual centre » is called for.
7. A « New Organizational Order » may be brought into being by recognizing the fundamental distinction between *local centres* (focalizing local or specialized consensus) and the « *unoccupied common centre* » whose position is determined by the pattern of all local specialized centres constellated around it. It is the very pattern of harmonies and dissonances between the local centres which can then engender the space of which the unoccupied centre is the focal reference point. This only occurred, by allowing them appropriate separation, and is thus itself used to maintain the form of the pattern
8. The common centre can only exist and « function » - by remaining free from the pattern by which it is defined. In a « New Organizational Order » communications cannot pass through such a centre or be mediated by it. They must travel along pathways through the pattern around the circumference (as is true on this planet). This permits many coalitions with profound differences of opinion to exist simultaneously (for example even as to whether it is « day » or « night » on the planet). However, it is their very complementarity within the unbounded overall pattern which maintains the stability of that pattern and contains its dynamism,
9. Such dialectical freedom (the freedom to dialogue) can only be adequate operationally as an organizational response to the present challenges if the dialectical pattern is rendered explicit. The greater the diversity encompassed or tolerated within the pattern, the more explicit the structure of that pattern must necessarily be. Encompassing social reality in this way thus depends upon a higher order of consensus which does not itself depend upon universal consensus of a lower order at the verbal/conceptual level. However the unoccupiable central position can necessarily only be defined and understood to a very limited extent from any local centre within the pattern.
10. The « New Organizational Order » can only succeed by being open to the harmonious and conflictual redistribution of information and energy around the pattern as a whole. For the pattern to maintain its coherence and integrity, care must be taken to ensure the emergence of a complement to every portion of the pattern; such counterpatterns counteract and absorb each other's excesses and energize each other's evolution.
11. The « New Organizational Order » cannot ultimately depend upon a single pattern to redistribute energies in response to present circumstances. Different patterns need to emerge according to the diversity to be interrelated and in response to the continuing pressures of human and social development. Familiarity with the range of patterning possibilities, and how their emergence may be facilitated, is an important factor in making this alternative viable.
12. The « New Organizational Order » will prove most significant when the transition between patterns can itself be made in harmony with a pattern of a yet higher order.

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