

Emergence of integrative processes in a self-reflective assembly

Introduction

At a congress with rather unusual characteristics (see description, page 266) the organizing group decided to stand back and thus oblige the participants in plenary to make the quantum leap in attitude from being there to be served passively by the organizing group to being, making and evolving the Congress themselves as a conscious whole. The consequences of this dramatic decision and the processes which were elaborated in plenary are described here.

Self-reflective plenary : Unity

This section reports on the consequences of the decision by the organizing group to « stand back » and allow the Congress to take care of itself. On the morning of the fifth day, participants gathered in a plenary session for a discussion which lasted some nine hours. The early hours of the discussion were filled with exchanges and complaints, often bitter and emotional.

One major theme was whether the Congress should be tightly structured with a significant proportion of the time given to lectures by the key resource people, and with much of the remainder devoted to workshops by other resource people. A strong response to this was that it amounted to a « consumer » approach - denying the importance of participants as resource persons in their own right, and reinforcing conventional structures which it was the purpose of the Congress to call into question. The point was whether the participants had come for a safe, low-risk, pre-packaged (« super-market ») experience (1) — which was often available in their home towns, in books or at other events — or whether they had come to work collectively towards new approaches, however painful the experience.

During this session, for the first time, people stopped holding back critical comments in public. Things that needed to be said were said and the responses, often very moving, resulted in integration of the group rather than fragmentation. There emerged a sense of shared reality — even if that reality was painful. It became less appropriate for a participant to stress his or her personal wants and frustrations rather than those of the group as a whole, or some significant part thereof. The session itself was held under considerable pressure from those who believed that « talking » itself was a sterile activity and a waste of time. Frequent proposals were made to have lectures or workshops, to switch to an alternative mode of expression (e.g. dancing), or to counteract the analytical divisiveness by affective displays or meditation. One response to these was they amounted to « cop-outs » and an inability to face up to the collective reality and the tensions inherent in it. Another, in the case of workshops, was that they fragmented the group as a whole and prevented it from coming to any understanding of its *raison d'être* or how its action could be improved. Handling differences by dividing into smaller groups is a standard practice in society — it results in mutual alienation and the inter-group conflict with which the Congress was concerned in attempting to reflect a greater whole. Another response, in the case of alternative modes of expression, was each such mode alienated some of the participants without responding to the problems of the whole. The paradox that the « talking » mode was equally alienating to many was also recognized as part of the Congress reality. Another theme was that of responsibility, given that the organizing group had eliminated themselves as authority figures providing a packaged experience to be consumed by participants. Every proposal that this or that should be done was met by the questions « Is

there consensus ? » and « How do we as a group propose to go about it ? » The Congress was increasingly forced to be aware of itself as a whole and to take responsibility for itself as a whole — including such matters as manning the registration desk. The argument that the real business of the participants was to obtain or share insights in workshops or lectures was strongly countered by the point that the real challenge was in the nature and activity of the whole in the light of whatever participants had already learnt from such partial experiences on past occasions. Postponing such a collective awareness was viewed as avoiding the challenge. By this time it was remarked that the group as a whole at last constituted a « We » rather than a bundle of « I's ». The group was prepared to ask what « we » wanted and why « we » were there. It was recognized that the Congress was now on unknown territory since no diverse international gathering of such size had placed itself at risk in this way before (2). The group felt it had to feel its way forward, improvising at each stage, to see whether anything creative could emerge from the process. For some experienced congress-goers this was an excitingly unique experience.

The sense of immediacy and moment-by-moment reality provided a « collective central space » — an eye in the hurricane — from which the Congress processes could be sensed. To the extent that the space was a vacuum of non-action, there was great pressure to fill it with any kind of activity. The nine hour session terminated without however taking responsibility for the following day and without a sense of the possible evolution of the Congress. For some this continued refusal to confront the collective reality — despite what had been achieved — represented merely a further stage in the process.

(1) International congresses have always been recognized as intimately related to travel and tourism. The point has however never been made that since the congress program items themselves — panels, presentations, etc. — constitute packaged « trips » (to use the jargon of the

Itself be conceived as a collection of intellectual and emotional tours amongst which participants are free to choose. A congress may thus be seen to be related to the packaged tour industry both in reality and metaphorically.

(2) There is of course much experience of the behaviour of small groups (6-15 people) in unstructured situations, since this is an integral part of sensitivity training, encounter groups, and the like. In which many of

(3) Response to the above from the focal person of that group : « It was imperative that we demonstrate something larger than " good feeling " and " we-ness " to have resulted from the previous day. I don't deny that we thereby removed some of the creative tension from the plenary, nor that it grasped hungrily for something resembling a programme by which to constitute itself short of achieving the same objective itself — in the course of which it could have extended its sense of " we-ness ". But I feel that given the prevailing state of affairs, general mood, etc. there was a good chance of total disintegration occasioned by the general unwillingness of the plenary mode of functioning. I also felt that it was important to clear the air of expectations, resentment and frustration, so we could get on to dealing with higher orders of substantive integration — which is what I feel began to happen two days later ».

Reaction and Premature Synthesis

The tension of collective self-awareness and the "space" which it created could not be maintained. On the sixth day, as a reaction, the program was tightly and conventionally scheduled (by a small group which took their role upon itself without the general consent) — lectures in the morning and early afternoon, followed by workshops (3). The latter were however held in the same large room to avoid the sense of fragmentation, and then reported back together as a plenary assembly. The sessions were a relief to many who felt that a meaningful synthesis had been achieved between structure and process. The general atmosphere was very positive. The workshops contributed to this sentiment until the reportback procedure highlighted how unearthing-merged were the insights which emerged — despite the assembled expertise — and how the problem of interrelating them meaningfully and usefully remained to be confronted. It was then agreed that the experimental approach of the previous day should be continued in plenary.

Despite the consensus of the previous day, a small group again took the initiative to schedule (the Sunday) with a morning plenary session of meditative celebration, poetry reading and Renaissance dance. After a short period this was abruptly broken up by a series of protests which re-opened the issues which had been raised on the fifth day. A very powerful debate ensued with many eloquent speeches. The first point made was that whatever its aesthetic, inspirational or celebratory appeal, the proposed program reinforced attitudes which had already been proved inadequate to the challenge of the times. As such it was in many respects a hindrance in that most of what could be learnt from such activities had already been learnt. A second point was that time spent collectively in respectfully absorbing further inspiration, or insightful information, diverted attention and effort from actually engaging in transformative activity. As has been said before, collectively we know most of what we need to know — except how to act collectively in more appropriate ways. Any focus on how things could or should be done, on why they should be done or on the beauties of action appropriately performed, merely prevents the group concerned from confronting itself in the here-and-now. It postpones all activity, if any, to the elsewhere and elsewhere. The point was also made by some that they were there to work together collectively and not simply to consume the products of New Age initiatives. The contrast was made between the Con-

From group consciousness to conscious groups

• It is useful to distinguish between (a) the awareness individuals may have of the group of other individuals with whom they interact, namely « group consciousness », and (b) an awareness by a group as a whole of itself and its activities, namely a « conscious group ». The first is necessary to enable individuals to respond appropriately to each other within a group. The second arises when the individuals are collectively and simultaneously aware of the pattern of those interactions between the group members.

• Little is known about conscious groups and what they could achieve. There are clues in the statements of members of a football team who are instinctively aware of one another's movements. The same may be said of an integrated dance troupe. But such examples are purely physical. How would it be to participate in a group which was physically, emotionally and mentally attuned? Statements from members of some commune-type groups suggest that they are moving in that direction.

• When learning to ride a bicycle, we have to deliberately correct excessive responses in order to maintain balance — until such correctal moves are made instinctively.

In a conscious group, excessive responses resulting in energy disequilibrium are also smoothly corrected by an integrated response within the group — whereas this would normally only be achieved through a series of sporadic procedures, characterized by a heated mix of rational and irrational argument and expression, leading to changes of an almost spastic quality.

• Consider the clues implicit in the following description of an experiment in avant-garde music :

« Correspondences are based on the principle of mutual psychological reactions and attempt to « join » the four participants with each other and to make them increasingly dependent on each other. There are four levels:

1) The musical material is entirely fixed, but the choice of instruments is left open.

2) Each musician possesses only incomplete instructions. In order to be able to play, each musician must search for missing material in the performance of the neighbour (pitches from the first, length from the second, etc.) and react to it in different ways: imitate, adapt himself to it (if need be further develop), do the opposite, become disinterested or something else (something « unheard of »).

3) The composed material is completely substituted by the description of the possibility arising from the reactions of the performers to their neighbours.

4) On the last level, it is left up to the performers whether to cease playing or to continue: for not even the selection of reactions is now necessary ».

(Vinko Globokar, Drama and Correspondences, Harmonia Mundi 20 21-803-1. Comment on recording.)

• A sign of the emergence of a conscious group - from the point of view of anyone involved is that each is moved to act in the right way at the right time, although there does not appear to be any central coordinating agent or any explicit design. The actions of the whole are very much greater than can be comprehended from the individual actions. How each awareness interpenetrates the others is not yet clear. The « eyes » do not understand how they are related to the « feet » or the « hands », and the right and left « feet » do not understand how their movements harmonize through their opposition to each other (a yin-yang cycle) to move the body forward. A similar situation arises early in the growth of a child.

• The prime characteristic of a conscious group is its awareness of itself and its place and rhythm in the scheme of things. Within itself it mirrors an awareness of how its environment is organized. Each action on the environment is paralleled by an equivalent displacement of energies within itself. There is a « magical sympathy » between the outer and the inner worlds. It is through this inner / outer attunement that the group is able to increase considerably the amount and range of energies that it can handle and focus in order to transform itself and its environment as it evolves into a greater identity.

Participation in a conscious congress would be a dramatically uplifting experience. But how are we to allow our instruments to respond in their respective ways to the tune which unfolds us? And how would it be if such a congress interlinked a number of conscious groups, each attuned to a particular aspect of the whole?

(Extrait from a Congress document) •

gress as a supermarket for participant-consumers and the Congress as a work-site for the construction of a cathedral, whose nature had still to emerge. Counter-arguments were made that the individual of today is a crippled being requiring care, that generations are required for anything significant to be achieved, and that significant social transformation could anyway only be achieved through personal transformation. These views were forcefully rejected (with the aid of three deleted expletives) as « cop-outs » justifying collective inaction by those present and as placing self-inhibiting limits on the creative ability of the Congress.

The session had now come to a point of explosive desperation not knowing how to reconcile the fundamental polarities of plenary vs small group format and intellectual ("talk") vs experiential

action, in the light of what had been discussed.

Such is the lack of creative self-confidence, there is a widespread belief that such polarities cannot be reconciled. A proposal was however accepted to attempt, in a plenary session on the following day, to apply a small-group counselling technique to the plenary group in an effort to heal the group creatively.

Self-reflective Plenary : Harmony in Diversity

There exists a wide variety of techniques to promote individual transformation within groups of from 5-15 people. A great deal is known about the behaviour of small groups. Very little is known about groups of more than 25 people, and yet groups of this size are frequently encountered in meetings of all kinds (4). Often larger groups (such as the Congress) fragment naturally into smaller groups having some shared characteristic or affinity. Such smaller groups each acquire their own "per-

(3) See footnote previous page.

(4) Lionel Kreeger (Ed). The Large Group: dynamics and therapy. London, Constable, 1976 (eumartozes current understanding but with apparently little relevance to a conference-type situation).

Affinity groups at the Congress

1. Original organizing group
2. Structure-oriented group (i.e. favouring adherence to a predetermined programme, with emphasis on lectures and workshops by key resource people)
3. Process-oriented group (i.e. favouring flexibility with emphasis on all participants as resource people)
4. "Super - class" resource people (i.e. those who participated with the intention of giving a lecture)
5. "Middle-class" resource people (i.e. those who participated with the intention of giving a workshop)
6. Lecture attenders (i.e. those specially in favour of lectures by key resource people)
7. Workshop attenders (i.e. those specially in favour of workshops)
8. Detached observers (i.e. those uncommitted to the ends of the Congress)
9. Floaters (i.e. those drawn to a variety of experiences)
10. Movie makers (i.e. the group producing the film on the Congress)
11. Visionary instigators (i.e. the group concerned to ensure that something new and significant emerged from the Congress)
12. Psychotherapists and the like (i.e. those concerned with personal and spiritual development through some form of counselling)
13. Movement, dance and performer group (i.e. those oriented towards non-verbal expression and its personal significance for group integration).
14. Whole-earth, organic food/health group
15. Mediator group
16. Intellectual modellers (i.e. those intent on the possibilities and fruits of conceptual synthesis)
17. Non-anglophone group (i.e. those who were handicapped by an inadequate knowledge of English)
18. « American » group (i.e. 31 participants travelling as a group and isolated in a distant hotel)
19. Kitchen voluntary worker group
20. North-American Indian group (i.e. those wanting the Congress to act in response to the native American crisis)
21. « Action-new » group (i.e. those wanting to act immediately and to stop talking)
22. « Here-and-now » group (i.e. those impressed by the immediacy and "rightness" of the present and the lack of pressure to act)
23. Artists and visualisers
24. Educator group

sonality > within the larger group and the interaction between such smaller groups creates many problems and creative possibilities within the larger group. The unexplored question is whether any of the small group techniques can be used within a large group to promote the transformation of its constituent smaller groups (namely small group transformation replaces the usual goal of individual transformation — and the group consciousness sought is an awareness of the larger group as a whole).

One small group technique, itself a synthesis of methods used in China and the USA, was adapted as follows by the plenary session after some discussion.

Round I : Some 24 smaller groups were distinguished as contributing significantly to the dynamics of the larger group. Provisional labels were made out with identifying key terms (see box). These were laid out in a circle within the concentric circles of participant chairs. Participants were asked to determine with which groups they felt some special affinity (5). Those identifying with each group in turn were then asked to stand up and a spokesperson for the affinity group was asked :

— What were the special qualities of that affinity group and what did it contribute to the larger group as a whole ?

— What were the major challenge areas of the affinity group to improve its contribution to the larger group as a whole ?

Other members of the affinity group could supplement the responses to these questions.

This process gave all concerned a better awareness of the distinct contributions made by each affinity group and encouraged each group to clarify the nature of its shortcomings. This Round was successfully completed by the plenary group. It was clear that some of the affinity groups were not especially aware of their shortcomings. Some of them also considered themselves as the « most important » of the affinity groups.

Round II : The exercise is repeated in a second round in which a spokesperson for each affinity group informs each other group of how they are each perceived by the spokesperson's group. In other words the spokesperson answers the above two questions for each other affinity group, identifying the qualities and shortcomings of each. This process gives each affinity group a greater awareness of which of its

qualities are appreciated within the larger group. It also exposes it, gently, to feedback on the matters on which it is insensitive (and to which it is never likely to be exposed under normal circumstances). It helps to clear many of the blockages to inter-group interaction within the larger group. And it does it by providing a supportive context for exchanges which in a larger group are conventionally at the primitive level of « Our group the best... Your group very bad » (as had already been experienced in plenary exchanges. There⁵ was unfortunately no time to undertake this round within the plenary session although it would, seemingly,

have provided the needed breakthrough to a new level of integration within the larger group — one which would be respectful of diversity (6).

Round III : Further rounds were envisaged in which affinity groups exchanged roles to enable them to obtain a greater understanding of the domain in which each other group operated. (In the case of individuals, one form of this technique is known as psychodrama).

Round IV : Some of the above affinity groups, which are most evident in the initial dynamics may, after several rounds, prove to be somewhat superficial. The exercise can then be re-

- (5) a A participant could well be part of several such groups.
- b Possibly some preliminary exercise could have been used to reduce the number of labelled groups (e.g. to 5-15, corresponding to the viable number of individuals in small group processes). The labels could have been located in relation to the chairs in which each small group was located, provided that participants
- d Each affinity group is often aware of its members as a result of prior interaction within the Congress framework. A refinement would en-

courage use of the original technique with the individuals of each small group either prior to or following this process. e Each small group could collectively re-assess its identity as symbolized by the terms on the label. Ideally the label should be revised, possibly to include negatively loaded descriptors as its negative characteristics are highlighted by the process in the larger group. Labels may not be necessary, however.

- (6) The pattern of appreciative and problematic interactions could usefully be represented on a large wall chart open to annotation by participants.

peated with new affinity groups considered to be more fundamental or more relevant to the collective purpose of the whole as it emerges. At this stage the pattern of tensions between the affinity groups becomes a collective reality which can be worked with to stabilize disequilibria and unfocused exchanges within the larger whole. This procedure represents a compromise both between small and plenary group processes and between verbal, analytical and experiential processes. Experiential skills previously only applied to small groups are applied both within the affinity groups and within the larger whole — in this way feeding back specialized expertise normally restricted to small groups. Ideally the attempt could be made to apply a wide variety of small group skills to the larger whole with the object of progressively transforming the relationships between affinity groups within it. Answering the direct question of what any affinity group contributes to the plenary group ensures a collectively focused awareness of the varied nature of such contributions and their special relevance to the dynamics of the whole. This eliminates the triviality of token contributions normally characteristic of small group feedback to a plenary body unable and unwilling to integrate such input in any meaningful manner. The plenary group in this way engages in a "self-healing" process (which, as it was expressed at the Congress, « helps to get the crap out »). It is well-recognized in psychotherapy that the ability to permit and to handle negative feedback is an essential indicator of the maturity of any individual and equally of any group. By permitting such feedback the process facilitates the maturation of the affinity groups (7) and of the larger whole. A great deal of creative energy emerges from an appropriate stance in response to negativity or, more precisely, in responding appropriate stance in response to negativity ting tendency. And essentially this is what the process achieves, namely a dynamic equilibrium between a variety of polar opposites — a balance of dualities which defines a central space or position from which the group can act creatively, with focused energy, as an integrated self-reflective whole.

Conceptual Synthesis

A deliberate effort was made by the initial organizing group to use the occasion of the Congress to bring into focus the interrelationships between a number of unique and little-known conceptual models. These « universal » models are characterized by the wide range of phenomena which they attempt to encompass and the manner in which they draw insights from a broad

range of disciplines, often including natural and social sciences and even arts as well as sciences. Some of the originators of such models were present at the Congress, two were directly represented, and others were collectively represented by people working on the interrelationships and isomorphisms between such models (a preoccupation which, unfortunately, the model-builders themselves usually do not share for obvious reasons). The last occasion on which such a synthesis was attempted was in 1969-1971 in association with some members of the Society for General Systems Research. The models were presented in lectures and workshops and their synthesis is partly documented in the Congress film (see footnote 1).



Buckminster Fuller

The significance of this initiative is that (a) the Congress provided a forum within which such syntheses could be presented, (b) it ensured a unique confrontation between such intellectual approaches and the affective, artistic, spiritual and experiential approaches hitherto characteristic of the « New Age movement », and (c) applications of two of the models were used to provide integrative guidelines for the Congress process itself, thus linking theory to social reality.

Conclusion

A congress of this kind is many things to many people. Many descriptions, evaluations, explanations and interpretations can be projected on to it — and this document may be more selective and biased than others. Only the future may be able to tell, from the consequences of the Congress, what weight

to give to particular factors. But having participated in the event and its processes, a significant number of experienced meeting-goers now recognize that many conventional meetings are a sterile, unproductive bore in comparison. Summarizing its unique achievements, the following may be noted :

1. Individuals of a very wide range of preoccupations and persuasions (both famous and otherwise) were brought together, by-passed their usual lack of mutual credibility, and worked together in a mutually beneficial manner. A unique « space » was thus provided for incompatible elements to interact integratively.
2. The organization of the Congress was self-consistent in responding within itself to the issues raised by the need for new social structures. The Congress was self-organized, participant-run and staffed. Elitism was severely restricted by the Congress processes without destroying orderly process. Participants were prepared to place everything at risk in order to ensure the emergence of more appropriate modes of organization. The Congress demonstrated that such modes can emerge with direct consequences for the smooth organization of its own processes.
3. Resource people, and those anxious to structure other people's awareness, were placed on the defensive. They were obliged to seek ways of making their contribution to the whole without distorting the collective process for the purposes of individual ego-nourishment. A new mode of congress behaviour was clarified.
4. A core group of people, who had personally risked most, were taken by the process they initiated through a very rapid process of transformation as a group. Many other participants reported significant personal transformation. The value of the process, as a « complete experience », whether personally or collectively, is itself adequate justification for holding the Congress.
5. What was achieved was done with a derisory amount of funding and a preponderance of quite « ordinary people ». Ironically, it could probably not have been achieved with generous funding or with « better qualified » or « more effective » individuals. (It was the well-armoured dinosaurs that failed to survive the evolutionary crisis, not the mammals scurrying between their feet).
6. A triple synthesis was effected (with joy) : (a) in physically gathering together and blending harmoniously a uniquely diverse group (point 1), (b) in engaging experimentally in a process it originated which brought into focus and balanced the dualistic forces within the group, thus opening the way to structured development of large group collective self-awareness, and (c) in interrela-

(7) Which are "sub-personalities" of the larger whole according to the terminology of transpersonal psychology.

ting a variety of conceptual models and demonstrating their use in the Congress own processes. 7. A creative impetus was established in view of those most centrally involved whose consequences may well be evident shortly in a variety of forms, notably innovative social organization.

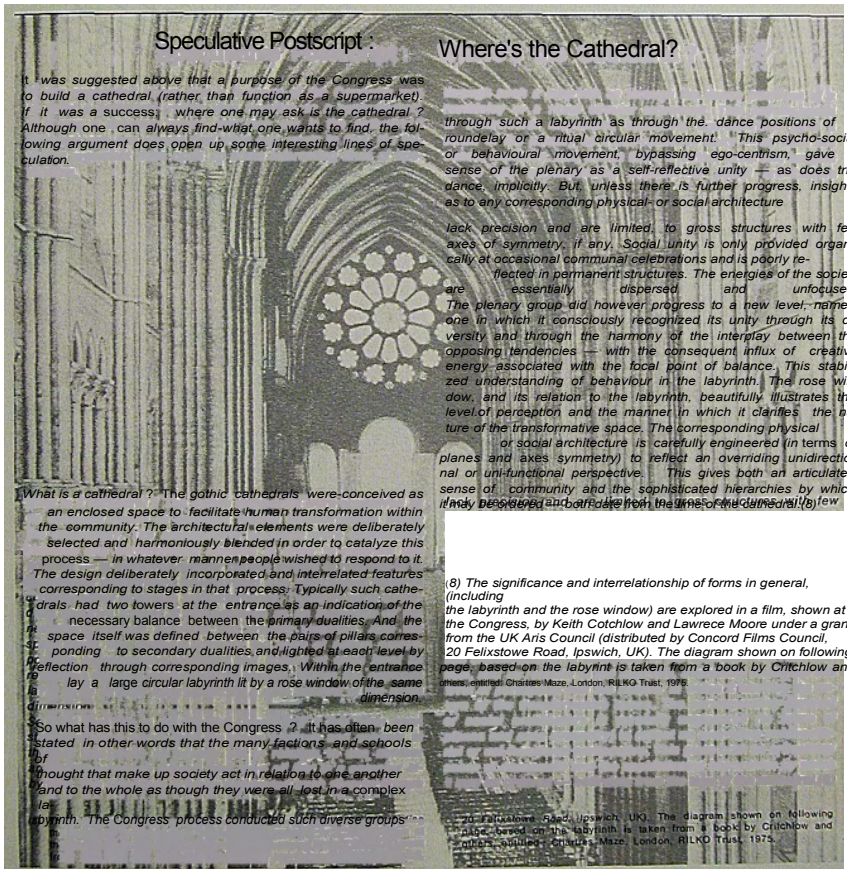
As a contrast to its successes, the failures were mainly associated with the time taken to benefit from the preliminary stages of the Congress process and with resistance to that process. Had less time been spent on the early difficulties, the Congress would have had more time to build on the point of balance it reached in its closing period. Fewer people would have been unnecessarily hurt.

In addition, part of the synthesis achieved was implicit rather than explicit because of the time factor. The challenge raised by the Congress is how to build on its achievement — given that part of its success derived from the variety of opposing tendencies represented (as a result of the confusion surrounding it prior to the event). Could such an event be repeated, how, and by whom? — given that part of its success also derived from the ability of the organizers to terminate their responsibility.

Finally, the real test of a Congress on social transformation is its ability to transform its own structures and processes — using itself as a laboratory — and to provide meaningful personal transformation for those who participate.

Failing which the Congress resembles the preacher in the following tale :

" In a small Welsh village the preacher great length on the evils of alcohol consumption. The preacher himself, however, was often to be seen incapacitated by alcohol although none of the village adults dared to comment. One little boy did ask about the seeming inconsistency, however. The preacher responded ; " My boy it is very simple, i am a signpost but not the way " . . . Many Congresses produce splendid signposts (recommendations, declarations, reports etc.) Maybe this Congress established a way.



Speculative Postscript :

It was suggested above that a purpose of the Congress was to build a cathedral (rather than function as a supermarket). If it was a success, where one may ask is the cathedral? Although one can always find what one wants to find, the following argument does open up some interesting lines of speculation.

What is a cathedral? The gothic cathedrals were conceived as an enclosed space to facilitate human transformation within the community. The architectural elements were deliberately selected and harmoniously blended in order to catalyze this process — in whatever manner people wished to respond to it. The design deliberately incorporated and interrelated features corresponding to stages in that process: typically such cathedrals had two towers at the entrance as an indication of the necessary balance between the primary dualities. And the space itself was defined between the pairs of pillars corresponding to secondary dualities, and lighted at each level by reflection through corresponding images. Within the entrance lay a large circular labyrinth lit by a rose window of the same dimension.

So what has this to do with the Congress? It has often been stated in other words that the many factions and schools of thought that make up society act in relation to one another and to the whole as though they were all lost in a complex labyrinth. The Congress process conducted such diverse groups

Where's the Cathedral?

through such a labyrinth as through the dance positions of a roundelay or a ritual circular movement. This psycho-social or behavioural movement, bypassing ego-centrism, gave a sense of the plenary as a self-reflective unity — as does the dance, implicitly. But, unless there is further progress, insights as to any corresponding physical or social architecture

lack precision and are limited to gross structures with few axes of symmetry, if any. Social unity is only provided organically at occasional communal celebrations and is poorly reflected in permanent structures. The energies of the society are essentially dispersed and unfocused. The plenary group did however progress to a new level, namely one in which it consciously recognized its unity through its diversity and through the harmony of the interplay between the opposing tendencies — with the consequent influx of creative energy associated with the focal point of balance. This stabilized understanding of behaviour in the labyrinth. The rose window, and its relation to the labyrinth, beautifully illustrates this level of perception and the manner in which it clarifies the nature of the transformative space. The corresponding physical or social architecture is carefully engineered (in terms of planes and axes symmetry) to reflect an overriding unidirectional or uni-functional perspective. This gives both an articulated sense of community and the sophisticated hierarchies by which it may be organized and controlled from the times of the dawn till the

(8) The significance and interrelationship of forms in general, (including the labyrinth and the rose window) are explored in a film, shown at the Congress, by Keith Cutchlow and Lawrence Moore under a grant from the UK Arts Council (distributed by Concord Films Council, 20 Felixstowe Road, Ipswich, UK). The diagram shown on following page, based on the labyrinth is taken from a book by Cutchlow and Moore, entitled, *Concrites Maze*, London, RILKO Trust, 1975.

20 Felixstowe Road, Ipswich, UK. The diagram shown on following page, based on the labyrinth is taken from a book by Cutchlow and Moore, entitled, *Concrites Maze*, London, RILKO Trust, 1975.

Although the organic, wholistic circle is beautifully blended architecturally into the rational square (e.g. the gothic arch), this is only achieved by the skillful use of compression between structural members. The structure as a whole is dependent on the external overriding tensional force of gravity (or authority) to prevent it falling apart. It is not structurally self-dependent and its elements lack the freedom of tensional interplay which would permit the structure to respond appropriately to forces (or shocks) from any direction. Such structures are "natural" only to a limited degree because they fail to make use of constructional principles inherent in plants and animals, namely the appropriate balance between structural tension and compression — an animal can be rotated flexibly into any position without falling apart, but not a cathedral, or social organizations built on the same hierarchical principles (9).

Also active at the Congress however, were those working on isomorphic conceptual models and the synthesis they represent. At least two of these give rise to two-dimensional structures which were a focus for group activity. The question then is, are there new kinds of structure which can be used as a basis for new kinds of architecture, whether physical or social? To be superior to conventional architecture, they need to:

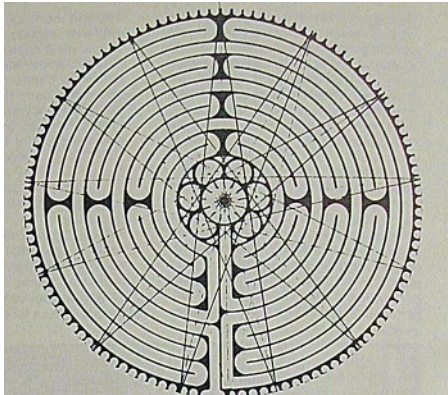
- require fewer materials
- be easier to construct
- be more stable under a wider range of forces
- be more isomorphic with corresponding conceptual structures of philosophic and social significance
- correspond more closely to the harmonies and economies of natural structure.

One set of structures presented, which fulfils these conditions, is known under the name « tensegrity structures ». They are best known through their architectural application in geodesic domes, although as usually seen they disguise the important principles underlying their design which are relevant to this argument and to the elaboration of corresponding social structures.

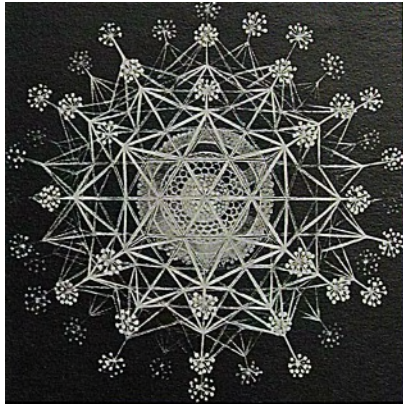
Returning to the Congress, aside from the limitations of the rosewindow perception already mentioned, the problem is that the interplay between the factional tendencies is obviously much more complex than can be adequately represented in a two-dimensional display. Such complexity can only be "captured" in a structure of matching complexity which does justice to the variety of interaction patterns. Tensegrity structures lend themselves admirably to this. Briefly, their advantages include: an elegant relationship between tension and compression elements, a more elegant solution to the relationship between the spherical and the linear, omnidirectional stability, and multiple axes and planes of symmetry. Translating these advantages into psycho-social terms, the interacting tendencies in a large group (for example) are balanced much more elegantly. The transformative space defined between the dualities is now focused at the centre of a sphere (rather than between rows of vertical pillars), whose shape is maintained by the dualities and by the network of forces which hold them in symmetrical relationship to one another, however they are oriented. Order is inherent and not externally imposed. Duality is balanced and transcended in structure which lend themselves to rational analysis whilst exemplifying the wholistic dimension by progressions through a complete scale of such structures. Symbols of appropriate psycho-cultural significance can be associated with them and as such they can be understood as precisely designed aeriels tapping into archetypal energies. The key question is whether these clues can be used in practice to design new kinds of psycho-social structures which are more adequate to the needs of the times. A tensegrity structure could, for

*) " Class One of all history's domes is comprised of the hundreds of millenniums of old upside-down baskets which include the later evolution of baskets into boats and the re-upside-downing, once more, of boats to form the roofs of community meeting places and its later derivative the

cathedral" R Buckminster Fuller. *Ideas and Integrities*, Prentice Hall, 1963.



Labyrinth at Chartres Cathedral Drawing : Keith Critchlow (see footnote 8)



A lesson in structure from one species of radiolaria

example, have been used to clarify the harmony within the plenary's diversity and to facilitate understanding of how energy could be moved, focused and used within the Congress in response to different initiatives (10). As to the cathedral, the Congress did not build one for they have largely served their function and a new type of structure is urgently required. The Congress did however create a central transformative space analogous to that in cathedrals and it did bring into focus the nature and significance of some new structures — perhaps best illustrated by a micro-organism of the order radiolaria (above), or by the concept of nested tensegrity structures. This establishes a basis from which the reality of the corresponding psycho-social structures can be explored (10).

(9) " Class One of all history's domes is comprised of the hundreds of millenniums of old upside-down baskets which include the later evolution of baskets into boats and the reupside-downing, once more, of boats 10 form the roofs of community meeting places and its later derivative the cathedral " R Buckminster Fuller. *Ideas and Integrities*. Prentice Hall. 1963.

(10)A first step towards exploring this possibility is described in an article in this issue, pages 246