

TOWARDS SYNERGY IN NETWORKS OF PEOPLE WITH NETWORKS OF PROBLEMS:

A NOTE ON GPID METHODOLOGY*

by Johan Galtung, Project Coordinator
Goals, Processes and Indicators of Development, UN University

1. The GPID Project is organized in 27 research units, one is the coordinating unit in Geneva, and with 29 sub-projects and study groups; 24 of the former (out of which 6 relate to GOALS, 6 to PROCESSES, 5 to INDICATORS and 7 to TOOLS - the methodological approaches needed and to be developed) and 5 of the latter. [See Appendix for the total list as of units and sub-projects as they relate in the GPID matrix.]. This has evolved out of the GPID history so far: initiated from within the Human and Social Development Programme of the UN University it took on its own life as a network starting with two planning meetings (Dubrovnik, April 1977 and Geneva, January 1978). Research work was initiated as of April 1978 when contractual relations with the UNU Centre were established.

2. At the second planning meeting the general structure in terms of research units and sub-projects (for short no distinction will be made in the following between sub-projects and study groups) was fully endorsed, but the problem of integration was raised by everybody. For that purpose a steering group was appointed and had its first meeting over a period of one month in Geneva, April-May 1978, producing three documents:

- (1) "Towards a working plan for integrating the GPID Project"
- (2) "Remarks concerning the inter-relationship of sub-projects"
- (3) "Notes written with the purpose of generating discussions within the GPID Project" (on the Methodology of integration)

In addition to this the steering group meeting in Bucuresti in January 1979, in continuation of the first steering group session in Geneva, repeated the need for integration, and drew up the first indication of a time-table (see report from the meeting).

/...

The following is an effort to explain what has happened so far, what is happening in the GPID project and to concretise plans for the future, for the dialogue about this within the GPID project itself and for the UNU organs.

3. As an intellectual enterprise the GPID project has been operating under a number of assumptions, all of them reflecting the intricate nature of the inter-relation between substantial and administrative considerations in a project which covers a very vast substantive field (in fact, the whole development problematique) for all kinds of countries, rich and poor, capitalist and socialist, scattered all over the world, as well as from the points of view of some international organizations, non-governmental and governmental. In the GPID project participate scholars from many different disciplines, some of them experienced, of world renown, some of them younger; with both sexes, all "worlds" and continents, different orientations and inclinations as to practical action, and so on represented. Needless to say the points of departure are different, and the level of crystallization of ideas about the development problematique as a whole varies. For that and other reasons five of the basic assumptions underlying the coordination of the project have been:

(1) The project should be inductive, not trying to state holistic conceptions and general perspectives in too much detail from the very beginning. If this had been done we would only end up with the perspectives we already brought into the project. The GPID project can only be of any value if we are able to get more out of it than we put into it. The only valid indicator of "success" is the level of synergy.

(2) This inductive process has two aspects, one rooted in the research units the other in the sub-projects.

(3) Building on the research units: The idea was first to have a stage of presentation where the research units spell themselves out, show how they see an important problem within the development problematique in the way they are used to doing it. This presentation stage was, in my view, very well enacted in the GPID III Network meeting in Geneva October 1978, producing a wealth of interesting

/...

papers. In fact, due to the circumstance that there had by now been some interaction in the GPID network, the second stage had already started to some extent; a stage of eclecticism (as defined in the Bucuresti steering group meeting) where some edges are cut off, some personal biases are blunted or sharpened so as to facilitate linking and tying in with others in the GPID project. The views are as in stage one, only presented in such a way that it is more easy to compare them and relate them to each other and move on to a third stage of integration.

(4) Building on the sub-projects: The sub-projects are thematic and a high number of meetings of sub-projects have already been held, for smaller groups of participants from the GPID network as a whole, but also inviting other than GPID core members to participate because of their special expertise and perspective. The idea has been the same: for each sub-group to work out in detail what is implicit in that particular theme, such as Needs or Exploitation/expansion processes, without too much regard for the totality, but always keeping it in mind. If all these sub-projects were to have the totality in mind all the time what would come out would not have gone through the nitty-gritty of spelling out the implications of the sub-project themes, but would try to reach for the moon at a too early stage. Only when a sufficient number of research units and sub-projects have gone through the stages of presentation and eclecticism, their real interaction could start, as has been the intention from the very beginning, clearly expressed in the steering group documents. The only disagreement might have been in terms of timing: there was impatience at the GPID IV network meeting (in Dakar) urging that the integrative stage should now start. This was fully endorsed by the project coordinator, but for several administrative reasons (not to be repeated here) more easily said than done. It might also be mentioned that when the project coordinator has urged for integration somewhat later (six months) than some of the members, such as the Bariloche and Gamma groups, it might be that knowledge of the total GPID project leads to a

/...

different perspective: a concern for the research units and sub-projects that might not yet be quite ready for the next stage. In this judgement the project coordinator may, of course, be wrong - the reason why this is discussed very openly in the steering group meetings we have managed to have.

(5) As to this integration or synergistic phase: a number of approaches have been suggested and will be developed as the project proceeds. Thus, there is mechanical synthesis, pointing out that two positions that look antithetical in fact are not, that position A may be valid under conditions C1 and position B may be valid under conditions C2, and that the two proponents have not taken this into account, having a too particularistic angle. Then there is a more dialectic holism yet to be spelt out, but this is what the GPID project is aiming at. It should, however, be emphasized very strongly what has already been formulated by the network meetings and the steering group: that there is no intention of changing anybody's view, to arrive at consensus, even conversions. The aim of the GPID project is to arrive at a good dialogue within the project, and with others. And by "dialogue" is meant a process where all participants help each other clarifying positions, the positions of others as well as of themselves, so as to identify better different angles and perspectives from which the development problematique may be understood more clearly, so as to make for better practice. Thus, what one might say is that the participants will, like I myself, hardly change views basically, but perhaps broaden them, put them into wider contexts, see more facets of a problem - and in this process both identify points of convergence and points of basic disagreement - as different from strawman argumentation and polemics. Nobody should expect this to be an easy process without pain: one starts with a clear image of reality, then it is challenged by others, and from many angles till everything looks confused and confusing and tension develops within and between participants. GPID is probably in that tension now - a tremendous source of energy for creativity.

/...

4. Towards integration of the research units. After indicating what is meant by integration with a view to obtaining synergy; the following are some more concrete observations on how that is done. Obviously the GPID Network meetings are, in principle, important instruments for this, but their potential is limited. They are too big in scope (too many topics, too diverse) and domain (too many participants, about 30) to become a setting for the type of dialogue possible in smaller groups (five to twelve-fifteen) with a more focussed theme and more sharing of a frame of reference. Even to suggest that they are good settings for an agenda-free discussion reveals some ignorance of group processes. They will probably function best when they are well prepared, bringing together material from research units and subprojects, with discussants, working groups (small, focussed --) to explore more in detail, and so on.

5. But there are other means: direct contact by letter and personal visits, developing a habit of referring to other GPID papers, positively and/or negatively, and above all: the opportunity to be together for a longer period, doing joint research within the GPID broad and flexible setting. Needless to say, this is more easily done when the researchers are at the same university than when they live half a world apart: not only are the costs exorbitant, especially with UN practices (too high per diems, usually the most expensive form of air travel), but there is also the problem of finding time given that the researchers are not UNU employees but usually employees of an institution with its own rhythm, and given that their GPID involvement is only part of the total involvement. Possibly the idea of the UNU fellow may be very useful here, permitting the researchers from unit X to stay with unit Y for a longer period of time for joint research. Another format would be to have a limited discretionary fund, to be well accounted for, available to the GPID steering committee and administered by the coordinating unit so as to be able to act quickly and inexpensively when both need and opportunity are there for joint research and joint papers.

/ ...

6. However this may be the content of the interaction has been indicated by the steering group several times: the idea of mutual challenge, more particularly of challenging the holders of one paradigm to answer questions formulated and sometimes answered by the holders of another paradigm. But the experience - very much to be expected - is that this does not easily come about by itself, so the coordinating unit, after a phase of commenting on all the papers presented up till GPID IV, making them ready for further processing and publication from the UNU Centre, is now engaged in a process of intellectual stimulation as originally envisaged by the steering group in May 1978, with a view to intellectual cross-fertilization. One form it takes is to tie two or more researchers together, asking some questions of the work done by them, circulating questions and answers to all of them, hoping for this to lead to a chain-reaction. As letters are limited and even limiting as an instrument of communication, this should be followed up by come-togethers.

7. Another form, complementary to what has just been said, is indicated on the next page. Here a general list of what might be called GPID dimensions (as seen by the project co-ordinator) has been formulated. They are meant as indicative only, indeed not to force everybody into a general format. But in some they might release creative processes that could be useful simply because they may point to something the researcher forgot but could easily have paid attention to when a paper was written or a research project was planned. In others it might have the effect of expanding the research focus beyond what was envisaged, leading to excursions into new territory. Hopefully it will not have a paralyzing impact on any; in that case it should be put aside, perhaps to be looked at later. One task of the integrative workshops might actually be to criticize and improve upon lists of that kind, or to propose other approaches.

/...

TO: Participants in the GPID Project

FROM: Johan Galtung - Project Coordinator

RE: "Intellectual Cross-Fertilization" in the GPID Project:
A Tentative List of GPID Dimensions

This is a short list of dimensions suggested for the purpose of bringing about more comparability within the GPID Project, and also to suggest to all of us aspects of the total "development problematique" that we may, accidentally or intentionally, have left out of papers, project designs etc. Please have a look at it, criticize the list, and see if any of it can be of any use to you in (re)considering GPID research papers, projects, your own and those of others. It goes without saying that no single paper can deal with all of this - but a research unit or a subproject group might be able to.

- (1) SPACE: Would your conclusions be different in other regions?
 Could there be an ethnocentric bias?
- (2) TIME: Would there be a process in what you have explored?
 Could there be "tempocentric" bias?
- (3) SOCIAL SPACE: Would your conclusions be different for other groups?
 Could there be a MAMU (middle-aged male university) bias?
- (4) LEVEL: Could there be a level bias in your approach?
 What would be the conditions, implications at the levels
Personal Societal Inter-societal Global
- (5) INTELLECTUAL STYLE: Would you say your paper is primarily directed towards
Paradigm- Data- Theory- Commentary Pragmatics
discussion analysis formation
 If one or more of these are missing, how would you justify that, or make up the deficit?
- (6) SOCIAL SCIENCE STYLE: Would you say your paper primarily sees reality in terms of
actors and structures processes processes also
interaction in the past in the future
 If one or more of these are missing, how would you justify that, or make up the deficit? What about culture and nature, production and distribution?
- (7) GPID STYLE: Would you say your paper primarily discusses
goals processes indicators tools concrete fields
 If one or more of these are missing, how would you justify that, or make up for the deficit?
- (8) PRAGMATICS: Have you considered implications of your study for
concrete dissemination training and
-action education
In case of action: Have you discussed a strategy?
Who shall do what how, when and where (not only why?)
In case of dissemination: any proposals for a form of presentation beyond articles/books; talks/discussions?
In case of training/education: any concrete proposals?

8. Towards integration of the sub-projects. As mentioned there are 29 of them, but to simplify for this presentation I shall concentrate on only twelve of them. There are some simple principles underlying this elimination (for the sake of presentation only):

(1) The GPID project, with some very few exceptions, has postponed work on indicators till work on goals and processes has come further in order not to fall into the trap of exploring indicators that would only be variations of all the existing indicators, rather than letting indicators flow from considerations about goals and processes.

(2) All the subprojects under the heading tools are in a somewhat special category; they are not substantive. But three of them have had meetings and "come off to ground", Dialogues, Networks and Forms of presentation and the same applies also, to some extent, to Methods of analysis (see the document referred to under 2 (3) above).

(3) Very much on purpose working groups on Concepts and Theories of development have been postponed in order to avoid repeating work most participants already are good at: presenting conceptual and theoretical positions without reference to more concrete substantive areas. This should come towards the end rather than the beginning of the series of subproject meetings.

(4) Of the study groups, the groups on Economics and the Dictionary group are still in a very preparatory stage. The same also applies to the subproject on Processes in the UN system.

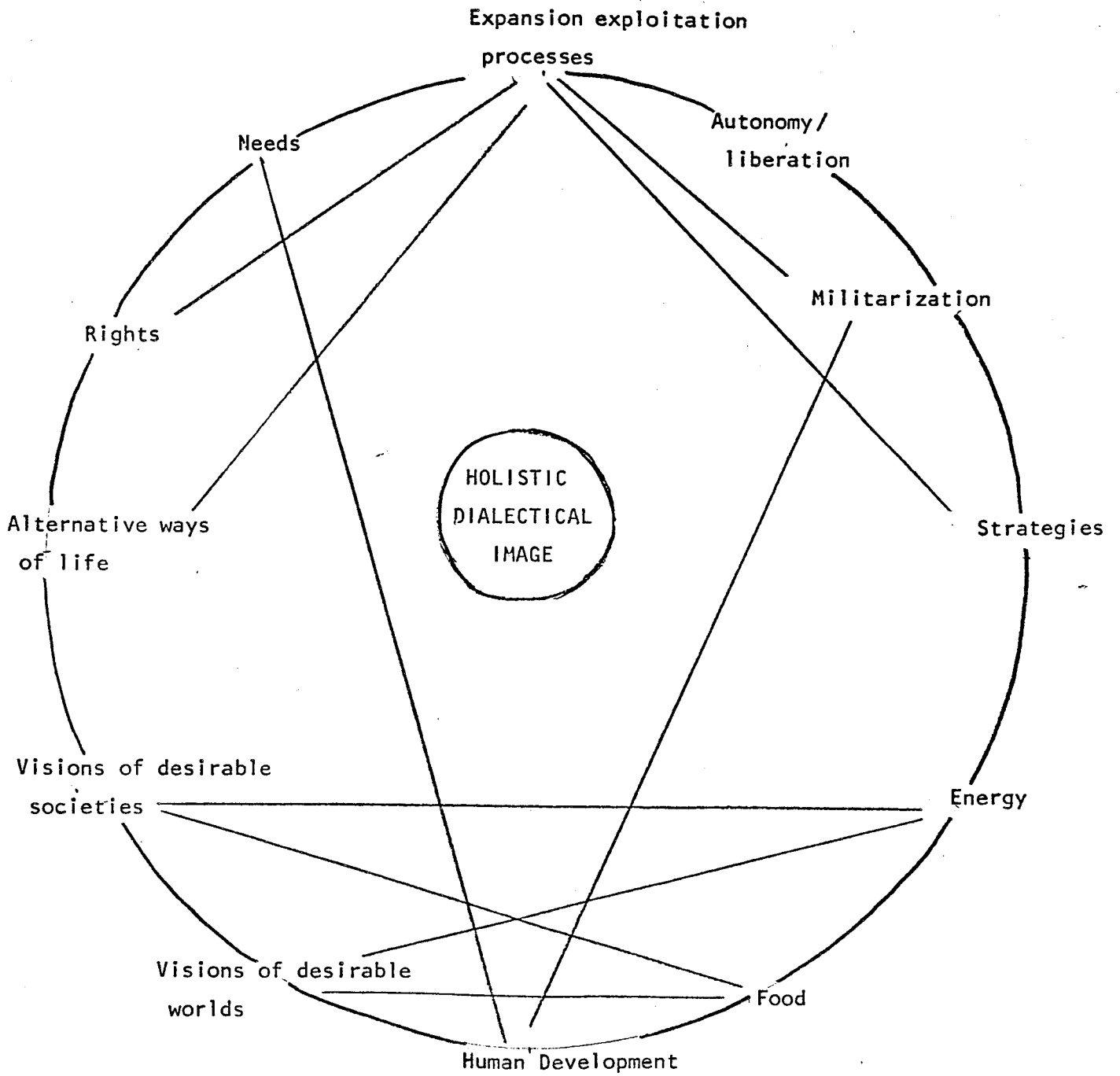
Thus, of a total of 29 we shall for this purpose focus on 12 subprojects, to illustrate the methodology of GPID project: from presentation via eclecticism towards integration.

/...

9. The GPID Wheel as a Research Process: To illustrate how this is being done, the figure on the next page might be useful. Twelve subprojects are placed on the circle, like on a clock, representing the three types of subprojects included in this presentation: goals, processes and more specifically substantive study groups. It should be emphasized that the order in which they are placed is more or less at random, they are only grouped together for the purpose of exposition. The basic idea about the wheel, or the clock, is that it moves with time: as time goes on new subprojects come into focus, then recede into the background for a while only in order to come up again later, but then changed by the process. There is also something more in the metaphore of the wheel: there is no beginning, nor any end; the process can never be linear. And as the wheel moves on relations are spun between the subprojects, two at a time, three at a time, any number; and this is where the synergy comes. The whole thing is designed in such a way that there should always be some overlap in participants between any two subprojects (not always so easy to obtain for administrative reasons) so that explorations in the two subprojects inevitably will lead to some integrative spin-offs. Some of this will be explored below: a basic point in the methodology of the GPID would exactly be to explore nontrivial consequences arising from the twinning etc. of two or more subprojects. Needless to say, this does not come about by itself, by joining two reports together. It can be done only in the minds of participants of one, two or more subprojects, individually, but also by the participants in the subprojects coming together (particularly the core groups of these participants, otherwise it becomes too big for a good discussion), in order to explore exactly these "interfaces" between the subproject themes.

/...

THE GPID WHEEL AS A RESEARCH PROCESS



10. At the centre of the wheel, at the very hub, is written "holistic, dialectical image." This is one of the goals of the research process but only one: the GPID aims both for very specific, detailed knowledge and insight applicable under historically specified circumstances, and for images of the totality. There are such images existing in the world (marxism, liberalism, most religions are carriers of such images) - what the GPID project is likely to do would be to try to combine, perhaps to identify ranges of validity for such images, and perhaps to come up with something a little bit innovative beyond this. That this is a difficult process goes without saying. There is even a very specific contradiction built into the process and, very much on purpose; whereas the rim of the wheel has a distinct Western touch (the totality is segmented, cut into more manageable pieces in a cartesian manner to be approached analytically) there is an Eastern touch to the hub (daoist, buddhist in general more synthetic to be more precise). In another language: whereas the rim would draw on the left hand side of the brain, the hub is for the right hand side--.

This raises the question: can one achieve non-Western ends with Western means - apologizing immediately for the way the question is formulated. And suggesting an answer: exactly the contradiction within which a project like the GPID has to work! In so doing what is needed are more people with some sensitivities in either direction. Unfortunately, neither the UNU in general, nor the GPID in particular has been able to have in the research process people genuinely in non-Western traditions, as distinct from people who talk about them, are knowledgeable about such traditions, can say something about what should be done - everything short of doing it. One reason may be that they (a Zen priest? a bhikkhu in a temple in Southeast Asia?) would not be much attracted to our way of doing things; another that our training as researchers in the Western style, regardless of where we come from, has destroyed some of our latent capacities or at least blunted them. But just as non-Westerners with eagerness have acquired Western approaches (today passing as "universal science"), Westerners are reaching out for other approaches - sometimes making for interesting settings with West being more non-West than the non-West and vice versa.

/...

11. Just as the wheel continues rolling, giving new (and old) phases to the GPID project as different subprojects come into focus, the process relating rim and hub is not a linear one. It should certainly not be seen as a one way process leading from analytical insight along the rim to synthesis in the hub, although GPID has started at the rim for the reason mentioned. The process has to be hermeneutical, with glimpses of the whole informing and shaping the view of the parts and vice versa - and I think this is very much what is now going on in the GPID project. The depth of this process depends to some extent on how much one has participated in and this is where the project co-ordinator is in a privileged position: it is his duty to participate in most of the activity, a duty that sometimes is quite strenuous (in terms of psychical more than physical travels). But this duty then becomes a privilege: moving around the wheel, and up and down the spokes one is forced to see old things from new angles. As many as possible should participate in as much as possible and the GPID project is designed (see the ever-changing matrix) so as to permit this. Thus, the process should not be confused with a hypothetical-deductive approach to theory-formation although this is, in my view, one way of developing an image of the whole (but usually not dialectic). The relation between the whole and the parts is not of the same type as the relation between axioms and theorems/propositions but both share some of the same va-y-vien, up and down movement which requires considerable flexibility in the mind of the researchers. Some want to stay in one end, some in the other - and become competent in either position, but the real exhilaration in research stems from the movement, even the crisis of the process.

12. How should this process be administered? The subprojects are clear, the twinning of projects by means of groups also clear - but what happens as one comes closer to the hub? One idea, put forward by several participants, is a subproject no. 30 - the subproject to end all subprojects. Another one is to say that there are already two subprojects dealing with this: Visions of desirable worlds, and Methods of analysis. A third would be to have a series of workshops with different membership (one participant has suggested not one but two steering groups for this purpose). My own inclination would be to try to combine all of this in the following way:

/...

- the job of arriving at more integrated views, and of positing such views against each other for clarification and deepening belongs to all participants and at any time - we shall have no division of labor with a periphery doing the job around the rim and a center waiting somewhere for that to be done so that it has enough material for the hub work. Thus, efforts to appoint, from above (HSD or the project co-ordinator) a group to do this kind of work should be rejected (quite another thing is the need, expressed in GPID IV in Dakar, to take stock of what is happening in the GPID).
- the two subprojects mentioned are important and more holistic than others, but although they have functions to serve they are not quite at the hub. The Visions of desirable worlds is concerned with the effort to come to grips with the world system of territorial and non-territorial organizations and above all of human beings in their ecological setting as a whole; and the Methods of analysis is more specializing in epistemological/methodological aspects. They will continue, but are not quite it.
- I think we are now at a stage where the twinning and tripling approach half way to the hub should be attempted, and this can be done by having core groups from subprojects meet for prolonged discussions (one of these, combining Visions of desirable societies and Visions of desirable worlds has been suggested for Spain April 1980). More of these have to be organized.
- Then, later in 1980, with GPID V, there could be a first meeting to try to get at the totality, bringing together some of the findings of the half-way meetings. This should be in Bariloche late 1980, with a second meeting in 1981 and a third meeting in 1982. Whether we call it subproject 30 or not is immaterial; I would rather see it as integrative workshops.

To organize it this way may be hard on the most impatient (partly those in the administration who want something conclusive to show that the UNU is innovative, etc., partly participants but for other and very different reasons); my judgment is nonetheless that we should not rush it too much. It is also important to build into ourselves a deep sense of the insufficiency of any one approach around the rim, be that Needs, Exploitation/expansion processes or whatever - out of that sense of insufficiency an urge to move inward will be stronger.

13. One word at this point about my own bias where the hub is concerned, among other reasons not be accused later of not showing my hand, of having a hidden agenda. My own bias is in the direction of the cosmology concept I, with the Oslo team, have been working on for about five years now. The cosmology is the unwritten program of a civilization, just as the personality is the unwritten program of a person. It can be transcended, but (probably)

/...

only through a deep level of consciousness about it, a readiness to face one's own assumptions. This, in turn, is probably only something that happens in periods of deep crisis; those are the periods of transformation. The cosmology is expressed both in the material worlds of man-made structures (including social structures) and in the non-material world of ideas. It transcends the old (and probably very stupid) problem of what comes first, ideas or the material, very much focussing on isomorphisms between the two. In crises, then, all of this is challenged, ideas and structures together. In Western history this happened both at the end of the (Western part of) the Roman Empire and at the end of the Middle Ages. It is my conviction that we are in a similar process now - hence the efforts of the Oslo team both to compare the end of the Roman Empire with the end of Western imperialism, and to study the medieval system. The whole world, then, is seen as a dialogue des civilisations. But the cosmologies are not tied to geographical areas: they move. Capitalism, for instance, is compatible with Western cosmology but also with some Eastern cosmology (but then becomes a slightly different capitalism) and may move with cosmologies. There may even be a process of cosmology exchange, possibly emerging now, with the West becoming more Eastern and the East more Western - both, of course, shaping and changing what moves in on them. Hence, the research focus is both on the identification and characterization of cosmologies (the unquestioned assumptions underlying a civilization), on their interaction, and on the transformation processes in situations of crisis.

14. Practising now the methodology of va-y-vien: back to the rim, and the figure. Look at 11 and 12 o'clock: Needs, and Exploitation/expansion processes. As conceived of by the subproject meetings they are both very complex, but here is one set of formulations:

- Needs: that which the individual cannot have unsatisfied without some basic disintegration/pathology sooner or later showing up. Needs=basic human needs, no other meaning should be given to needs. The satisfiers span a wide range, material and non-material; both needs and satisfiers vary - of course - in space and time, both for societies and individuals.
- Expansion/exploitation processes: a process with a center and a periphery,, both of them moving, the content of them moving, the exact processes within and between changing, but the gradient of exploitation remains, enriching the center, impoverishing the periphery in various ways. A recent aspect

/...

is the externalization of labour by moving factories to the external sector of a Western-dominated economic system to the periphery.

What comes out of a twinning of these two? At the trivial level: a needs concept as indispensable in any analysis of exploitation/expansion to know whether any impoverishment is going on, whether misery is produced. And it has to be a rich, flexible, culturally diverse needs concept. A concept only based on income as a means to the satisfaction of material needs leads to extremely poor, even a-human or anti-human images of what goes on - yet that is the most frequent approach to analysis of exploitation. A richer approach may see more clearly that both center and periphery are suffering, that misery of different kinds are produced if, through a sufficiently diverse needs concept, one is forced to check any process against a spectrum of needs. But there is also a less trivial level to this, via the concept of interest. Needs analysis can lead us to focus on the problems of individuals but also on the predicaments of individuals with sufficiently similar problems to be grouped together: that leads to the problems of classes, even of whole societies and of classes of societies. A need is located inside an individual, a need has a subject, groups are not subjects. In Western political thought interests are usually seen as material (and basic) - it is high time to extend that concept in more non-material directions. It is also high time to see the continuum between individual level needs analysis (that when left alone becomes too individualistic), group level interest analysis and the powerful global processes in the world today. Thus, some synergy is emerging! - to be spelt out.

15. To take another example from the GPID wheel: the famous Needs/Rights interface. This was explored at some length in the meeting Politics of Needs, Berlin, June 1979 (GPID Meeting No. 22). Obviously, there are cases where needs are translated into rights (freedom and identity needs, later also some material needs), cases of needs that do not have any rights counterpart (a need to be creative, a need for togetherness, a need for sleep), rights with no needs counterpart (the right to vote) and the fourth category, neither needs nor rights and yet very important (what would that be?) However, whereas the process whereby rights crystallize and become rooted is a concrete

/...

socio-political process needs are more ephemeral, difficult to come to grips with in concrete terms, for which reason those who work with rights will have a tendency to focus on material needs with satisfiers that are scarce so that a political process can be defined to regulate the access to the satisfiers. And that opens for what can be seen as the two major approaches to rights: the access approach and the structural approach. The access approach would emphasize the right, usually of the individual, to have access to food, to a clean environment, to psychiatric assistance, to judicial review and redress, etc. The structural approach would focus on the right of the individual to live in a structure that does not produce food scarcity, does not produce environmental breakdowns, does not produce the stress, etc., that eventually leads to mental disorder, does not produce criminal deviance and so on. The two approaches do not exclude each other but the Rights approach is biased in favor of the former since it is so compatible with the liberal paradigm of institution-building and social justice seen in terms of equality of opportunity (in this case of access to institutions, e.g. food delivery stations, mental hospitals, courts and free legal advice, etc.) And that opens for the important problem of the limits to human rights; how far is it possible to develop the human rights approach further before it becomes counter-productive - because it counteracts the satisfaction of needs rather than meeting them?

16. Still another example: the interface between the Alternative Ways of Life and the Visions of desirable societies subprojects. To many these sound so similar that it is difficult to keep them apart, and yet there is a very different emphasis although they both deal with goals. One way of emphasizing the difference would be to say that AWL is diachronic, looking at the whole life-cycle (and not necessarily accepting the assumption that life ends with death) whereas VDS is more synchronic, giving a view of what a good society might look like (but in such a way that the contradictions leading upto it, and possibly also away from it, are brought into focus). One way of emphasizing the linkage between the two would be by asking whether a vision of a desirable society is able to accommodate a human being in various phases of the life-cycle - or, is it by chance best for middle-aged males

/...

with university education (MAMUs)? Put differently, what is the general social structure in which various AWLs can be accommodated? Since some of the same GPID researchers have been at work for some time in the two sub-projects there is no danger that such questions will be forgotten, but at the same time the task of working out a micro-oriented approach, seeing the entire life span of an individual in the more immediate social setting (a beta structure, for instance) and the task of working out a macro-oriented approach where this is seen with a wide-angle lens must never be lost sight of.

17. The interface between Visions of Desirable Societies and Visions of Desirable Worlds is an interesting one. The two subprojects would have merged into one in a different world from ours, a world spacious enough to accommodate all the desirable societies with no contact, no interaction between them - like roving tribes of nomadic peoples only very rarely with intersecting trajectories. In that case the world would have been an unconnected set of societies. Our world is both better and worse: there are marvellous opportunities for mutual enrichment, and there are terrible opportunities for structural and direct violence. Will the desirable societies tilt this yin/yang mixture in a more positive direction? Will the desirable worlds favor the desirable societies which, in turn, will favor alternative ways of life - alternatives to the dominant ways of life in today's poor and rich countries? Thus, all three levels, and with it the ecological level come into play: the GPID will have to explore their interrelation as well as the levels one at the time.

18. Expansion/exploitation processes can be related to all the others immediately. What are the strategies of counter-acting them, what are the processes of liberation and autonomy? To fight them right on, or to adopt a more "Asian" approach of soft power, refusing to cooperate with them, carving out alternative niches of ways of life, of small societies, of alternative social formations, fighting from the inside? What is the relation between these frighteningly strong processes on the one hand and human development on the other? Will the structure on top of these processes not only attract authoritarian personalities but, in fact, produce them

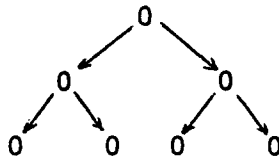
by institutionalizing processes of remote control, of generalization and abstraction instead of direct face-to-face relations - in short the ills of any bureaucracy? Or, to take another one: what is the relationship between these processes and militarization? Is it merely a question of getting sufficient military power to protect oneself against those out to conquer, or for oneself to conquer others? The great stimulator of technological transfer and innovation? Or, could the relation be deeper, one of using the military not only to produce economic demand and to recycle NIEO-dollars (out of which petro-dollars are a special case) but to create structural demand, a model for technocracy to imitate, a reserve society in case the more regular one breaks down? Obviously the two processes reinforce each other, but what is the nature of this complex process of reinforcement?

19. This is sufficient to indicate the kinds of problems GPID is now forced by the logic of the research process to enter into. Not all of this can be taken up in the same detail, but some of it can, and all of it can be indicated. The levels problem touched upon many times above is a major one: how that integration is to be worked out has been a basic concern of social sciences for a long time and if GPID could make an ever so small contribution here it would be good. The most important subproject on the rim, however, is in my view the Alternative strategies and scenarios subproject, for this is the place where GPID has a chance to show that it does not shrink away from the responsibility of coming up with concrete, specific policy advice. Obviously this will also have to be worked out with practitioners in the field, with planners, decision-makers and citizens engaged in political activity.

20. Thus, the GPID project is a network of people, to some extent organized in research units, and a network of problems. By "network," then, I mean essentially anything that can be represented by a connected graph - one of the weakest structures in mathematics. However, the concept of network is only useful if it is kept as flexible as networks themselves should be. Thus, the unconnected set of people (individuals or collectivities such as "research units") or problems (such as subprojects) could be referred to as a latent

/...

network, in search of some linkages. On the other end of a spectrum of connectedness is, of course, the totally saturated network with everything related directly to everything else in $\binom{n}{2}$ links. Between 0 and $\frac{n(n-1)}{2}$ links is one important special case: the tree, the cycle-free network which is also the minimally connected network with $n-1$ links. And among the trees there is a special case; the alpha-structure:



It should be noted that not only is it minimally connected (there are seven points above and $7-1=6$ links); the links are in addition asymmetrical, making it vertical, fragmented.

21. The interpretation of an alpha structure for the GPID is clear: for a network of people it means a hierarchical organization, with one clear center, one-way links of communication, even command, no direct linkages except the ones indicated; but unlimited size. And it is equally clear for a network of problems: one problem is seen as the axiomatic base, the deductive center from which the others can be inferred through one-way links constituting chains of deduction, with no direct links, but unlimited size. The logical interconnection, or linkage, between these two networks would for many people be through isomorphism: the center in the network of people deals with the center of the network of problems; the more peripheral the research unit, the more low-level the problem dealt with. Two alpha-structures related by isomorphism would also be the classical bureaucratic structure, and it holds equally well when the network of people is a network of networks (like the United Nations University), with the organizational center trying to draw the essence out of the raw material delivered from the various networks.

22. This extremely simple use of simple mathematics (from the theory of graphs) may help us formulate the problem we try to come to grips with more

/...

clearly - what else should be the purpose of using mathematics? Two dangerous extremes can clearly be identified. On the one hand there is a minimal isomorphism based on two unconnected sets of people and of problems, with each research unit working on the problem of its choice, producing results that are unconnected both at the people level and the problem level. On the other hand there is the very firmly connected structure referred to: two alpha-structures also connected through isomorphism. These are the Scylla and Charybdis of this type of networking. It is considerably more easy to steer clear of the former than the latter. To steer clear of the former links have to be established (through reading and using each other's papers, letters, participation in the same meetings, joint research, etc.). To steer clear of the latter is more difficult as this is the structure in which we are socialized, trained, and which seems to come about by itself, so to speak, unless consciously counteracted.

23. Some of the ways of counter-acting this rigid structure can be indicated: At the network-of-people level: trying to promote a maximum of direct links (no need to "report to the center" except for conclusions that should be circulated to the whole network, using the center for communication, not for command); rotating the center; decentralizing as much as possible also by making very important that which can most easily be decentralized: in the GPID case the subprojects, and later on the integrative workshops. Rather than integration through a center, integration through something shared, shared interest in the job to be done, a GPID spirit, even a GPID ethos. Criticize the center.

At the network-of-problems level: trying to promote a maximum of direct links (no need to refer to an axiomatic base, using any such base as a center of reference to be related to, positively or negatively); rotating the vantage point from which the totality is seen (e.g. by turning the GPID wheel); maintaining a structure of many vantage points; decentralizing by making all of them salient. Rather than integration through an axiomatic system, a deductive theory, integration by finding something shared in all the problems explored, and this is exactly what holism is about.

At the isomorphism-between-people-and-problems-network level: this is the

/...

most difficult one because the center of communication will have most information and hence be in a better position to draw integrative conclusions. Hence, the task of drawing integrative conclusions has to be decentralized to the whole network just as much as subprojects are decentralized to the whole network (but some minimum of central organizational coordination is still indispensable); sticking to this policy to the project is concluded. Of course, the project can only be concluded in a bureaucratic sense: neither the network of people nor the network of problems will ever be dissolved - the former will continue to exist in some form or another transformed by social forces, eventually dissipating; the latter will, hopefully, be an input to the world of theory and practice of development and will be transformed by all kinds of forces, also eventually dissipating. An elected steering group for administrative purposes in the network of people (and relations to the UNU Centre), with some rotation of membership, and workshops (in plural) for integration in the network of problems should come far towards counteracting this basic danger. But there are also other ways: it looks so obvious that the best way of studying two subprojects together would be to bring together those who have worked on the problems separately. Do that, but also bring in some people who have worked on neither and can challenge assumptions others have grown too accustomed to.

24. All of this is good on paper, not so easy in practice. At an ordinary university campus, in any interdisciplinary institute, this process would already be problematic as anybody who has ever participated in such teams, particularly in the role of trying to bring them into being, can testify to. Going interdisciplinary, and more particularly, going inter-paradigmatic, may, in fact, prove much more difficult than going international. The latter only transcends geographical borders, the former is an effort to transcend mental borders, even borders effectively blocked. But geography is nevertheless important: communication takes very much time and the oscillation from the inactivity between and hyperactivity during meetings may prove less fruitful than it looks at first glance. Technical means to overcome distance, tele-networking, may prove important here. But most important is administrative flexibility, letting the network itself decide

/...

over the shape and form the process shall take. And with that I conclude: a network can only be managed through flexibility, decentralization and minimum direction. Make it rigid, centralized, directed, bureaucratic and simplistic - and the result is once more that heavy, unimaginative, non-creative organization one hoped to avoid.

N O T E

* The present paper is my report, as a member of the Steering Group of the GPID project appointed by the GPID Network Meeting at its fourth session, Dakar 23-29 April 1979, entrusted with preparing "the theoretical overview of the GPID Project (synthesis/integration)" and "the drafting of the network's report". I have seen these two tasks as relatively identical, except for the report on what happened where and when, included in my two reports for the period April 1978 - April 1979, and April 1979 - October 1979. In preparing this paper I also benefited from the excellent discussion on Networks at the GPID subproject meeting in Brussels 4 - 6 May 1979 where I had presented many of these ideas, particularly of the relation between Networks of people and Networks of problems. The paper, hence, is also a paper for that meeting. I am particularly grateful to the other members of the Steering Group, Carlos Mallmann, (and Oscar Nudler) Eleonora Masini, Taghi Farvar, and Patrick Healey - Samir Amin, unfortunately, did not have occasion to participate in the four meetings (in Dakar, Berlin, Bucuresti, and Penang), and to the participants in the Networks meeting, particularly Tony Judge and Kimon Valaskakis - to the latter also for his memorandum "The GPID or Can the GPID Survive Its Own Methodology," to the former also for his response to the latter. This debate is as old as the GPID project and will continue as long as it lasts.