

20 November, 1973

Revised version  
in 1974 / The  
NSV.

PRELIMINARY NOTES ON THE  
PROPOSED CONFERENCE SERIES ON  
SOCIAL ENGINEERING  
to be held under the auspices of  
MANKIND 2000.

These very tentative notes have been prepared by A.J.N. Judge on behalf of Mankind 2000 to facilitate the dialogue with the French group interested in funding and organizing the meeting. The notes are being sent to the Board of Directors of Mankind 2000 for comment and as a means of ensuring consensus within Mankind 2000 in moving towards a final draft proposal. At the same time counter suggestions will also be supplied by the French group.

Preliminary note on the suggestion for a conference on social engineering.

1. The action and result oriented connotations of "social engineering" are valuable. The implication that it is possible to identify, examine and restructure social relationships in a precise way, perhaps reminiscent of civil engineering, is refreshing.
2. The social engineering approach has a history however. It is closely related to the efforts to apply systems analysis to social problems. This approach was for example advocated in 1965 in Olaf Helmer's Rand Corporation report on "Social Technology".
3. This system application has not matched up to expectations in the USA. There is little evidence there of unambiguous successful application to social problems. Massive programs in which attempts to use it have been made have been judged failures (e.g. poverty, no base renewal, Greek tourist industry, the Camelot project).
4. The use of the systems concept, as advocated by the Rand Corporation, to solve social problems has also suffered from the errors and failures in the use of this concept in Vietnam. Much use was made of it there to investigate and "stabilize" the rural social system.
5. Such "failures" of the systems application should however be carefully interpreted. Some have been due to
  - use by groups wishing to advance their special interests
  - use of the technique as a scapegoat in political manoeuvres
  - use of the technique to symbolize a directive, manipulative mode of thought.
6. The question is therefore how best to conceive of a social engineering approach which would not lay itself open to criticism of the above type. This is essential if Mankind 2000 is to be able to associate itself with any such project
7. The main weaknesses perceived in the approach by its opponents are, summarizing :
  - 7.1 Directive features  
It is important to draw attention to means of setting in motion social engineering projects of a non-directive decentralized or participative nature.
  - 7.2 Manipulative features  
It is important to draw attention to those approaches to social engineering which are facilitative rather than manipulative, whether or not the so-called manipulation is beneficial.

### 7.3 Deterministic features

Any centralized plan must of necessity envisage a clearly determined end. In the case of some social problems the deterministic aspect of the approach may antagonize where an open-ended approach might encourage support. Social engineering should be equally applicable to closed and open systems.

### 7.4 Technocratic features

The technocratic emphasis requiring dependence on high technology and highly specialized and esoteric quantitative skills should be counterbalanced by the presence of social engineering approaches which are more person oriented and only dependent on a low-level technology.

8. In the light of these considerations a first attempt has been made to outline a possible programme for an international meeting on social engineering. This is attached.
9. From the start it is important that the process of preparing and organizing this meeting should be conceived as an example of social engineering and not as an event isolated from the society in which it takes place - as are many meetings of this kind. Means should be sought to structure and interrelate the topics to bring this self-awareness to the fore rather than encourage groups of participants of different schools of thought to isolate themselves within the private universes of their own specialities.

Preliminary draft of an approach to a programme outline for an international conference on social engineering.

1. To counterbalance to any possible interpretation of social engineering as directive, manipulative, deterministic or technocratic, it is suggested that the name of the conference should be modified to "social catalysis and social engineering". Social catalysis implies acceleration or facilitation of ongoing social processes. This may be used to achieve formation of beneficial relationships where social engineering would be unacceptable. Social catalysis is therefore the chemical and biological (or possibly micro-level) complement to the social materials (or possibly macro-level) orientation of social engineering.
2. The emphasis in both social engineering and social catalysis is on identifying key relationships and processes and determining where such relationships are lacking or inadequate, or where the processes are insufficient in terms of the requirement. Both are concerned with complex systems in which simplifying assumptions are dangerous. The meeting programme should therefore identify different types or levels of relationship susceptible to catalytic or engineering intervention. These might include :
  - attitude, belief or conceptual systems
  - information systems
  - organizational systems
  - social products or artifacts
  - building or urban complexes
3. The programme structure should highlight the fact that the above systems of relationship are interrelated along several dimensions, including
  - duration (temporary, permanent)
  - tangibility (tangible, intangible)
  - spatial focus (diffuse, centred)

It is the resultant matrix which in effect provides the range of valid approaches and outcomes of social catalysis and engineering.

Duration Tangibility Spac. focus	Tempor. Intang. diffuse	Tempor. Intang. Centred	Tempor. Tang. Diffuse	Tempor. Tang. Centred	Perm. Intang. Diffuse	Perm. Intang. Centred	Perm. Tang. Diffuse	Perm. Tang. Centred
Conceptual (excl.tang., centred)	1				2			
Information (excl.intang., centred)			3				4	
Social orga- nization (excl.tang.)	5	6			7	8		
Artefacts, products (excl.intang., centred)			9				10	
Building (excl.intang. diffuse)				11				12

Only some positions in the matrix represent valid possibilities, but each of these is either a domain for valid social change in its own right or also a necessary stage in any project towards a more permanent and tangible outcome at some specific spatial location.

The point to be emphasized is that social engineering and catalysis may affect, change or facilitate socially significant relationships and processes, whether they are tangible or intangible, temporary, recurring or permanent; diffuse or spatially specific. However, the different groups engaged in social change may of course be primarily concerned to facilitate the formation of beneficial relationships differing in kind on any of these dimensions - although the improvement of relationships of one type may either lead to or require improvement in relationships of another type. In each case (or at each level) however the same, or very similar techniques can be applied in clarifying the nature of the system although extra techniques may be required the more permanent and tangible the desired outcome becomes.

Preliminary note on the organization and participants at the suggested conference.

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1. The emphasis of the conference should be on bringing together people who are concerned with the conception and implementation of practical projects for social change rather than models or explanations of processes.
2. The focus of papers should be on the design of "devices" which would catalyse or result in social change. The concern of the conference should be with how to select or, if necessary create, the necessary device to meet the constraints of a particular type of social change.
3. The concern should be primarily with devices which can be made available to be run by a community of users for their own benefit, rather than devices which when implemented have to be run as a system by a closed group of experts.
4. The conference programme attempts to bridge a wide range of approaches to social change. If successful, the interaction between normally antagonistic schools of thought would be very valuable. If, for practical reasons, the range of topics is too great, any cuts should not be based on eliminating schools of thought or approaches but rather in the manner in which the conference time is used. Many papers could be presented very briefly rather than at length, to permit the major portion of time to be devoted to discussion.  
General review papers could be commissioned for some areas.
5. The report of the conference should be seen as a major item -- a device which itself should give rise to social change. The concern should be to have papers which supply "blueprints" for practical projects which could be implemented in many countries, possibly after adaptation.

Preliminary draft outline of programme items of the  
proposed conference.

1. Dimensions of social catalysis and social engineering.

This section would include general papers and discussion on the scope and general principles of social catalysis and social engineering; their relationship to and distinction from other planning and policy disciplines.

2. Mapping and tracking complex psychosocial structures, together with reference to supportive technologies.

This section would contain papers which suggest and describe practical means of looking at complex psychosocial structures, mapping them to permit meaningful discussion and the isolation of key areas in which structural change might be fruitful and have multiplier effects. Given the level of complexity which must be dealt with, papers on technologies which facilitate this tracking, mapping, consensus formation and decision process would also be included here.

3. Approaches to social catalysis and social engineering and the supportive technologies required.

This major section would be subdivided by type of social structure and within that by the nature of the project. The latter system of subdivisions is repeated for each type of social structure. The papers would be action and project oriented. The papers and discussion would focus on what could be done and how to go about doing it rather than attempting to supply elegant theoretical models to explain or justify the action.

3.1 Conceptual structures and processes

This sub-section would be concerned with projects and procedures which result in beneficial change to conceptual, belief, attitudinal and value structures.

3.1.1 Centralized, closed, high-resource projects

The projects covered here would, typically, be those elaborated by a large (usually governmental) agency or group of agencies to mobilize and direct attitudes and resources in response to some particular threat. Examples are : energy conservation campaigns, development aid campaigns, road accident campaigns, anti-litter campaigns.  
Participants : from government agencies with such concerns.

3.1.2 Decentralized, open, high-resource projects

The projects covered here would be those elaborated on a participative basis, often on the initiative of large governmental agencies, and involving the collaboration of a multitude of nongovernmental and business groups as a mutually reinforcing network of action-oriented social actors.  
Examples are : disaster relief campaigns, anti-discrimination campaigns.  
Participants : organizers and planners of such campaigns.

### 3.1.3 Low resource projects

This would cover both centralized and decentralized projects to change attitudes on particular issues. Typically it would be concerned with the design of projects to be undertaken by the smaller or less organized interest groups, possibly to draw attention to emerging problems before they warrant approaches of type 3.1.1 or 3.1.2.

Examples are : womens rights, welfare of blind.

Participants : organizers and planners of action in such areas having some ability to generalize from their experience, typically representatives of minority action groups.

### 3.1.4 Catalytic products

The papers here would be concerned with the selection and design of products which could be sold or disseminated through a social system such that by their use and without any directive explanation, they facilitate the adoption of beneficial new attitudes and modes of action.

Examples are : new games whose rules encourage new understanding of social relationships, information and data display devices which facilitate perception across conventional category boundaries.

3.2. 1

## 3.2 Information systems

This sub-section would be concerned with the design of information systems whose function is to facilitate the maintenance and formation of beneficial relationships, particularly as an aid to action programmes.

### 3.2.1 Centralized, closed, high-resource systems

The information systems covered here would, typically, be those elaborated by a large (usually governmental) agency or group of agencies to enable them to plan and act more effectively in the face of the problems for which they are mandated.

Examples are : environmental information systems

Participants : designers and implementers of such systems.

### 3.2.2 Decentralized, open, high-resource information systems

The information systems covered here would be those elaborated by a network of agencies and organizations in such a way that a wide range of individuals and organizations could be brought into relationship by the information they store and retrieve.

Examples are : ARPA Data Network, inter-university computer networks.

### 3.2.3 Low resource information systems

The papers here would be concerned with "intermediate technology" information systems which can be designed and implemented by smaller groups.

Examples are : newsletter systems on specific topics, chain letters or telephoning strategies.

Participants : people capable of generalizing from experience in this area or suggesting new systems of this type.



### 3.2.4 Catalytic products

The papers here would be concerned with the design of information gadgets which facilitate new flows of information likely to counteract any abuse of existing information systems.

Examples are : systems facilitating communication from audience to podium or between participants at a meeting (without passing via the podium), systems bringing individuals or organizations together on the basis of self-defined interests and not some externally imposed set of categories.

## 3.3 Social organizations and administrative structures.

This sub-section would be concerned with the design of new styles of organization which would facilitate the organized interaction of people, groups or member organizations in situations or under conditions in which existing forms of organization are not viable.

### 3.3.1 Centralized, closed, high-resource organizational structures

The organizations dealt with here would, typically, be large manufacturing or research enterprises in which there is a problem of providing a satisfactory working environment for workers engaged in exceptionally monotonous assembly-line tasks or alternatively for creative individuals who do not function well in a excessively structured environment.

Participants : personnel managers and consultants of enterprises responding creatively to this challenge (e.g. Phillips, Volvo).

### 3.3.2 Decentralized, open, high-resource organizational structures

The papers here should cover the design and improvement of inter-organizational systems within which there is a fairly high degree of individual mobility.

Examples are : inter-university system, inter-think-tank system, kibbutzim network, youth hostel network.

Participants : individuals and organizations attempting to promote or implement such organizational systems.

### 3.3.3 Low resource organizational structures

The papers here would be concerned with blue prints for the creation of "minimal institutions" of various kinds. Typically such structures would be useful at the grass-roots, community level or in inter-linking bodies or individuals in situations where formalized relationships are not possible.

Examples are : "invisible" academic and political colleges, organization substitutes (meetings, demonstrations), various kinds of "peoples" organizations, communes.

### 3.3.4 Catalytic products

The papers here should cover the conception and design of products which encourage and facilitate the creation of new organizational structures.

Examples are : organizational directories designed to function as organizational "marriage brokers", computer software packages to permit computerized information services to be set up to automate any such brokerage service.

### 3.4 Building and urban complexes

#### 3.4.1 Centralized, closed, high-resource projects

The projects dealt with here would be, typically, those originated and/or financed by large government and private enterprise consortia (in which plans are drawn up by a centralized group using all the necessary technical expertise). The aims of such projects are well-defined and easily justified in terms of the economic interests of the region and the socio-economic needs of the users of the building complex.

Examples are : university cities (e.g. in Russia, Japan), urban developments, new capital cities (e.g. Brasilia).

#### 3.4.2 Decentralized, open, high-resource projects

The papers here would cover projects, usually originated by government agencies, to stimulate with financial support the construction of building complexes of social rather than economic value. (Plans are drawn up through an extensive consultative process to ensure that the needs of a very wide variety of user are satisfied). The aims of such projects are broadly and loosely defined in qualitative rather than quantitative terms.

Examples are : community centres, redevelopment to create urban shopping/meeting/entertainment areas, community effort to revivify old, but architecturally interesting, town centres.

#### 3.4.3 Low resource projects

The papers here would be concerned with the types of project which can be undertaken with the application of minimum funding to restructure and design existing buildings to serve new socially beneficial functions.

Examples are : community centres, meeting halls, multi - association office and meeting centres, old age homes, communes, playgrounds, youth hostels.

#### 3.4.4 Catalytic products

The products covered here would be those which enable wider sectors of the population to produce buildings at lower cost. The papers would be designed to draw attention to the types of product which if produced would help to eliminate barriers to socially needed construction.

Examples are : geodesic dome, new joining devices, and other products which could usefully be made available to villages in developing countries to improve housing quality and ease of construction from low cost materials.

### 3.5 Energy, water, transport and communication technologies

#### 3.5.1 Centralized, closed, high-resource projects

The projects dealt with here would be those originated by large government and private enterprise consortia (in which plans are drawn up by a centralized group using all the necessary technical expertise). The reasons for developing and making available the technology are well-defined and easily justified in terms of the economic interests of the region and the socio-economic needs of the users.

Examples are : dams and irrigation systems, inter-regional roads, bridges.

#### 3.5.2 Decentralized, open, high-resource projects

The papers here would cover projects usually originated by government agencies to stimulate development of a particular technology by the communities in the region. The success of such project depends less on the government seed-funding and more on community recognition of a need justifying joint action and commitment.

Examples are : community construction of dams; irrigation and road systems, community radio/TV service, community newspaper.

#### 3.5.3 Low resource technologies.

The technologies dealt with here are increasingly called "intermediate". The papers would identify new technologies of this type and ways of making them available to the areas in which they are needed. A principal characteristic of these technologies is that they can be put into effect with little need for external materials. It is therefore the know-how, rather than a product which is required.

Examples are : water-carrying devices, wind-power devices, water-recirculation techniques.

#### 3.5.4 Catalytic products

The products covered here would be those which could usefully be made available in under-developed areas to stimulate community development of low-resource technologies. Some of these products may be technically sophisticated but they should not be costly to obtain or maintain. Examples are : solar-power devices, new types of plough, simple duplicating/printing devices, low-cost cement substitutes to improve mud-based house construction.

### 4. Interaction between approaches

The purpose of the papers in this section would be to clarify the relationship and interdependence of the approaches identified in the individual sub-sections of section 3.

4.1 Complementarity of unrelated projects based on different approaches

The papers here would draw attention to the mutually reinforcing effects of projects focusing on different types of structure, from the concrete to the conceptual. Whilst each project may be envisaged and implemented in isolation, it is the resultant effect on society which is of interest to the proponents of each of them.

4.2 Systematic interaction between different approaches within the framework of a single project

The papers here would cover the manner in which a project must ensure the interrelationship of different, and seemingly incompatible aspects - conceptual, informational, organizational, etc.

4.3 Possibilities of substituting one approach for another

To achieve the same ends, the social change agent may choose one of several means. The papers here would examine the ways in which, for example, the establishment of an information system can be made to substitute for the creation of an organization. Similarly, under some conditions of mutual suspicion it may be more useful to construct a building within which different groups have neighbouring offices (permitting them to interact informally) rather than to attempt vainly to establish an organization in which they would not wish to interact formally.

Preliminary note on the establishment of an organizing committee for the proposed conference.

1. A continuing committee for the organization of the proposed series of conferences will be established through the good services of the Société Internationale des Conseillers de Synthèse, which will provide any secretariat services.
2. This Committee will be composed of three members nominated by the Board of Mankind 2000, and three members and a President nominated by the Société Internationale des Conseillers de Synthèse. The President would have a casting vote.
3. The Board of Mankind 2000 would have the right to be fully represented by one of its members or nominees on any organizing sub-committees established in connection with the series.
4. The agreement governing participation in the Continuing Committee and use of the phrase "under the auspices of Mankind 2000" may be revoked should the Board decide this to be in the best interest of Mankind 2000.
5. Each meeting in the series would be considered by the Continuing Committee as an opportunity to raise funds for the general work of Mankind 2000.
6. The meetings in the series will be financed primarily by funds raised in France on the initiative of Monsieur Breuil and his associates.
7. The general subject of the meeting series will conform to the aims of Mankind 2000 as understood by its Board of Directors. The specific topics to be dealt with by each meeting in the series will be determined by the Continuing Committee in consultation with Mankind 2000 and other interested parties.