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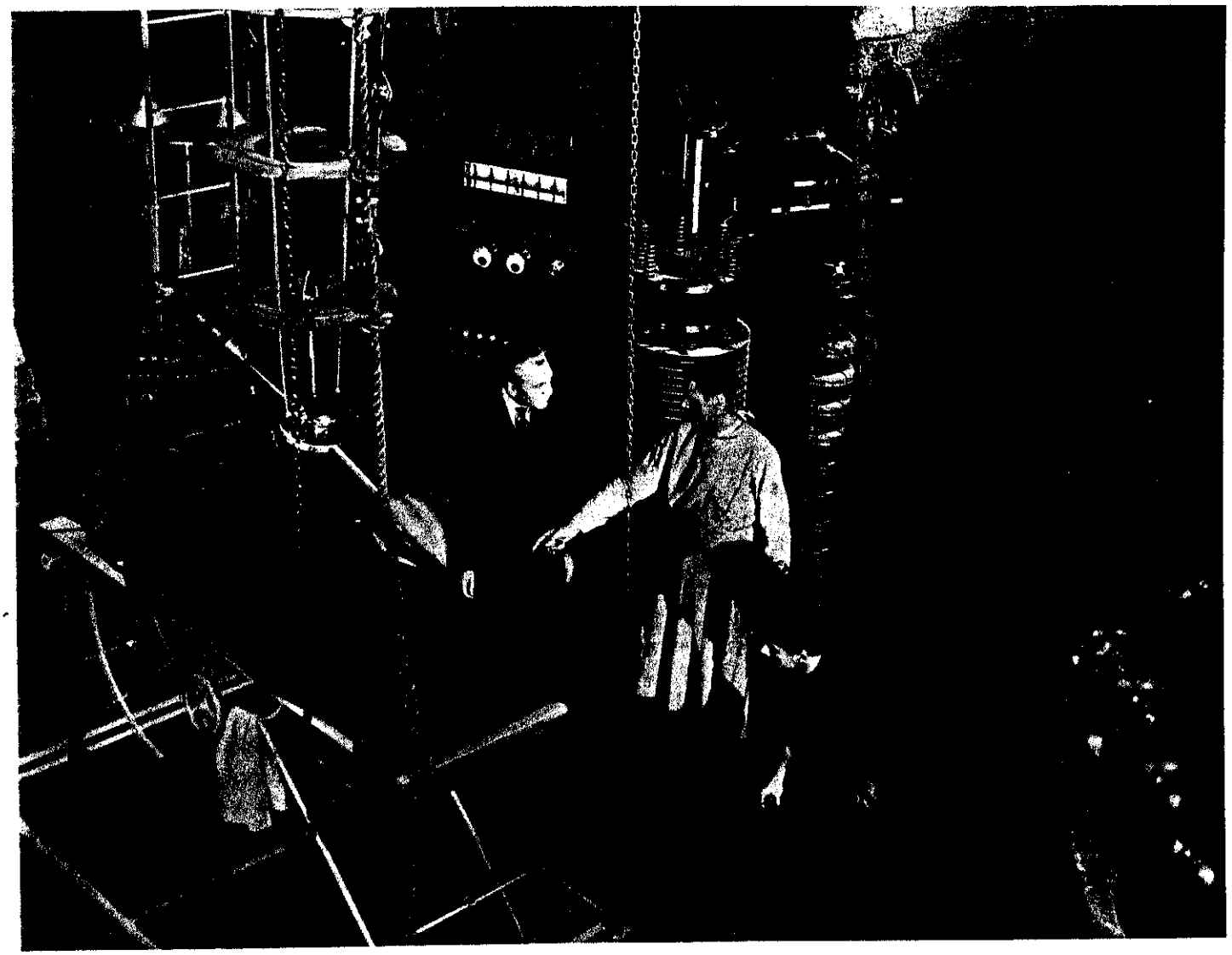

Making Decisions on Technology

Contents

Editors -- Sandy Emerson and Marcy Darnovsky

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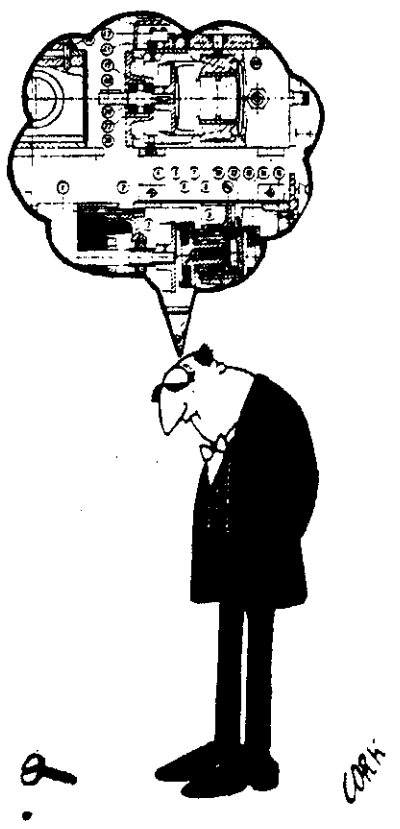
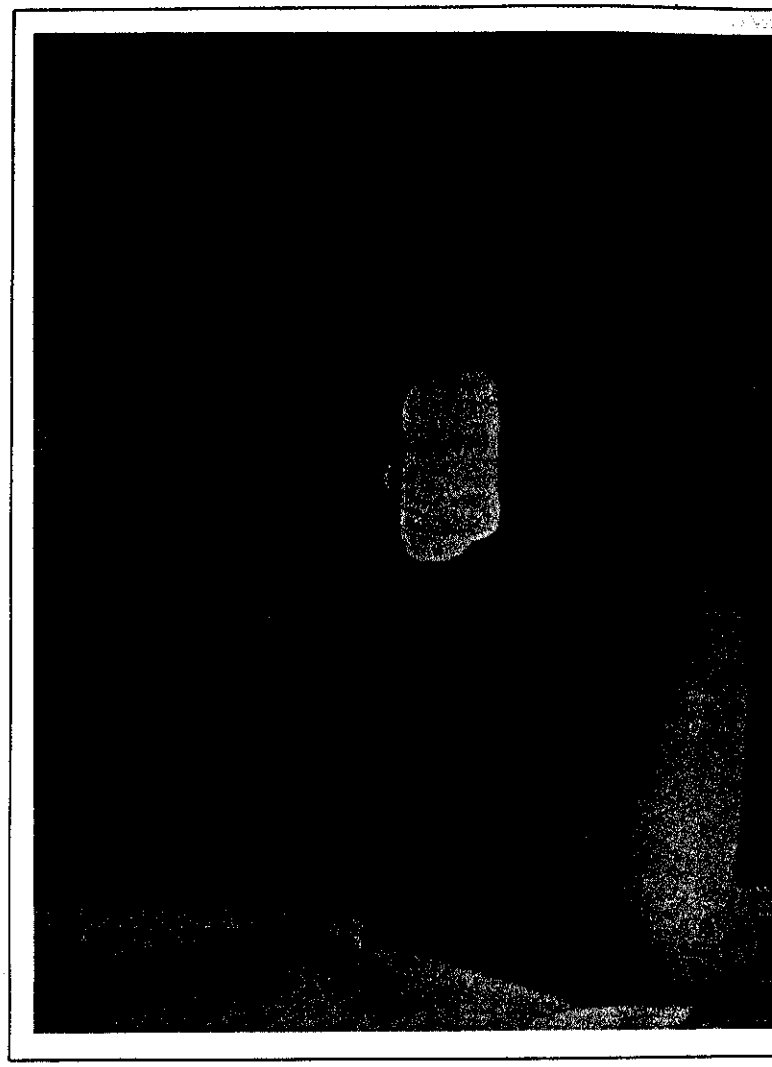


No Frontiers:

Notes on Transnational Networks

by Peter Hayes



Minimata disease.

Foreword

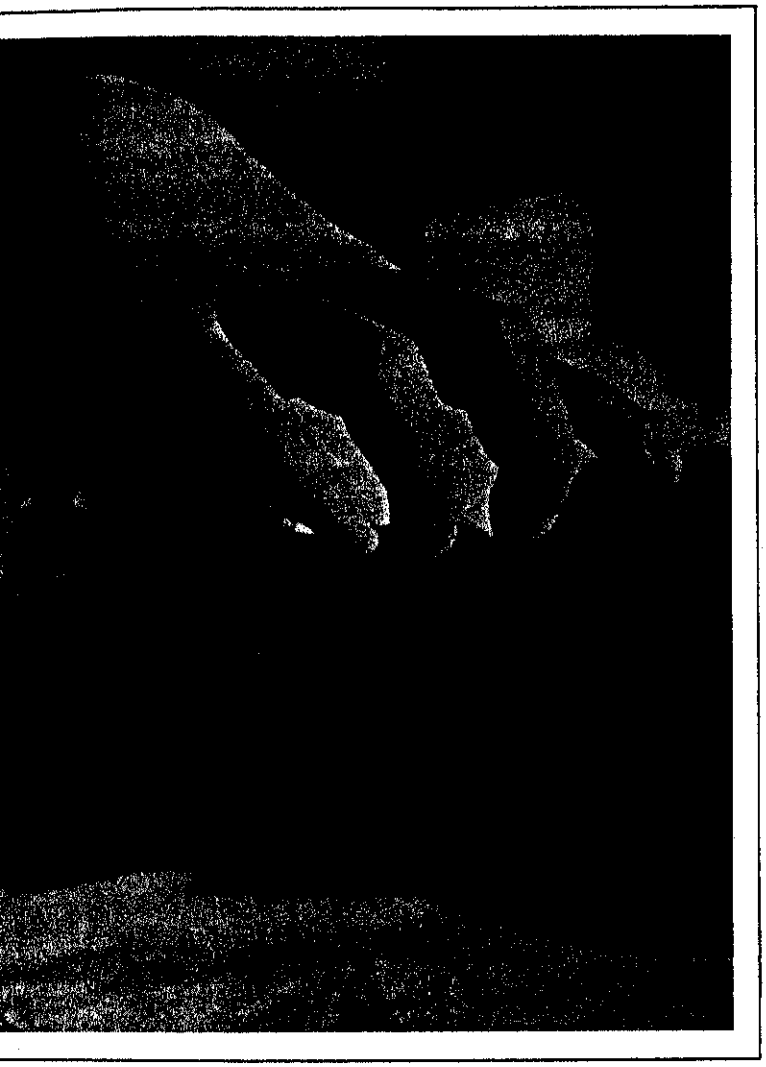
This report (1), written four years ago for sleepy U.N. bureaucrats, reflects my own theoretical underdevelopment at the time. While there is nothing specific in the report demanding urgent rectification, I wish to note some important points which I neglected in my original analysis.

First, I implied in my analysis of the structure and function of networks that they embody and realize the values of equity, self-reliance, and ecological balance. Thus I wrote enthusiastically (if not very lyrically) about their potential. While networks are undoubtedly an efficient social technology for achieving these ends in particular contexts, it is not true that all networks take these values as their goals.

I now feel that the distinguishing characteristic of networks is the high level of motivation of their members to communicate across formal social and political boundaries. Networks can also be distinguished from all bureaucratic "command" organizations by the "bottom-up" characteristic of such communication, regardless of their overall goals. There is no such thing as a "top-down" network.

Moreover, I discussed networks without describing their political and social contexts. Networks are discrete entities from the "internal" perspective of information flow, and my definition of networks includes the fact that their members are acting unconventionally. However, the internal structure and function of a network can only be understood by viewing it

Peter Hayes is an activist on energy issues who has worked with Friends of the Earth in Australia. He was Director of the Environment Liaison Center in Nairobi, Kenya from 1975-1976, during which time this study was prepared. He is currently engaged in transnational anti-nuclear work. Comments or inquiries should be directed to: Peter Hayes, ERG-100, T-4, U.C. Berkeley, Berkeley, CA 94720.



Tadahiro Ogawa

in the matrix of conventional relationships from which its actors and their motivations are drawn.

The regulating principles which keep networks under control and limit their extension and efficiency are the basic fault lines which cleave capitalist societies. My analysis, therefore, was somewhat a-historical: it neglected the social and political determinants of the problems around which networks spring up and the nature of the information they exchange.

A further conclusion follows this retreat to history. Networks exist because people strive to overcome all the ways they are shredded and pulverized under advanced capitalism -- the fragmentation, segmentation, marginalization, and feudalization of their lives. Finding themselves in continual conflict with themselves and others, people seek to deflect and overcome this social disintegration by using networks.

The paradox is that the issues which stimulate people to enter networks (which attempt to transcend the age, sexual, racial, national and tribal differences which are deployed against their class unity) are also issues which can be resolved only at the level of *structural change*. Such change cannot be achieved with the social and political resources of issue-oriented networks. This has resulted in lots of frustrated networks.

Finally, my report did not ask which people are stimulated to enter networks -- to whom is this social technology useful? In my experience, it seems that networks primarily exist among social groups who may be undercapitalized but who have a sufficiently comfortable standard of living to organize beyond mere daily survival. For the poorest strata of the overdeveloped countries, networks are generally irrelevant social tools, beyond their budgets of time and energy. In the underdeveloped countries, networks are usually covert and highly structured, to avoid the immediate repression attracted by unorthodox and subversive social and political behavior. Consequently, networks are found mainly in the overdeveloped societies, reaching into international levels of social and political organization.

The historical grounding for the fantastic proliferation of networks is found in the degree to which communities have been fragmented by capitalist exploitation. Since informal networks are primarily aimed at reducing isolation and overcoming social divisions, networks as such would become obsolete if a reconstructed, socialist society succeeded in abolishing such divisions. Such a reconstruction remains problematical. The important question is what role networks will play in the transitional struggle.

NETWORKS

> **The day someone discovers how to unify, without uniting, the different groups of every country, of every continent, of every race and religion, then we will have found a strength that is more powerful even than nuclear power -- the strength of love. That is where the real strength lies. (2)**

Definition

The term network, in its most minimal definition, is a number of spatially dispersed elements connected by intersecting lines of communication. (3) In another definition, the

term describes "the relationship between formal and informal groups, particularly at a grass-roots level." (4)

How Networks Operate

Networks can be termed "informal associations" which include action groups, movements and temporary cooperating mechanisms. (5) They operate with a *decentralized mode of action,* characterized by coordination of many points of activity, and they are relatively *unstructured.* Often there is "no formal dividing line of membership." (6) These characteristics need not imply disorganization or a lack of order, but a different kind of coordination. (7)

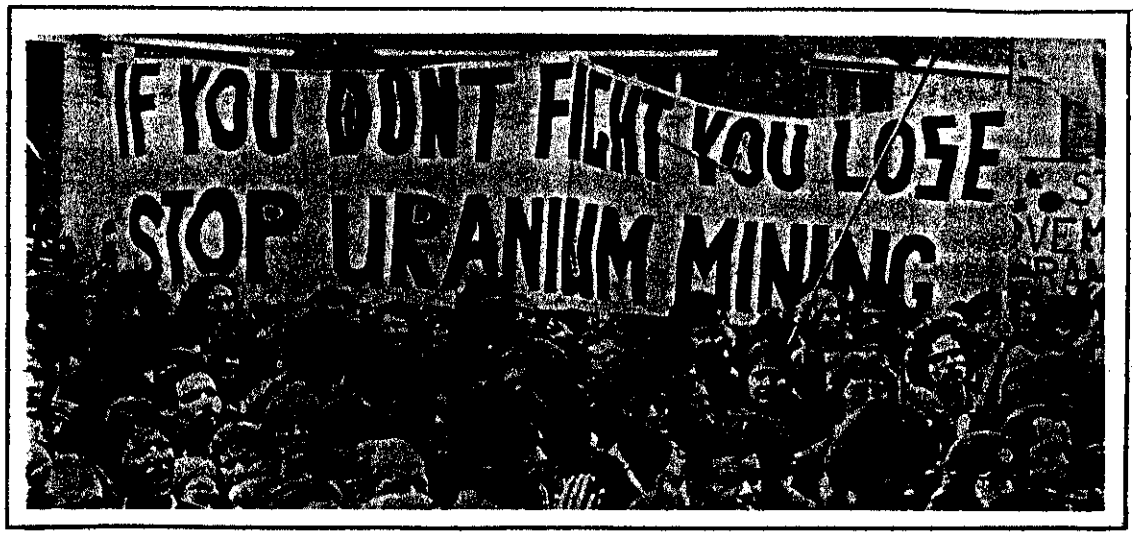
Network analyst Anthony Judge states that the network is

> appropriate to today's rapidly-changing conditions which constantly give rise to fresh problems and unforeseen requirements for action -- requirements which cannot be rapidly and satisfactorily distributed to organizations working in isolation within rigidly defined programs. The network permits all the decentralization necessary to satisfy the need for autonomous organizational development and individual initiative. It also provides for very rapid centralization, canalization and focusing of resources the moment any complex problem (or natural disaster) emerges which requires the talents of a particular configuration or constellation of transnational organizations (or other bodies). (8)

One member of a grass-roots network described it as "very issue-oriented ... [it] involves working with and changing our own peoples' concepts. We really have to become our own experts." (9) The informality of networks allows the relationships within and among them to be horizontal, as opposed to vertical and hierarchical. Optimally, each actor in a network can benefit by participation and command increased resources. Since a unanimously agreed-upon common policy is not often required of an informal network, the actors can work at the highest common factor rather than the lowest common denominator. Status, prestige and divergencies are accommodated without irrevocable breakdown of relations in the whole network: conflicting members simply disengage.

Information Flows within Informal Networks

Networks often rely on *information clearing houses* (10), which sort and decipher information to make it comprehensible to a wider audience, reorient it to make it locale-relevant, and apply information from past experiences to new situations. One such clearinghouse, the Tasmanian Environment Centre in Australia, states that " *ideas and information must be used as tools* the environment 'movement' there are people who know; or who have friends who know; or who have contacts inside various industries, departments and organizations who know. And there are people, everywhere, who have the ferret-like ability to question the 'experts' and 'authorities' and get information from such sources before it becomes published



Australia

as 'news.' The use of the network is one of our most valued weapons in defense of the environment. After all, the wreckers and developers don't often wait for a 'report' to be made public." (11)

Transnational Networks

Transnational networks are local action groups interlinked across national boundaries. These networks spring up to share common experiences and to undertake joint action. Thus, "what happened thousands of miles away provides the incentive for new initiatives all over the world." (12)

Transnational networks, habitually run on a shoestring, ensure the maximum utilization of local resources over long distances and broad conflict fronts, emphasizing specific issues, and minimizing 'keep in touch for the sake of keeping in touch' kind of activities. (13) Communication toward synchronized action is often achieved through *travel* ('mobile actors'), as well as through messages and other means of sharing information.

The Jishu Koza network, a Japan-based transnational environmental network, exemplifies many of the characteristics of informal grass-roots networks: it has no one center or prime controller, and it is highly informal, drawing its strength from interactions among members. A leading Japanese environmentalist states, "Jishu Koza is not an organization at all. We are a kind of telephone switchboard; we liken ourselves to a movement. Sometimes we say [that] we will not be any kind of organization." He notes further that "trade unions and parties did not work successfully on pollution issues, especially because at the top some were erased, bribed or corrupted. In our network, there is independence [and] as much bilateral, personal and informal contact as possible. The other side cannot find the Center. If the other side selects a Center and bribes him, the whole network doesn't change." (14)

Reactive Networks

The Jishu Koza network is an example of a *reactive* network. As the evidence of the severe neurological effects of mercury poisoning emerged at Minamata and Niigata, the struggle of the local people against the factories was confused by the importing of "independent" researchers who put out irrelevant or partial information. It was only through the continual interaction of the victims that this diversionary information was systematically debunked by committed scientists and the needs and problems of the local victims were correctly assessed. In 1967, the Niigata victims commenced a civil action which was won in 1971. In Minamata, the local community was more fragmented and only undertook legal action after Niigata victims visited in 1968.

The local Japanese experience with mercury proved to be relevant to situations in Scandinavian countries as well as to Italy, Holland, Canada, America, Puerto Rico, Brazil and Australia. In Ontario, Canada, the Dryden River and the English River were contaminated by a pulp mill, affecting the Indians in two reserves. In 1971 the Ontario government started a 'Fish for Fun' campaign [catch them, but don't eat them] because of the high mercury contamination of the fish. But since the tourist resorts continued to serve fish to their U.S. visitors, the Indians didn't take the ban on eating local fish seriously. The Indians began showing signs of mercury poisoning, but their symptoms were at first attributed to alcoholism.

In May 1974, a Canadian who had been alarmed by the similarities of the victims to those at Minamata visited Japan; in 1975 three Japanese experts formerly involved with the Minamata case came to Ontario. As in Japan, the Canadian company tried to refute their responsibility, stating that they "did not cause the mercury to turn to poison," but rather that " nature performed a process of biological methylation which produces the lethal methylmercury combination." (15)

Links in this transnational network developed first between the victims of the disease in one country and then moved across national boundaries when special expertise was needed in the diagnosis and treatment of the disease, as well as in the method of approaching the pollution issue. Both the victims and the experts have visited each other's communities to establish direct relations. Although the mercury conflicts were on a local and national basis, the information transferred from one national confrontation to another increased the efficiency of local environmentalists who knew the arguments and counterarguments.

Importance of Strategic Thinking

In a Swedish case of mercury pollution, the fishing community was outraged by the restrictions on fishing areas closed after mercury pollution from paper pulp factories, whereas in another case in Australia, this was avoided by prior consultation with the fishing community by environmentalists. Friends of the Earth in Australia note "the same pattern of deceit that occurred in other parts of the world" over methyl mercury. (16)

After mercury pollution in Thailand by Asahi Glass Company, a joint exhibition on pollution by Jishu Koza and the Japan-Thailand Youth Friendship Movement was organized in Bangkok in 1974. (17) "This combination of both movements brought great success. Cooperation by Thai and Japanese citizens who keep watching the pollution exporting enterprises has reached a point where we can exchange information and take action together." (18). An evolution from a *reaction* to the local experience of mercury pollution to a *preventive* approach can be seen in this example.

Preventive Networks

Preventive networks arise which seek resolution of the specific issues they tackle through *structural change*. Such issues are manifestations of persistent problems, and long-standing networks are the result.

One of the most vibrant transnational networks is aimed at halting nuclear power. One of its layers is Friends of the Earth International, "a loosely linked network of separate FOE organizations," (19) all of which are "completely autonomous." (20) For example, FOE of the United Kingdom is a permanent organizational entity which acts with 150 local groups to embed policy changes in local action and is "systematically developing what has become a network extending from Cornwall to Orkney. Each group is led by a coordinator whose job includes liaising with the head office. [However,] groups are autonomous and are free to choose their own campaigns. . . " (21)

The anti-nuclear movement began independently in many countries. There is evidence confirming that "the diffusion develops as an outward movement in small steps and simultaneous inner condensation takes place. Occasional jumps of the innovation over longer distances at the beginning of the process tend to create secondary centers later on. The point of introduction in a new country is its primate city. . . . the centers next in rank follow. Soon, however, this order is broken up and replaced by one where the neighborhood effect dominates over the pure size succession." (22) Almost all the anti-nuclear groups which operate transnationally are urban-based.

The Canadian Coalition for Nuclear Responsibility views the nuclear controversy "as a focal point and a rallying point for one of the most crucial questions of our time. This question goes far beyond whether or not nuclear energy is an acceptable technology for generating electricity. The question is: given the incredible power of modern technology, who should make the decisions in our society, and in what manner, and for what purposes?" (23) It is the consideration of such structural questions that typifies long-standing preventive networks.

As a leader of the Danish Organization for Information About Nuclear Power, (which has been instrumental in the indefinite postponement of Danish nuclear power) (24) puts it:

> The battle against nuclear energy is increasingly seen as an ideal model and test case for these 'strategies for survival' through the politics of society. It is only from a broad critical basis among public opinion and with continual links back that political structures can emerge which have the stature to face the many forces threatening life. In the battle against nuclear energy there lies a chance, for the first time and perhaps for the last time, of creating such political structures in a democratic way. (25)

Conclusion

The transnational networks described so far have been negative in some degree -- whether reactive, defensive, or preventive. On the positive side are networks which emerge to diffuse innovative ideas and potentials for change.

Todos en Bicicleta, a network of about 50-70 bicycle action groups, represents a potentially powerful base for political action. Although concentrated for the most part in developed countries, the base is broadening.(26) In 1974, Todos En Bicicleta held a

major demonstration in Mexico City. The integration of bicycles with public transit is an *innovation* that goes hand in hand with the preventive approach of opposing the automobile industry.

The important question now, for all transnational networks, is that of strategy. As the International Foundation for Social Innovation puts it:

> No hierarchy can reflect the complexity of the interrelations between concepts, problems or organizations, interrelations which it is nevertheless desirable to perceive in order to take decisions.

As a result it seems necessary to think up structures backed up by the appropriate conceptual tools which will enable the new and complex problems which are constantly emerging to be mastered. It is a question of defining what could be called a "network strategy" to facilitate -- or catalyze -- the appearance, the development and the adaptation of inter- organizational networks capable of dealing with the entanglement of problems in terms of values perceived at all levels of the social system. (27)

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