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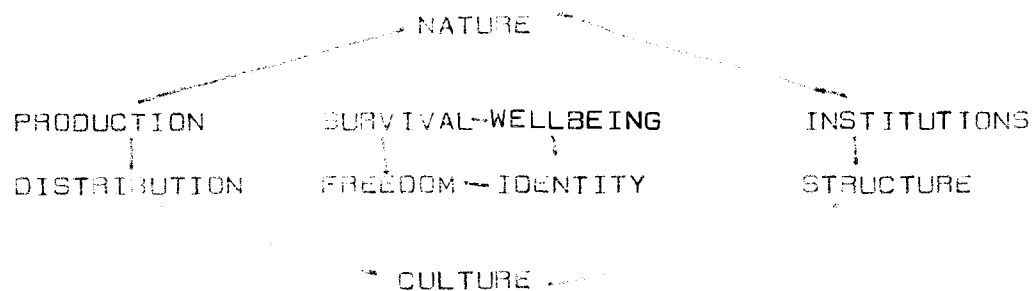
THE GRID(L) WORLD MODEL:
Some Basic Aspects

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1. Human societies are entities in process, they evolve and devolve, more or less; they do not necessarily develop. To explore this a balance has to be struck between an analytical framework rich enough to accommodate many dimensions of analysis, yet parsimonious enough to permit a certain economy of thought. As the GPID project is an exploration in human and social development these two notions **will** be taken as basic, and the former will be subdivided into four, the latter into six aspects:



There is an "inner circle" for human development seen in terms of the satisfaction, and further development, of sets of needs; and there is an "outer circle" of social development seen in terms of the type of evolution of the six aspects that would be conducive to human development. This immediately raises the question of whether there is a positive feed-back here in the sense that human development, balancing the satisfaction of survival, wellbeing, identity and freedom will be conducive to social development - and one assumption is that identity, under certain conditions, will provide a linkage to society in general, and nature and culture in particular. A developed human being will care for these aspects of his/her environment, a maldeveloped one not. Like a developed society for the world.

2. All of this is seen as in constant flux, in process; being defined and redefined. There are goals for all ten that together would constitute a normative model - one example is given on the next page. There are dominant processes and counter-acting processes, also in the goals - some of them to be described later. And there are actors trying to bend the processes towards the goals - such processes are called strategies of development.

THE CPID(L) NORMATIVE MODEL: GOALS OF HUMAN AND SOCIAL DEVELOPMENT

HUMAN DEVELOPMENT

= sustainable satisfaction and development of basic human needs (neither under-, nor over-consumption of "satisfiers"), facilitating or at least not impeding the human development of others

a) survival needs
(negation: violence)

- for realization of potential biological life-force, unimpeded by direct and structural violence

b) wellbeing needs
(negation: misery)

- for food, clothes, shelter, health care, education, "comfort", transportation/communication; for energy, etc.

c) identity needs
(negation: alienation)

- for closeness to self and others, society, culture and nature

d) freedom needs
(negation: repression)

- for the possibility of choice, and for a conscious choice

SOCIAL DEVELOPMENT

= human-made environment compatible with human development

a) production

- in a broad sense (formal, informal; goods, services) with priority of production for the satisfaction of basic human needs,

b) distribution

- so that priority is given to those most in need, building social justice and increasing equality among nations, classes, races, sex, age and ethnic groups.

c) institutions

- building institutions for the enactment of these goals, avoiding excessive authoritarianism and gigantism

d) structure

- building, through participation, self-reliance at the local, national and regional levels, thereby also preventing that development is at the expense of others today or in the future (synchronic and diachronic solidarity) - such "development" being called exploitation; building equity at all levels.

e) culture

- doing all this in a way compatible with those aspects of the endogenous culture that are compatible with the above.

f) nature

- maintaining and building ecological equilibria so as to prevent depletion and pollution, on a sustainable basis.

By "social development", then, is meant all social spaces: local, national, regional, global. What is said above applies, mutatis mutandis, too all levels. One might also talk about WORLD DEVELOPMENT as the environment compatible with social development, "social" then referring to the "lower" levels.

3. The normative model is given here as a way of spelling out ten aspects of human and social development, thereby also coming closer to their definition [in the Indicators part of the GPID project this is carried further, towards operationalization, but that will not be presented here]. The model raises the problem of how to conceive of such lists of desiderata, themselves the outcome of countless discussions with all kinds of people around the world. Are these detachable items from which we can pick any subset because they are independent of each other; can we only realize some at the expense of others so that trade-offs have to be considered; or do they come in clusters because they belong together in the same "family/scheme of things", meaning in an extreme formulation that it is either all or none? The former would be a highly atomistic, the latter a highly holistic position, the trade-off position admitting couplings between the items being somewhere in-between. Our own view is in the holistic direction, but a soft version: rather than all or none it is a question of many or few, and rather than full realization to move towards some realization is already quite a lot. The important point is to try to spell out visions of desirable societies and visions of desirable worlds that are relatively holistic, hanging together, and compatible with these normative goals presented above.

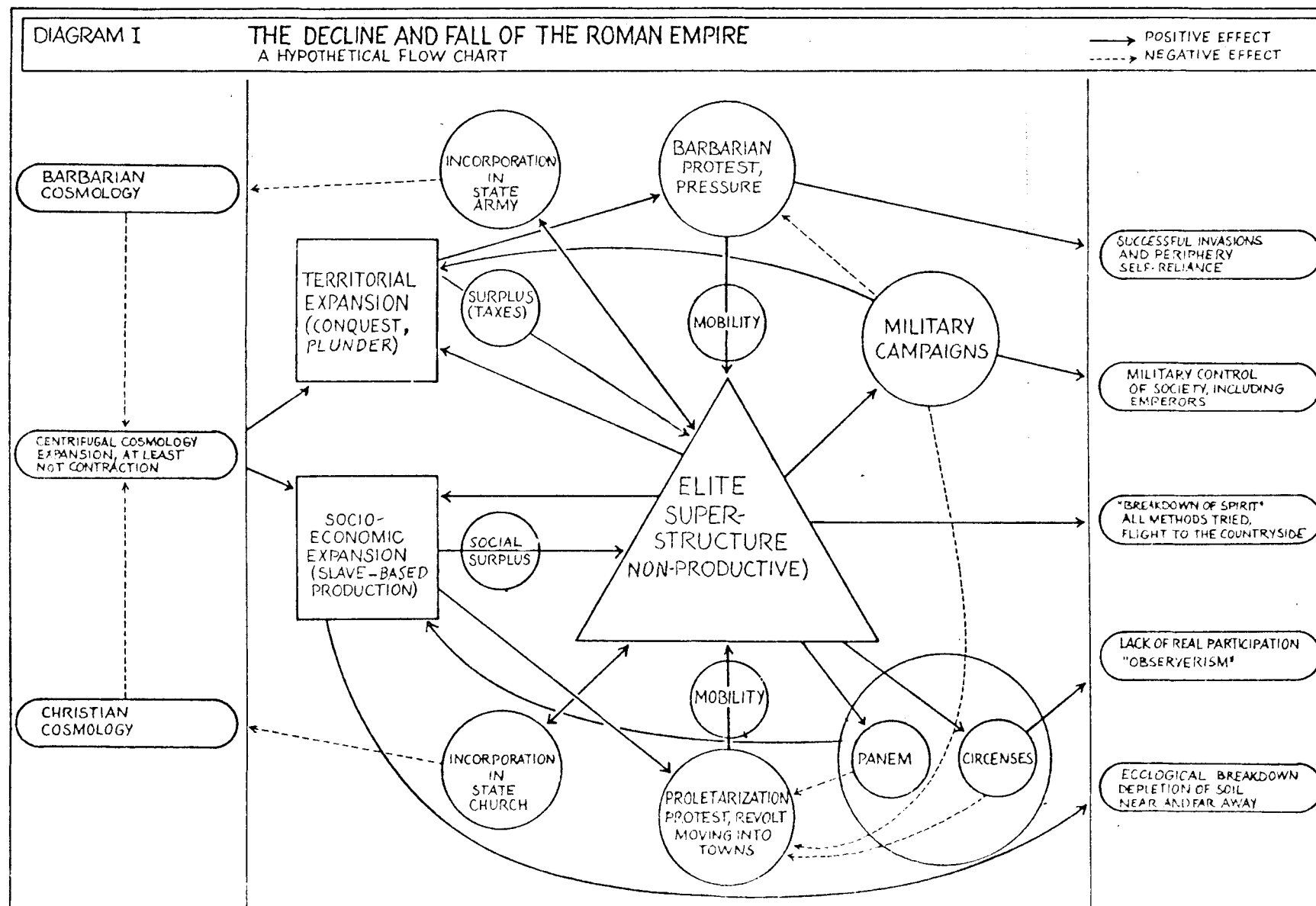
4. Thus, the GPID(L) world model will not stay within the narrow framework of the essentially econometrically oriented models best known today; focussing on production and nature, exploring what limitations depletion and pollution would place on economic growth. The more advanced models, more human and social oriented, would in addition take in a range of the material/somatic needs: survival (as life expectancy) and the wellbeing needs for nutrition, dwelling, education and health, including the distribution of their satisfaction. What is left out is rather much; for instance wars; nonmaterial needs; structure; culture; history; visions; action. For realism such concerns should be central in a model, not peripheral.

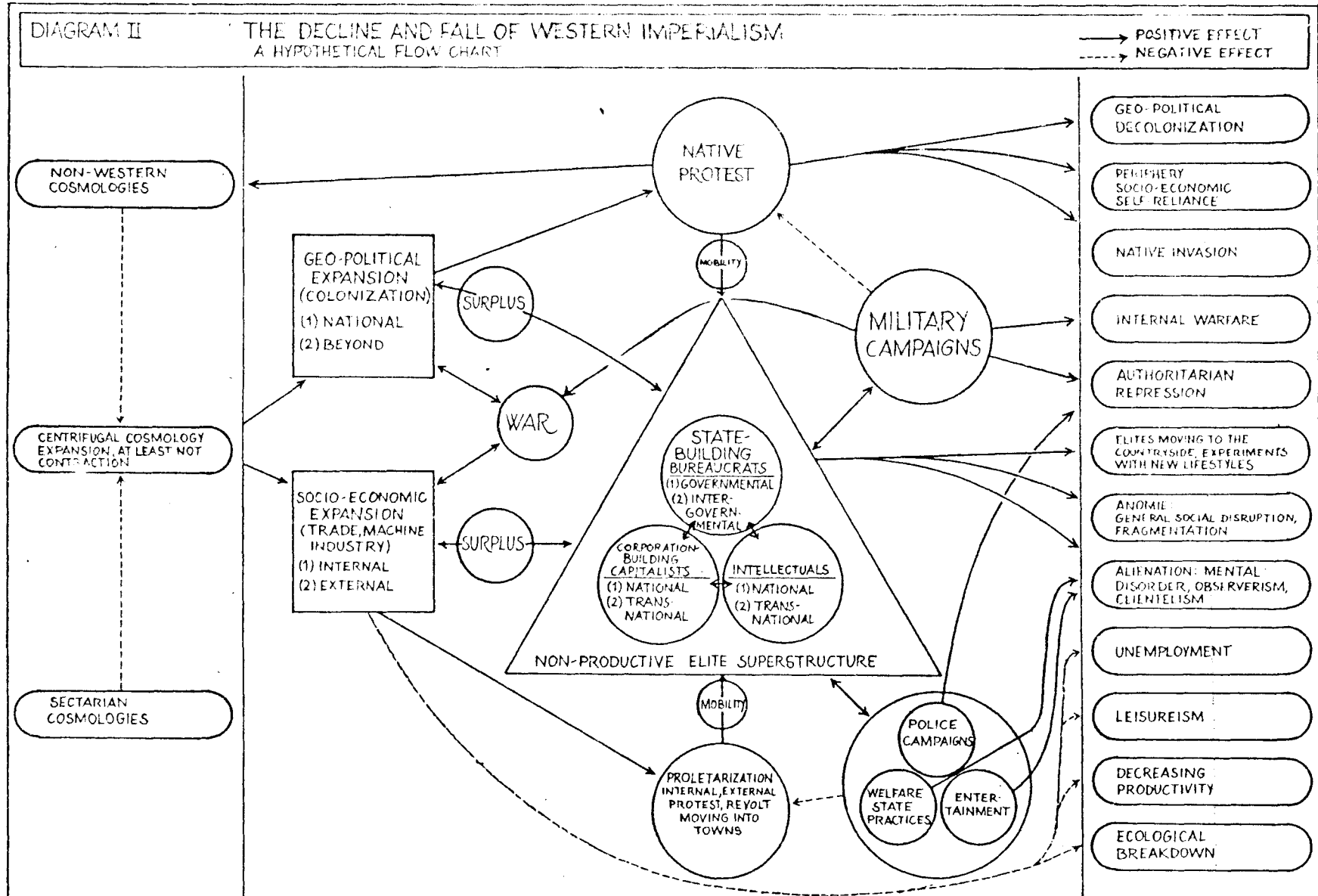
5. The point of departure for descriptive models, of real world processes, not of goal processes, would be a standard Western society, which we define as a society steered by a program, a project embedded in its social cosmology (deep structure + deep ideology), roughly expressed as follows:

- (1) SPACE: Center-Periphery gradients, with the West in the Center
- (2) TIME: Ideas of Progress and Growth, with Crisis and Catharsis
- (3) EPISTEMOLOGY: Dichotomous; atomistic and deductive
- (4) PERSON-NATURE: Herrschaft over Nature, including animals
- (5) PERSON-PERSON: Vertical and individualistic; competitive
- (6) PERSON-TRANSPERSONAL: Religions/ideologies claiming universality and excluding other religions/ideologies

Structures and processes compatible with these basic assumptions, built into Western society and Western thought, would definitely be preferred to those at variance with them. But then it should also be kept in mind that the dominant cosmology is the cosmology of the dominant class, meaning that the dominant processes will be compatible with these six assumptions, and carried by dominant actors. There will also be counter-acting processes, carried by counter-acting actors -- and, of course, processes of either kind that will be carried by no particular actor at all. They are not willed, they simply are.

6. With a **social** cosmology such as this the history of standard Western society can be seen as the history of exploitation, and also expansion. Exploitation is seen as squeezing something beyond its capacity of reproduction/renewal. What can be squeezed are nature and people. But a distinction can also be made between an internal and an external sector of the world - the external sector being treated ruthlessly, the internal sector being treated in a softer way. This leads to distinction between four types of exploitation: exploitation of the external sector (nature as well as people), exploitation of nature, exploitation of self, and exploitation of the internal proletariat; E_e , E_n , E_s and E_p . What for? In order to satisfy the demands of a materially non-productive, but expanding, elite, with expanding appetites as under the Roman Empire and Western Imperialism





7. The two models are quite similar as they are intended to depict phenomena held to be very similar. There is a limit to exploitation/expansion: it works as long as it works. Either there is nothing more to exploit because the basis has been destroyed, is no longer able to reproduce/renew itself (and the system moves on to another type of exploitation), or the protests/revolts of the exploited become too strong. The system becomes a victim of its own lack of restraint, its own unlimited appetites and enters decline because it tries to satisfy increasing appetites with limited resources. In the decline and fall phase, then, a number of processes set in, some of them to try to save the system, some of them actually accelerating the decline, some of them the signs, and pains, of the birth of a new social formation [these three categories are not mutually exclusive].

8. Since we are now in the phase of decline and fall of Western imperialism, and since standard Western society has become the model society, attempted imitated not only by Third world countries with market economies, but also by - in most essential characteristics - countries with centrally planned economies both in the Second and the Third worlds, more details are needed to explore this process. Thus, the elite, as already indicated in Diagram II above, is seen as the urban-based, "modernizing" and industrializing elite-rooted in statism, capitalism and professionalism- of bureaucracy, corporation and intelligentsia [the BCI-complex] - supplemented by military and police, often headed by the party [the PMP-complex]. This elite is expanding, and its appetites are directed towards a bourgeois way of life [BWL] of non-manual work, material comfort, privatism and security. The pressure on the economy now depends on three factors: the size of the elites, the scope of BWL [how expensive the version] and the domain of BWL [how many are included from the non-elites, the assumption being that all elites go in for BWL].

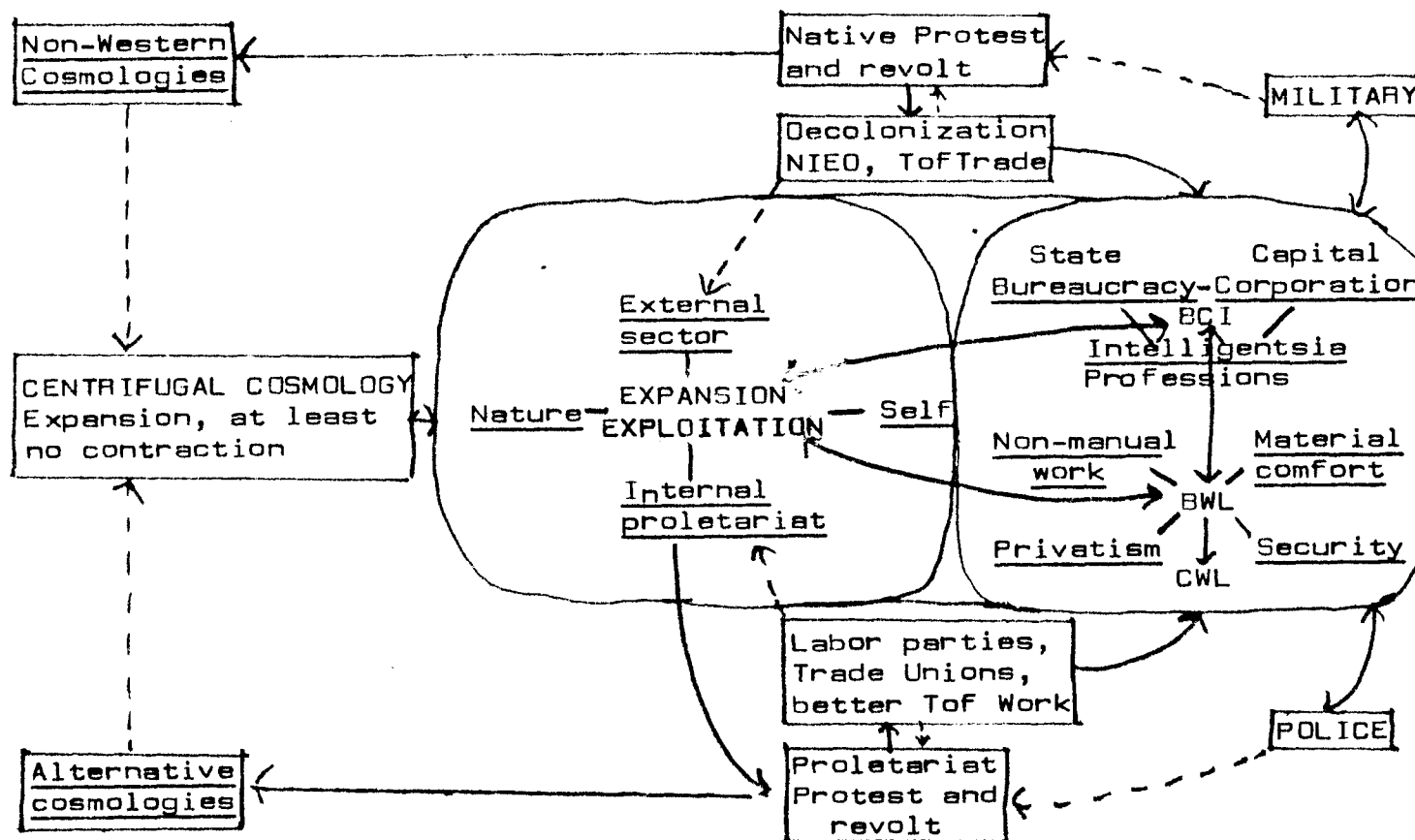
DIAGRAM III

THE WESTERN SOCIAL FORMATION: SOME KEY FACTORS

COSMOLOGY

STRUCTURE/PROCESS

MALDEVELOPMENT SIGNS



—————> positive effects

-----> negative effects

9. The maldevelopment signs are divided into human maldevelopment and social maldevelopment, in accordance with the logic of the normative model above of development - only that the items of production, nature and culture have been singled out for special attention. They are well known in standard Western society and seem relatively resilient. The reason why they are listed in that particular order in Diagram III is only that so much attention is paid to the economic crisis - here seen as an overproduction crisis relative to increasing capacity of other countries to supply their own markets, and relative to the strong competition the standard Western society now encounters from non-West^{ern} sources - Japan (certainly never a Western country), the mini-Japans (South Korea, Taiwan, Hong Kong, Singapore) and other NICs. Much attention continues also to be focussed on nature and the destruction of the ecological balance - in the shallow version of exploring depletion and pollution rather than in the deeper version of looking into the conditions for mature eco-systems, in terms of diversity and symbiosis. Surprisingly little attention is actually paid to social maldevelopment of the types mentioned, probably because they are seen as unsolvable and because injustice, inequality and inequity are not at all seen as bad. The revolt of younger people are often seen more as a sign of cultural malaise (which may be real enough) than as a social protest.

10. When it comes to human maldevelopment, however, there is no lack of attention. The diseases of the body and the mind are real enough. On the next page there is a more systematic presentation of the health consequences of this formation; with its impressive record in decreasing infant mortality and fighting infectious diseases and natural hazards, bringing about increased life expectancy and a growing population, and its equally impressive, negatively, record in producing a second, third (and in the future possibly even fourth) cluster or generation of diseases or sources of mortality. And health, in the broad WHO sense, actually touches all needs classes.

DIAGRAM IV

GENERAL CONSEQUENCES OF
STRUCTURE/PROCESS

HEALTH CONSEQUENCES
IN A COUNTRY LIKE NORWAY

Formal
Health
Sector
growth

General hygiene, nutrition
Inoculation, etc.
Other forms of preventive medicine
Primary, secondary, tertiary care

Bourgeois
Way of
Life

Non-manual work, with gradual abol-
ition of heavy, dirty, dangerous work
Material comfort, counteracting cli-
matic fluctuations of nature;
also leading to lack of exercise, cars
Privatism, withdrawal into family
and peer groups; observerism
Security, leading to rising entitle-
ments, and to clientelism

Chemical,
Circus
Way of
Life

Alcohol, tranquil izers, drugs
Tobacco, sugar, coffee, salt
Chemically treated food; panem,
natural fibres etc. destroyed
Circenses, TV, spectatorism

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Exploitation of Nature, ecological
balance down, depletion, pollution up
nature as health resource down
Exploitation of Self, ever higher prod-
uctivity leading to alienation, stress
Exploitation of Inner proletariat,
first heavy; dirty, dangerous jobs;
then non-manual, push-button, boring
Exploitation of Outer proletariat,
first economic exploitation; then export
of heavy, dirty, dangerous jobs and poll.

Informal
Sector
Decline

Local self-reliance break-down
Family cohesion break-down
Young people lonely; school ghettos
Old people lonely; old age ghettos

Informal
Health
Sector
decline

Self-care down
Mutual care down
Other-care down
Positive folk medicine down

Produc-
tion
crisis

Unemployment
Leisurism
Aggressive marketing in time and space
War, to generate more demand

First cluster:

-infant mortality down
-infectious
diseases down
-nature-generated
accidents down
-longevity increase
-population increase

Second cluster:

-cardio-vascular
diseases up
-cancer up
-society-generated
accidents up
-longevity stable
-population stable

Third cluster:

-chronic diseases up
-iatrogenic diseases,
hospitalitis up
-mental disorders up
-suicide up
-population decrease
-longevity decrease (?)

Fourth cluster:

-genocidal war
-destruction of FHS
-destruction of Nature

11. There will, of course, be a flow of action to arrest these types of maldevelopment from evolving further. If SWS is "blue" because of the predominance given to capital, its accumulation and its rentabilité, then there will be efforts within blue (or "pink" society) to engage in ameliorative policies - such as the ones listed on the next page; all of them within SWS. But there will also be political pressure for other options that no longer can be referred to as SWS:

Red Western Society - more rooted in work than capital, with a strong predominance of the state over capital, or bureaucracy over corporations, in economic life - and higher priorities to the needs of the working classes;

Green Western Society - more rooted in nature as the key production factor and with a strong predominance given to the local level over state and capital in economic life - also with high priority given to the basic needs, of everybody;

Brown Western Society - more rooted in absolute power than in capital, work, or nature, getting its political support where it can be found, from blue, red or green forces.

Of these three it is quite clear that only the green is a qualitatively different society - as will be spelt out below. The reason why is that it alone tries to handle all four forms of exploitation, to arrive at something close to an exploitation-free society; through cooperative enterprises of human size, coexistence with the Third world, a deep approach to problems of ecological balance, and a less stressful society by decreasing, instead of increasing the level of productivity.

12. Red Western society goes in for higher productivity, "release of the productive forces" through the "scientific-technical revolution", control over nature, "comparative advantages" through trade.

In its non-authoritarian form ^{it} wants to reduce the pressure on the internal proletariat - in its authoritarian form this pressure is as high as ever. It is difficult to see that this represents an alternative to SWS and not a consolidation through state power. And this applies a fortiori to Brown Western Society where power has become the supreme principle - and for that reason will be of short duration.

DIAGRAM V

A SURVEY OF AMELIORATIVE POLICIES

MALDEVELOPMENT SIGNS

unemployment

leisurism

aggressive marketing

wars and threats of wars

reduction of eco-maturity

depletion

pollution

alienation from folk culture

injustice by age and gender

inequality by age and gender

dependence on trade

dependence on BCI-complex

growth of formal sector

decline of informal sector

- local level disintegration

- family disintegration

- young people isolated

- old people isolated

no faith in institutions

cardio-vascular diseases

cancer

chronic diseases

mental disorder

suicide

anomie, meaninglessness

AMELIORATIVE POLICIES

emergency work, just to give an appearance of employment

stepping up entertainment, more channels and programs

only towards rich Third world countries (OPEC, NIC), not the poor

talks about arms control measures; such as SALT I, SALT II, etc.

environmental management

recycling industries

cleaning up industries

money for folk music festivals

doing something about gender, women

doing something about gender, women

working for national level self-reliance; forgetting local level

decentralization to reduce dependence on national level; creating higher level of dependence locally

decentralize, moving out of capital, formal sector all over the country

by "cloning" at the local level

reproduction of national level BCI

substitute friends, cohabitation

leisure time clubs, activities

leisure time clubs, activities

more public access to documents

more exercise, healthy diet, reduce smoking etc. less stress

no smoking, less stress, less additives

safety at work and in traffic in addition to above; periodic screening

tranquilizers, ataraxica; more mental therapists, social workers

care with prescriptions, fences to prevent people from jumping etc.

new religions, new social movements promising solutions for everything

Some of these measures can bring long term improvements, others are only cosmetic and may make the situation worse in the long run by delaying more fundamental changes that are necessary, or by resulting in unintended side effects.

A SURVEY OF GREEN POLICIES

MAINSTREAM CHARACTERISTICS

GREEN POLICIES, MOVEMENTS

1. Exploitation of internal proletariat

cooperative enterprises, movements
labor buyer/seller difference abolished, customers directly involved

2. Exploitation of external sector

co-existence with the Third world;
only equitable exchange relations

3. Exploitation of nature

ecological balance Person-Nature;
building diversity, symbiosis;
complete or partial vegetarianism

4. Exploitation of self

more labor- and creativity-intensive
decreasing productivity some field

1. Dependency on foreign trade

self-reliance; self-sufficiency in
food, health, energy and defense

2. Dependency on formal sector, BCI-complex

local self-reliance, decreasing
urbanization, intermediate technology

3. Offensive defense policies, very destructive defense technology

defensive defense policies, with
less destructive technology, also
non-military, nonviolent defense

4. Alignment with superpowers

non-alignment, even neutralism;
decoupling from superpowers

1. Bureaucracy, state [plan] strong and centralized

recentralization of local level,
building federations of local units

2. Corporation, capital [market] strong and centralized

building informal, green economy;
- production for self-consumption
- production for non-monet. exchange
- production for local cycles

3. Intelligentsia, research strong and centralized

high level non-formal education,
building own forms of understanding

4. MAMU factor; BCI peopled by middle-aged males with university education (and dominant race/ethnic group)

feminist movements, justice/equality, and for new culture and structure; movements of the young and the old

1. Non-manual work, eliminating heavy, dirty, dangerous work

keeping the gains when healthy,
mixing manual and non-manual

2. Material comfort, dampening fluctuations of nature

keeping the gains when healthy,
living closer to nature

3. Privatism, withdrawal into family and peer groups

communal life in bigger units,
collective production/consumption

4. Security, the probability that this will last

keeping security when healthy,
making life style less predictable

1. Alcohol, tranquilizers, drugs

moderation, experiments with non-addictive, life-enhancing things

2. Tobacco, sugar, salt, tea/coffee

moderation, enhancing the body's capacity for joy, eg through sex

3. Chemically treated food, panem natural fibers removed

bio-organic cultivation, health food, balanced food, moderation

4. Circenses, TV, sport, spectatorism

generating own entertainment, moderate exercise, particularly as manual work, walking, bicycling

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Bourgeois
Way of
Life

Chemical
Circus
Way of
Life

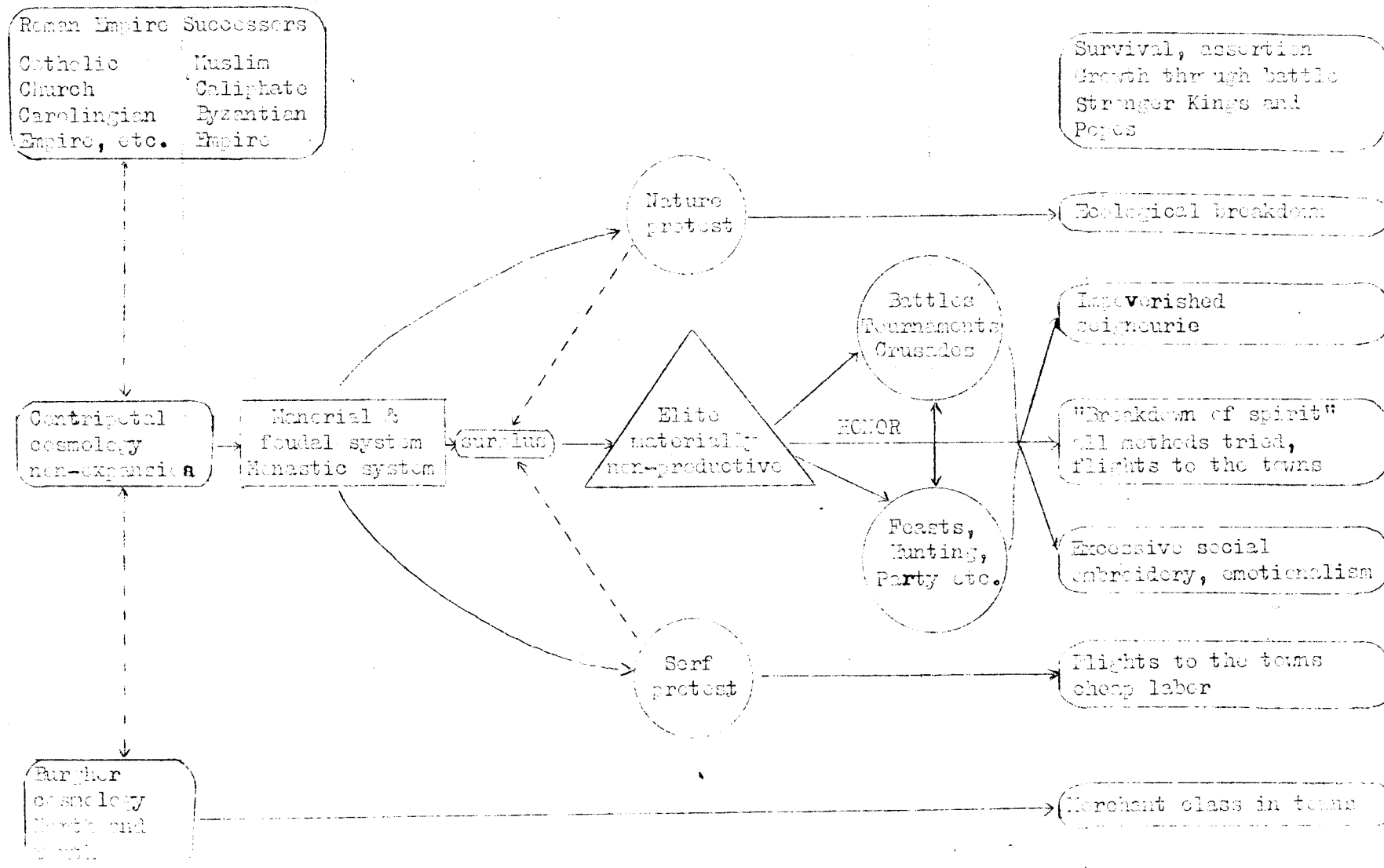
13. The green policies constitute an alternative to the extent they can be seen as rooted in a very different social cosmology from that of SWS. It may be expressed as follows:

- [-1] SPACE: Instead of placing the West as a center of control for the world, seeing the West as a center of concern, for ~~West~~
- [-2] TIME: Instead of believing that catharsis, a perfect Endzustand is around the corner, seeing the eternal, dynamic flow
- [-3] EPISTEMOLOGY: Seeing things more holistically and dialectically
- [-4] PERSON-NATURE: Experiencing deep union with Nature, with animals
- [-5] PERSON-PERSON: Experiencing deep union with other people, all over
- [-6] PERSON-TRANSPERSONAL: Give up universality, relating with curiosity to the truths of others

From these assumptions the type of concrete policies indicated on the preceding page would follow. They are interesting in this context also because they constitute the political package that, if implemented, may come closest to realizing the goals in the normative model above.

14. However, there is no reason to be excessively optimistic about this, and not only because the blue, red and brown forces are much stronger in SWS than the green forces - even if the latter are gaining momentum at present. The West has been through this once before in historical times: the decline and fall of the Roman Empire was followed by the Medieval system (first in its manorial, later in its feudal versions) - and this was not a system devoid of exploitation. It was based on exploitation of the internal proletariat (the serfs) and of nature - but there was very little exploitation of any external sector as it was rather localized, and the "bourgeoisie" - the materially non-productive nobility (the monastic system was more self-supporting) - was not exposing itself to the stresses of excessive productivity, but they were living under the pressure to produce "honor". The system eventually declined and fell because of the two patterns of exploitation - the Black Plague being a coup de grace - as indicated in the following chart.

DIAGRAM VII The Decline and Fall of the Medieval Systems in hypothetical flow chart



15. Thus, the history of Western society is the history of exploitation. Four types of exploitation have been defined above. If we ~~dis~~regard gradations and just reason in terms of {absent, present} or {0,1} that could give us an exploitation index from 0 to 4, ranking the $2^4=16$ patterns of exploitation in five classes according to level. However, it may also be that we could enter this set of patterns with a simplifying hypothesis. There may be something like a natural history to exploitation, starting with the exploitation of what is closest at hand, the internal proletariat (sometimes abducted from the external sector); moving on to squeezing nature; then, when that is exhausted, getting an external sector to exploit; and when that does not work any longer for either of the reasons given, moving on to exploit oneself, eg through ever higher demands for productivity. But this has consequences, like it had at the end of the Roman Empire: the costs start piling up, also for the elites, for "self". So we would assume that to be the first type of exploitation to be given up, followed by the exploitation of the external sector as the resolve weakens (and the external sector becomes stronger). What remains, then, would be the exploitation of nature and the internal proletariat, and that is as far as the medieval system came, on the way down from the exploitation peaks of the Roman Empire (we are obviously all the time talking of the bas empire, the Western Roman Empire). In principle, it could proceed further, coming to terms, so to speak, with nature and also with the internal proletariat - and there were tendencies in this direction also during the Middle Ages (which, in terms of level of exploitation, were much less dark than the periods preceding it and following it - but history has been written by the predecessors and the successors rather than by medieval thinkers concerned with more eternal things). The green option today has ambitions in the direction of getting to the bottom of the exploitation complex - the question is, of course, whether they will have more success than the medieval system.

16. There are limits to exploitation, and the hypothesis is that exploitation patterns build up and are broken down, according to a process with certain regularities:

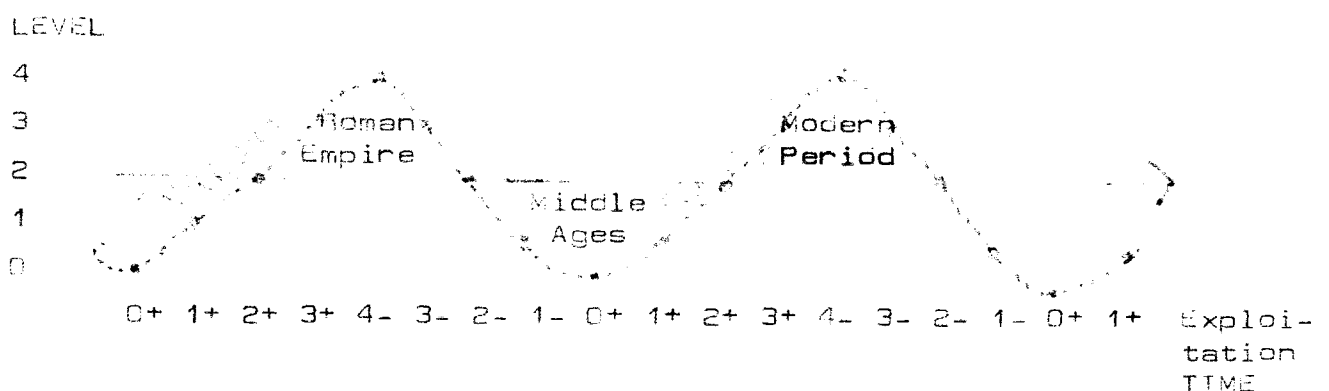
DIAGRAM VIII The exploitation process hypothesis

LEVEL	<u>Expansion</u>					<u>Contraction</u>				
4 Self	0	0	0	0	X	0	0	0	0	Self
3 External sector	0	0	0	X	X	X	0	0	0	External sector
2 Nature	0	0	X	X	X	X	X	0	0	Nature
1 Internal proletariat	0	X	X	X	X	X	X	X	0	Internal proletariat
0	0+	1+	2+	3+	4-	3-	2-	1-	0+	Exploitation TIME [+ on the way up, - on the way down]
	<u>Building up</u>					<u>Breaking down</u>				

The process has a starting point at a social formation with no exploitation at all; then one type of exploitation after the other is added till the full configuration is reached and there is nothing more to add (the moon proving to be non-exploitable, so far). From then on it **breaks** down. What is suggested here is that this process may now be starting, and precisely with the elites feeling that enough is enough. They would experiment, changing to alternative ways of life, and soon give up efforts to exploit an external sector that through NIEO and other policies starts becoming too strong - with the Fight for independence from colonialism as a beginning.

17. This is not a single-shot process of exploitation; it can be repeated. If repeated it would give us a serpentine through history [the real curve probably never went all the way to zero]:

DIAGRAM IX The exploitation process hypothesis repeated



In other words, there are problems at either end - there is overexploitation (for which reason 4 is 4-), but there is also underexploitation (for which reason 0 is seen as 0+) if the dominant cosmology is an expansionist/exploitative one. The curve should be compared with the many types of curves produced by various types of future studies during the last two or three decades, from the highly optimistic exponential curve of the 1950s (reflecting faith in growth unlimited) via the logistic curve prevalent in the 1960s (reflecting the idea of saturation, but then many logistic curves could combine into an exponential "envelope" to serve the function of psychological transition) to the bell-shaped curve of the 1970s (reflecting the idea of a possible overshoot, of going so far as to produce ruptures). All three can be seen as glimpses of the serpentine curtailed by a much too limited time perspective, and little sense of history, as opposed to a thinking and planning horizon of a couple of decades only.

18. A serpentine can, like any wave phenomenon, be discussed in terms of amplitude and wave length; to this we shall also add the level around which the wave is oscillating. In Diagram IX three periods in Western history are indicated, but not necessarily with the more precise definition given to level of exploitation in Diagram VIII. The three periods are, of course, overlapping - but the basic point is that the Middle Ages grew out of the decline of the Roman Empire with a highly expansionist exploitation system breaking down; the Modern Period grew out of the Middle Ages with an even more expansionist exploitation system building up; Something New will then grow out of this as the system breaks down - which is what is happening now. Although difficult to operationalize the exploitation/expansion amplitude is considerable - as between the bas empire in its splendor and the manorial aspect of medievalism, say, five hundred years later. The wave length, seen as the time distance between corresponding historical points varies (maybe one thousand

years for each of the Roman Empire and the Medieval System; the "Modern Period" cannot possibly last that long) - but this is as seen in chronological time. In the type of social time defined here as "exploitation time" the wave-length is 8. The average level around which the serpentine is oscillating is no doubt high - something that should be seen in comparison with other systems.

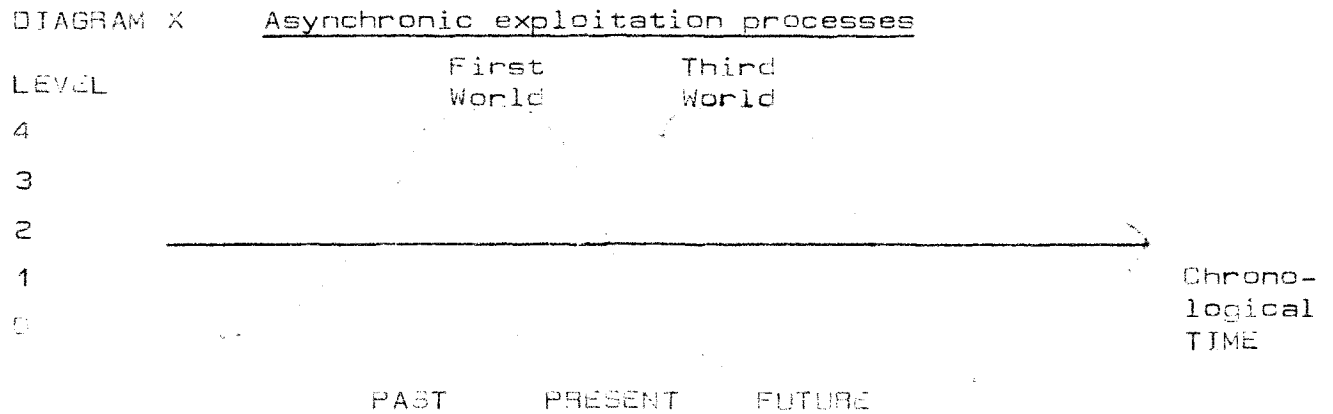
19. On the way up the exploitation hill the system would build large-scale enterprises (in the modern period known as industrialism, corporations); there would be increasing urbanization, growing cities and towns, dwindling countryside; and there would be "modernization" meaning centralization **and** the crystallization of big hierarchical structures (alpha structures) in the form of statism, capitalism and professionalism. No doubt this is the period of "economic growth"; particularly when the infrastructure has really been consolidated. Exploitation growth and economic growth being two sides of the same coin it belongs to the picture that the SWS presents itself only in terms of the economic growth side, keeping the face of the exploitation side down, invisible. The special type of professionals paid to perform this trick is called "economists"; unable/unwilling to include "at whose expense" in their formulas.

20. Correspondingly, on the way down the exploitation hill the opposite process takes place. There will be a return to agriculture with big industries dying, **small ones emerging**; there will be decreasing urbanization with contracting cities and people settling more in villages, in the countryside; there will be decentralization of both state and capital and a certain deprofessionalization. No doubt there will be much less economic growth, starting with zero rates, then negative economic growth - but by that time there will no longer be people calculating rates of economic growth, partly because it is too depressing, mainly because there will be other measures of how society is doing, both at the collective and individual levels, more reflecting the positive concomitants of reducing exploitation.

21. What about the demographic factor? One hypothesis would be that the population growth follows the exploitation growth and that it has much to do with expansion vs contraction ethos, and not only with health and nutrition factors. Health is certainly a key factor not only because of its effects at the individual and family levels but because of its impact in instilling faith or scepticism in the societal project, in the future in general. For these reasons we will, generally assume a high correlation between the growth rates for the economy and for the population, but with important leads and lags of short term duration.

22. What about the war factor? One hypothesis would be that wars would be engaged in on the way up the exploitation hill to secure the basis for exploitation, and on the way down the exploitation hill in efforts to regain the position on the top. Both at the top and at the bottom we would expect low levels of aggressiveness; the societies would be status quo oriented - those at the top because they have nothing more to gain from exploitation, those at the bottom if they have an anti-exploitation ethos (like certain buddhist societies). But the latter may have to engage in defensive wars. Internal wars (revolts) will probably follow the same curve.

23. So much for history and diachrony, now geography and synchrony. If **the West** is the model for most of the world -almost all of it now that the People's Republic of China seems to be in a phase of that kind too - other countries will in principle be on the same serpentine curve, but, of course, not necessarily synchronic with Western societies. As imitators they will be lagging behind, and there will also be important asynchronies inside the countries (as there also are inside the Western countries - and the more asynchrony there is, the better will the country be prepared to enter another phase on the curve). Put differently: in chronological time they are the same, in exploitation time they differ, as given in:

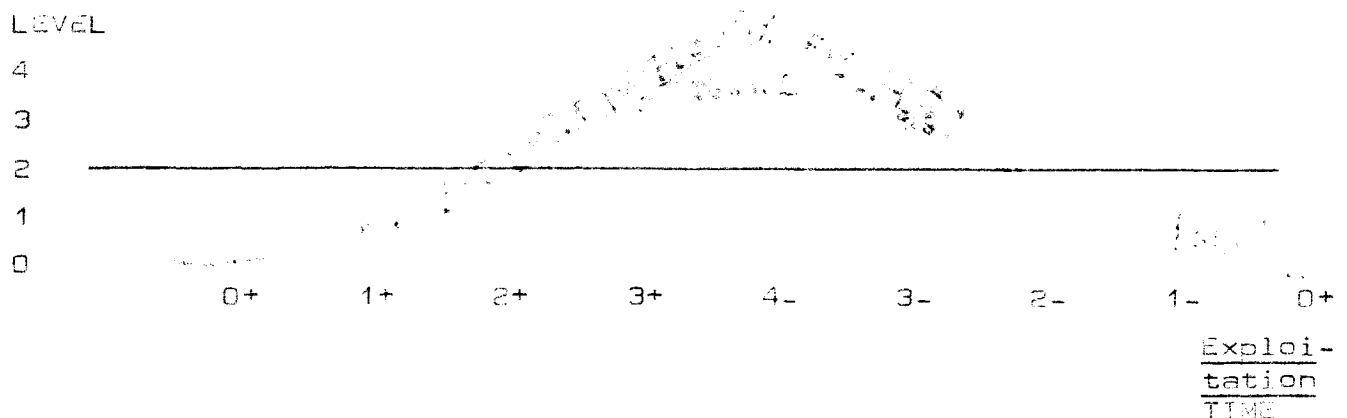


Thus, First world exploitation level may still be higher, but as it is giving up ^{both} exploitation of self and exploitation of an external sector certain Third world countries (mini-Japans, other NICs) will move for full into these two types of exploitation. Japan herself is **seen** on a curve somewhere between the two, meaning that she is also heading for her decline in a reasonably short time, the exploitation of self piling up and the exploitation of the external sector (military phase 1894-1945; economic phase afterwards - actually very much like the Western countries) is probably ^{also} approaching some limitations by now. Concretely this means that we are entering a period with First world countries dangerous because they are on the way down and Third world countries dangerous because they are on the way up (an example being the US and Libya in the Gulf of Sidra August 1981). The obvious Big Question: Will they treat us the way we treated them? The Second world, the socialist countries in Eastern Europe, are more seen as being status quo countries as they are at the top of their exploitation hill (somewhere between the two curves in Diagram X) - although still with some work to do in building a system of external sector exploitation and self-exploitation (alcohol consumption leading the way, it seems - and suicide of the Habsburg tradition in some countries).

24. The preceding paragraph can also be summarized by coming back to exploitation time again, seeing the three worlds of development as going up and down the same basic system of exploitation. Moreover, the three worlds can also be seen as being coupled

to each other like in a train, with the worlds as classes - the First world/class first, followed by the Second world/class busily trying to catch up with the First class, and the Third world/class hanging on as best it can. However, being more attached to the First than to the Second world, because of ties of [neo-]colonialism, and a general preference for first class over second class treatment, [people and countries] there is a special tunnel dug for the elites of the Third world so that they can go straight from the uphill struggle to the decline and fall - or from under-development to overdevelopment as it can also be expressed in a slightly different use of the curve in Diagram XI:

DIAGRAM XI The First, Second and Third worlds in the process



In front is the engine, the one to initiate full scale exploitation - as opposed to 18th to 19th century Spain ignoring the importance of processing nature - Great Britain. Of course, it should be admitted that the cream of the British upper classes have always understood how to protect themselves against the stresses and strains of mal-development, taking the green option in advance. It is seen as a pilot country, heading the descent down to the dreaded Drain, which essentially means that there is less opening for exploitation (this points in the green direction) but also that more of a squeeze has to be used on the exploitation options that remain (which points in the brown direction). So the drain must be something like a brown desert with green oases! The other cars in the train follow as cars do when the coupling is strong enough; the passengers

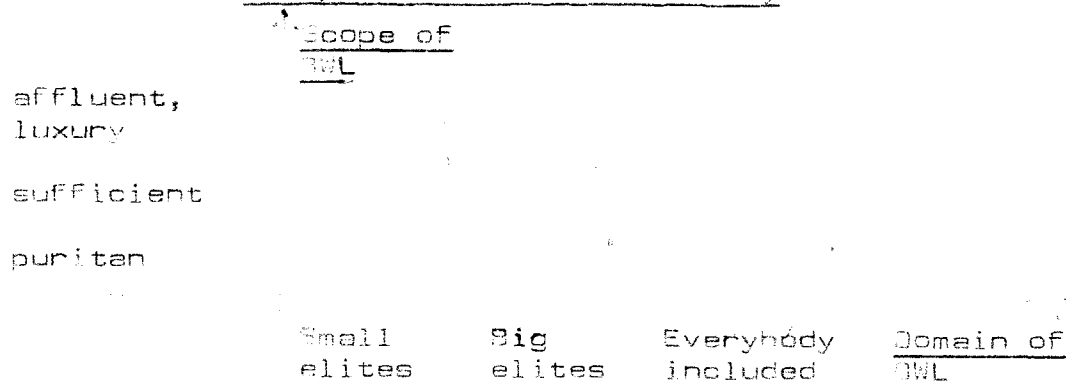
riding first class becoming increasingly pessimist, those riding second class being somewhat uneasy, those riding third class being optimist, particularly those in the first cars as they have already come high and it is still going upwards, isn't it, with industrialization, urbanization and modernization all around.

25. Let us now return to the problems of amplitude, wavelength and level [18 above]. On what does it all depend? We have indicated four factors above [see Diagram III]:

- a centrifugal, expansionist cosmology
- four patterns of exploitation
- a materially non-productive elite (currently the BCI and PMP)
- a materially comfortable life (currently the TWL, plus CWL)

They all support each other, push the society up the exploitation hill and into a solid overshoot - not knowing where to stop, even not knowing where to stop from the point of view of self-interest; among other reasons because the elites are far from enlightened enough. But the pressure on the economy can be analyzed in terms of scope and domain of the bourgeois way of life [8 above]:

DIAGRAM XII The pressures on the economy



The pressure comes when the elites become too big and all want a life in **affluence** and luxury, and/or when everybody is to be included in standard bourgeois ways of life which is not to be confused with satisfaction of basic needs (as can be seen from Diagrams III and IV), with non-manual work, material comfort, and so on. And this means that one way of keeping amplitudes low and wave lengths long is to keep the elites small, with constant appetites, and the people

at a puritan level (or below, as is usually done). This may be a reason why the haut empire lasted for such a long time - and also important in understanding some of the phenomena of the Chinese and Egyptian dynasties. In more egalitarian societies the style of the leadership will not be permitted to deviate that much from the population as a whole, and in that case everybody can be included if only at a relatively frugal, puritan level measured by today's standards, but possibly far better in terms of basic human needs. The key factors, hence, are the level of distribution and the rate of growth of domain and scope of a higher level of consumption - how many more are entitled to how much more? Is there a growing elite, ultimately most of the population, with growing appetites? With no restraint the only way out is to increase the level of exploitation, and sooner or later that will bring down the system - for instance in the ways indicated in Diagrams I and II. And these things are governed by the cosmology, with expansionist Occidental cosmology both favoring inequality and a high rate of growth. As long as this cosmology persists, as long as there is no "agonizing reappraisal", the pressure on the economy will remain, whether it takes the form of very luxury-oriented elites (like ⁱⁿ the U.S.) or a high material standard of living for the entire population (like the more social democratic of the Western European countries) or an effort to both (like the socialist countries of Eastern Europe). Conclusion: a change of cosmology will come about, by deed or by necessity. Otherwise, plus ça change, plus c'est la même chose, same basic program.

25. This type of analysis differs from standard liberal thinking in many ways. For one thing, liberal thinking and its economic expression, capitalism, is very weak on ^{insights in} exploitation and for that reason does not easily see limits to growth. This is very clearly expressed in the rostowian metaphor of "take-off". The curve flown by a plane after take-off is like the exponential curve, but after that comes a leveling-off, a logistic aspect - and sooner or later the plane comes down again, for landing, returning to stand-

still - an aspect of the metaphor not included. Of course, there are alternatives to a soft landing:

- to remain up there, and that requires a supply of energy not generated by the system itself - in other words expansionist exploitation;
- to get into outer space with no force of gravity to counteract, but that leads to other problems and one is no longer of this world;
- a crash landing because one runs out of energy supply

The Western economies are trying all three, including the option of carving out an existence in outer space. A much better policy seems to be to recognize that the flight is no longer viable and go in for a soft landing instead.

27. This type of analysis also differs from standard marxist thinking in many ways. For one thing, marxist thinking, and its economic expression, socialism, sees itself as being against exploitation, and for that reason as being at a higher level than capitalism, being capable of its economic growth, but without exploitation. What we have seen so far would perhaps rather lead to the conclusion that "socialism" is a special terminology for 'state capitalism', a relatively inefficient form of capitalism for late-comers, with the tremendous advantage that it may satisfy basic material needs for those most in need if the elites are thus inclined. Eastern Europe was a late-comer, and the present period of "socialism" may be seen as a latter-day version of the Early Modern period in Western Europe, with its more or less enlightened absolute rulers and heavy control of economic life by the state [the monarch] - a period preparing for the more mature capitalism to follow. In other words, "socialism" in the sense of state capitalism may be another version of capitalism with slightly different patterns of exploitation but more or less amounting to the same, or a preparation for capitalism. True communism a harum avis, would be quite different: this is where Marx seemed to let Fourier and St Simon into the picture and the image seems very similar to what is described above (13, and Diagram VI) as green politics.

28. This model is relatively deterministic as soon as the elites have made the basic choice, that of following the Western model. In a sense this is not even a choice: Western cosmology has been imparted in people all over the world through the very concrete structures of colonialism and neo-colonialism, and is carried every second of the day through Western technology, languages and religion - particularly Christian eschatology with its focus on individual salvation, in this life. The United Nations and almost all intergovernmental and nongovernmental organizations convey the same message: what seemed so successful for the countries following in the wake of Great Britain should now be repeated all over the world. The "development decades" (I, II, III - the present one) are variations over this theme. For the socialist countries the notion of "catching up and surpass" already legitimized, for a long time, any action according to the Western cosmology, in all essentials. And this is the basic point: as long as that cosmology persists the elites will continue enacting it more often than not without questioning the assumptions as it is seen as the normal/natural way for elites to act, and the same for the people because of rising expectations and entitlements. The power the bourgeois way of life, particularly when it comes with ^{delectable} trappings and trimmings, has over peoples of the world is tremendous. It may be the most successful ideology of all times, and if some exploitation and human and social maldevelopment are needed to get it they are willing to pay the price. Until that price becomes too heavy, that is - as in many of the Western societies today. But the evidence from these societies will be denied by the societies on the way "up" and seen as peculiarities of those societies rather than of the system. Learning, it seems, has to be from one's own mistakes rather than from the mistakes of others. And then there is also the ^{tempting} possibility of getting on top of the global, regional or national exploitation pyramid and enjoy the good life now. If history teaches that this can only be for some groups, in some countries, and only for a limited

period, it becomes even more urgent to fight for that position now. Hence the Western-oriented greediness of Third world elites today.

29. This model, then, introduces two determining factors usually not considered:

Culture: in the sense of cosmology, the broad, unwritten program of a civilization, almost never made explicit or challenged

History: in the sense of patterned processes, that it is important to have an answer to the question ou en sommes-nous?

The second partly follows from the first: the program sets the society on a certain path, with more or less success. And if that program is not challenged, elites and peoples as well are the prisoners of their own lack of consciousness. Enacting the program leads to certain structures that are very, very solid. Although they may satisfy material needs for some (and greed, too) they push others into misery, create nonmaterial misery (alienation, repression) for most, lead to wars, and are highly different from the vision most people actually would have of what development is about, not to mention the normative model in (2) above.

30. Given this, the most consistent policy advice for standard Western society on its way down would be the green policies of Diagram VI, actually not excluding most of the ameliorative policies of Diagram V. Historically it is the right phase, it is now il giorno dopo il dì di festa (Leonardi). History has rhythms, and and freedom is to some extent insight in historical necessity. Better a soft landing than a forced, even apocalyptic one, based on unrealistic/undesirable efforts to 'maintain' the system as it is. But it would constitute an admission that standard Western society does not constitute a model of development,

- because the ultimate goal, the bourgeois way of life for all, is undesirable in its consequences, and
- because the processes, based on exploitation and DCI/PMP complexes, are unacceptable to those who have to pay the costs of "development"

Green policies, however, will mainly be engaged in by those who believe in them, and for the time being those are the counter-elites rather than the elites. When/if it spreads to elites and people - that is the question.

* Paper prepared for the IIASA Global Modeling Forum, Laxenburg, 14-18 September, 1981, here in a slightly revised version.

The present paper gives a brief description of some of the basic assumptions in a world model coming out of the Goals, Processes and Indicators of Development Project, the GPID Project. Where the present author is concerned that project came out of research done at the Chair in Conflict and Peace Research at the University of Oslo in the period 1972-1977, in the Trends in Western Civilization Program and the World Indicators Program. Continuation of that research was then for a period supported by the United Nations University, Tokyo. I am indebted to the many colleagues in the GPID Project for good discussions, to the Institut Universitaire d'Etudes du Développement, Genève, and to Dietrich Fischer in particular.

For some publications by the present author from the GPID Project, all in one way or the other feeding into the GPID model, see:

"Sobre alfa y beta y sus muchas combinaciones", in [pp. 19-95] Masini, E. Ed., Visiones de sociedades deseables, CEESTEM, Mexico, 1979

"The Basic Needs Approach", [pp. 55-125] in Lederer, K. Ed., Human Needs, A Contribution to the Current Debate Hain, Königstein, 1980

"The New International Economic Order and the Basic Needs Approaches: Compatibility, Contradiction and/or Conflict?" in Brailard, P, Ed., Annales d'études internationales, Genève 1978, 127-146 also in Alternatives, A Journal of World Policy, Delhi, 1978-79, pp. 455-476

"Towards a New International Technological Order", in Alternatives, A Journal of World Policy, Delhi, 1978-79, pp. 277-300

"The North/South Debate: Technology, Basic Human Needs and the New International Economic Order", [the two preceding papers + introd.] Working Paper No. 12, WOMP, Institute for World Order, New York, 1980

"On the Decline and Fall of Empires: The Roman Empire and Western Imperialism Compared", Review, 1980, pp. 91-154

"Is there a Chinese Strategy of Development?", Review, 1981

"Social Cosmology and the Concept of Peace", Journal of Peace Research, 1981, pp. 183-199

"Society and Health: Some Health-related Societal Trends in Industrialized Countries", Psychiatry and Social Science, 1981, pp. 3-15

"Is a Socialist Revolution Under State Capitalism Possible? Poland August-September 1980", Journal of Peace Research, 1980, pp. 281-290

"Structure, Culture and Intellectual Style: An Essay Comparing Saxon, Teutonic, Gallic and Nipponic Approaches" Social Science Information, 1981, pp. 817-856

"Five Cosmologies: An Impressionistic Presentation", Det Norske Videnskaps-Akademis Årbok 1980, pp.

Also see Essays in Peace Research, Vols. I-V, Ejlers, Copenhagen, 1975-80
The True Worlds: A Transnational Perspective, The Free Press, NYC, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025

"On the Last 2500 Years in Western History, And Some Remarks on the coming in The New Cambridge Modern History, Companion Volume, Cambridge 1979. pp. 318-362