The Global Dominance System*
Notes on a theory of global political economy

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1. Introduction
The present paper is intended as a contribution to the development of a theory of the global political economy. It proposes to present global dominance relationships in terms of a vertically integrated system of control and accumulation, production and distribution on a global scale.

In so doing, we shall build on theorems developed by others, giving evidence to support some of them, reformulating others. As this article should be seen as an ad hoc report on an ongoing research enterprise, we cannot claim to have reached that stage of sufficient specificity and comprehensiveness which an 'ideal' theory would demand. Despite much and heated discussion, there is at present considerable agreement on concepts, schemes, paradigms, and basic theorems among scholars in this field. What is still needed is a better understanding of the concrete aspects - the structural elements, actors and processes - that fill in the framework. This is not to suggest that we can ever encapsulate the Truth, once and for all: by the time we think we have reached it, reality has changed. But our understanding of the real world may come closer to this ideal than it now is. The gap between the practise of domination and the theoretical interpretation and the public understanding of it is still too great. This is true whether the gap is measured in time space or according to level of sophistication of insight.

One way of closing this gap is to focus extensively on the dynamics of the system. Although it develops dialectically and with many contradictions, we can hop on the bandwagon of change by improving our understanding of the processes at work and by understanding the expectations and actions of those who possess the power to change: the Center, the Metropoles, the upper class of the world. Then, hopefully, we shall also be able to help apply the brakes as necessary.

There is a great need for a more comprehensive and 'wholistic' or totalistic perspective on international or global politics. Such a perspective will stress not the market of political or economic exchange and interaction, but structure and patterns and processes conditioned by, and conditioning, the structure. It will not focus on a priori symmetric inter-governmental or inter-state relationships assuming that units are by definition independent, but on asymmetric (as well as symmetric) relationships of penetration and penetratedness.

That current International Relations or International Politics theories seldom meet such demands, to be specified in the following, is evident. This does not mean that there is no longer room for exchange or interaction analysis: rather, such analysis more often than not misses the main point.

The following claims relevance primarily for what is generally considered the 'World Capitalist system'. The extent to which our scheme has more general applicability will need to be further investigated in other contexts. We do assume, however, that our analysis of global dominance relations represents a fruitful proposition for the study of the 'World Socialist system'.

However, the global system of control and accumulation is, as we will show, increasingly one system. Although a concrete description of the structure and its historical basis may reveal several dominance systems and differing degrees of domination - 'world capitalism', 'the Soviet empire', etc. - there are trends that increasingly point towards one, global sys-
tem. This may be best seen if we conceive of the world in terms of a system of production and distribution. The 'Capitalist West' - 'Communist East' conflict formation is still inherently competitive, if no longer aggressively antagonistic. At the same time, political contacts as well as concrete trade deals - whether in wheat or in sophisticated technology - are serving to integrate the two. That such integration - as follows from the feudal character of the East-West system - takes place at the top of the competitive hierarchies entails the participation of the integrated units in the domination exercised by the other unit over some third unit(s).

2. Some conceptual clarifications

We employ the term domination, and the resultant situation of dominance, to represent a social relationship where some unit exercises control over and accumulates value from some other unit. Dominance, in this rather general meaning, is a relatively permanent state where the patterns of control and accumulation systematically (if not on every single occasion of an exchange) favor the dominant unit. The dominance relationship is not only asymmetric, but often exploitative. That is, there are processes that work towards an unequal distribution among the units of the values produced by (the relationship between) them.

Obviously, domination takes many forms and the dominance relationship has different consequences in geographical and social space. For instance, it is necessary to study how productive and distributive relationships are related to forms of domination which belong to the politico-diplomatic, military, and other mechanisms of control. Any historical analysis of the development of the dominance system will have to explain how, to which extent, and in what space the present vertically integrated production system is a result of political organization, military conquest or threat, or ideological-cultural penetration, and as such has been conditioned by these.

The dominance system is entrenched and is reproduced in a strictly hierarchical structure of control and accumulation capacities. By control we refer to the capacity to influence some social unit to a degree where it acts according to the wishes of the influencing unit and where its behavior becomes highly predictable. Accumulation is the process of growth through appropriation of the surplus value produced and distributed throughout the system.

The political economy of the global society will have to be a theory of the relationship between control and accumulation at the global level. From the capacity to control, superior accumulation capacity logically follows, as the ability to accumulate value from other units requires some degree and form of control over the other unit. But unequal accumulation, or exploitation, does not always follow from an asymmetric control relationship; that is: the capacity is not necessarily utilized.

The exact structure and form of control and accumulation will be further explained in the following. We shall employ some rather simple distinctions to describe the relationship between actors, actual concrete structures of domination, and processes of control and accumulation. One distinction is between direct and indirect control and accumulation. The direct form, where control and accumulation is established and exercised on the spot, within the geographical and social space of the dominated unit, we will term the imperialist form of domination. Historically, this has moved from the stage of violent occupation and/or robbery accumulation where military force and trade blackmailing were important mechanisms, through a stage of colonialist imperialism where control and accumulation became organized into protected domains of economic activity under political and military supervision, to the stage of the immediate past, the 1950s and 1960s, where neo-colonialism has produced bridgehead types of control mechanisms, local elites or 'sub-centers' performing subordinate control functions in exchange for shares in the accumulation exercised by the controlling center(s).

The indirect form is control and accumulation via the system. Without attempting to cloud over the interests of actors and the pro-
processes actually at work, we must stress that processes leading to unequal distribution in the system are a function of the structure established and as such not entirely dependent for their functioning on concrete actors and interests. We would, however, give this perspective a rather restricted applicability. The indirect or ‘independent’ processes are an element of the functioning of the structure but will have to be clearly specified and related to the direct ones which are actor-dependent.

There is, however, one observation, related to the direct-indirect dichotomy, which is fundamental in our perspective: the structure is decreasingly dependent on any particular set of actors for its survival. The principle of substitutability is gaining ever-increasing applicability. The fall of the Roman empire left a structural vacuum. Today, the fall of emperors or empires does not have the same effect. They are substitutable, the structure may remain. Obviously, the structure can never do without actors actively establishing control. To the extent there is still room for expanding the system - for ‘peripherization’, to talk in terms of the center-periphery terminology - and to the extent control must be reinforced to maintain the flows of value accumulation, the actor-interest syndrome becomes fundamental. Such expansion and reinforcement, that is re-creation of the system, necessitates the active penetration of the objects of control.

We shall distinguish between three types of social units according to their position in the production hierarchy and their corresponding class status: actors, agents, and objects. This classification is both an extrapolation and a reformulation of the métropole-satellite and the class models of the system, having relevance to the control and the accumulation hierarchies, respectively. Units typified by high control and high accumulation capacities are actors: they possess a degree of self-control with control over other units. Units which possess little control capacity, at least in terms of the total system, while also sharing highly in the accumulation of value, are agents. More specifically, they have little general control capacity (including self-control) in terms of the system, but perform decentralized control functions on behalf of the actors. The third type of unit obviously is the object of control: the peripheries, the underprivileged classes.

The penetration of the system and its vertical integration into differentiated multi-level hierarchies of control and accumulation result in relationships of dependency. At a general level, the most fundamental dependency is the dependency on the hierarchical structure itself, a point to be developed below. At a more specific level, we wish to distinguish between interdependence, which is a relationship between equals, between units having penetrated each other symmetrically; and dependency, which is basically an asymmetric relationship. Dependency in this sense is of two kinds: dominant dependency, which represents the need of superior units to accumulate value from subordinate ones in order to meet own aims (such as the need to extract cheap raw materials from periphery units); and dominated dependency, which is the periphery’s position of being subordinated to and penetrated by the interests of other units controlling and accumulating surplus value from it.

Our definition of value remains problematic, as we have chosen to give it a meaning with which it is generally not associated in the literature. What we need is a concept which is broad, but also specific enough to represent the different aspects of social, economic, and ecological reality that may add to the status and wealth of social units. It must be broad because it should represent reality outside as well as inside ‘capitalist’ systems of production. It must be specific because we want to relate it to a discussion to be made in another context, of alternative strategies to change and/or replace the dominance system.

There are five aspects of value in present global society:

- Fixed value which is: territory; ‘nature’ as ‘fixed capital’: raw materials (geological)
- Consumable value which is: food, shelter, goods
- Social value (or intermediate value) which is: the ‘rationality’ of human beings (‘human capital’): education, organization and information: technology as creativity of the hand/machine
Ideological value which is: culture, ideas, creativity of the mind

Capital value which, as is most clearly seen under capitalism, is both a separate aspect of the value system, and at the same time an expression of a way of ranking, the three other value aspects (as will be shown in the following): money, capital goods.

But also the four other aspects relate to each other. Ideas (ideological) are related to nature (fixed) and give good (consumable) or create organization and technology (social) which again can transform nature (fixed) into new value (consumable, social, or capital) etc.

3. The new (cumulative) international division of labor

The hierarchy of levels of control in the dominance system is manifesting itself in the various separate aspects of the system: in the organization of production and distribution in the status system, even in the hierarchical differentiation of technology and products found in the processing of goods.

Extrapolating from the description of the organizational structure of private business developed by Chandler and Redlich (1961), Hymer (1972) has pointed out that the centralization and differentiation of control within the business corporation corresponds to the centralization of control within the global economy. A three-level structure is identified, where the lowest level represents the day-to-day operations of the enterprise (the firm), a medium level being e.g. the national corporation responsible for the coordination of the activities taking place at the lowest level, and a top level of the central decisionmakers who do the planning and the goal-determination and set the framework within which lower levels operate. Applying location theory to the scheme - as will be done below - a global system of central metropolitan decisionmakers, regional or national directors and local satellite managers corresponds to a world of superior rich units, the relatively well-off intermediaries and these in the peripheries performing the lowest, worst paid tasks of the system.

Different control and accumulation opportunities obviously structure the world not only into hierarchies of command and status, but also (consequently) into conflict formations. One such formation - according to the norms of production of the system - is found in the distinction between primary and industrial production. Industrializing the economy is widely held as a necessary (and sufficient) condition for obtaining higher accumulation capacities. There are also objective factors inviting a structural differentiation between primary and industrial (secondary) type of production, such as wage differentials (groups of industrial workers often constituting 'labor aristocracies' in otherwise low-wage working class societies) and differential socio-economic spin-offs.

As has been sufficiently proved by the terms of trade and unequal exchange critique of the principle of comparative advantage, such differentials are not products of the simple play of market forces, but are conditioned by the very structure of hierarchical control and accumulation. (Singer 1950; Prebisch 1950; Emmanuel 1959; Amin 1971; Palloix 1971.)

This structure 'super-imposes' its 'law of unequal development' on any relationship of 'natural' comparative production advantage and offers unequal remuneration for equal productivity (or production factors) depending on the position in the structure. Those higher up, the 'haves', receive a relatively bigger share of the value distributed than do those lower down, the 'have nots' - primarily because they are superior/subordinate to each other. The structure is based on constant reinforcement of status differences.

The processing hierarchy, expressed formally by the Standard International Trade Classification (SITC), represents at the same time the classical division of labor - between primary and industrial, or non-processed and processed consumable value. Tariffs are one of the old protectionist measures, of less importance today than is often assumed, but still part of the structure. In a study of 22 'primary products' subject to processing, Belassa has shown how tariff protection increases with increasing level of processing (Table I).

The main conclusion to be drawn from Table I is that the protective tariffs imposed by the industrialized countries is part of a structure
Table I. Tariffs on goods imported from underdeveloped countries

<table>
<thead>
<tr>
<th>Degree of processing</th>
<th>Weighted average tariff imposed:</th>
<th>Percentage share in the exports of underdeveloped</th>
</tr>
</thead>
<tbody>
<tr>
<td>of goods</td>
<td>nominal) in the exports of</td>
<td>real)</td>
</tr>
<tr>
<td>1</td>
<td>4.6</td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td>7.9</td>
<td>22.6</td>
</tr>
<tr>
<td>3</td>
<td>16.2</td>
<td>29.7</td>
</tr>
<tr>
<td>4</td>
<td>22.1</td>
<td>38.4</td>
</tr>
</tbody>
</table>

1) In percentage of the export value.
2) In percentage of the sales value.


which hinders the industrialization of the underdeveloped countries. To conclude e.g. that the latter are underdeveloped because they do not industrialize would seem to be to turn reality upside down.

Even at the lowest level of processing the protective mechanism is at work. The US tariff system is an illustrative example. Fresh bananas are imported tariff-free, dried bananas take a 6 % tariff (of export value), conserved bananas a 13 % tariff when imported. And whereas crude iron ore evades import tariffs, ordinary sewing needles must jump a 20 % tariff. (Maggdoff 1969.)

We wish to add the distinction between the extractive (primary) and processing (secondary) levels of production to the scheme presented above. This yields a four-level scheme of the world of production and distribution:

1) the primary level, where day-to-day production of material for further processing and elementary consumable value i.e. extraction of fixed value (food) is performed.

In terms of our own conceptualization, production is the process by which fixed value is transformed into consumable, social and/or capital value under the guidance, or with the assistance of, ideological value. In the real world, each of the five aspects of value is ranked in terms of the production hierarchy. There are hierarchized patterns of consumption, as expressed by price differentials on consumer goods and their corresponding distribution on class structure. Obviously, there is also a hierarchical ordering of capital, as openly expressed in the institutionalized currency agreements known as the Bretton-Woods agreement and the currency zones, and is also reflected in the IMF. (Amin 1971.)

Both the internal ranking of the value aspects as well as their ranking relative to each other are functions of the historical development of the system. Hobsbawm has shown the qualitative, indeed revolutionary, system changes that occurred during the industrialization of capitalist Europe. Later revolutions have been referred to as 'managerial' (Burnham 1960), 'communicational' and 'technological' ones, etc. Although there is much over-simplification and a certain amount of forced originality in terminology in such concepts, they do reflect the qualitative changes that have taken place. In our scheme, such major qualitative changes in the structure and the conditions of production and distribution reflect the processes by which social (and ideational) value have been combined with capital to create a system of efficient and centralized control and accumulation opportunities. In order to achieve steadily improving accumulation, it has been necessary to spread the control apparatus to ever growing parts of fixed value (the run for raw materials and energy) and consumable (the run for markets) value.

Pre-industrial production is marked by a relatively stable relationship between fixed, consumable, social, and ideational value - as in a subsistence economy where production centers on the creation of consumable value
for the members of the community. The introduction of a capitalist-industrial mode of production means the introduction of capital and production efficiency as determinants of the combination of the other aspects of value and as centers of command of the production process over and above, and also partly in contradiction to, those other aspects.

Our four level scheme reflects such a development. The qualitative changes in managerial and communicational abilities obviously have affected all levels of production down to primary level agribusiness' plantation work; but they established themselves as control centers at what is presently the third level, that over and above the management of actual day-to-day production and distribution. At present we are in the midst of - if not already past - the most revolutionary element of another major period of qualitative change: the revolution in technology and information and the ascendance of these factors - at the same time both superior means of control and accumulation and increasingly the actual centers of control and accumulation themselves - to the top of the global hierarchical structure. The major vehicles behind this most recent revolution on a global scale are

- the establishment of 'the technological basis for a major advance in the conquest of the material world and the beginnings of a truly cosmopolitan production' (Hymer 1972);
- the creation of highly sophisticated, highly specialized, highly efficient means of sorting, communicating, and controlling information on a global scale - the emergence of information on information as the decisive new means of control;
- the formidable growth and superior efficiency of the multinational corporation in organizing the use of technology and information, creating and recreating an even more efficient hierarchical structure on a global scale.

Such an outline of the historical development of the structure, by necessity sketched only roughly in the context of a short paper, points to the cumulative character of the dominance system. This 'law of cumulative hierarchy' means that the present structure (and any past or future one) is the result of a process of accumulating control opportunities, where new ways and/or actors of control are superimposed, or are superimposing themselves, on existing ways and/or actors. The structure becomes a set of control layers, the more recent ones imposed on the past, but without abandoning subordinate layers. This structure is a growing organism, a process of vertical extension of control. Still, old forms of control may be indispensable to the efficient functioning of the structure in some geographical and social space.

The unequal accumulation of value, where those operating at superior levels in the production hierarchy can take a larger share of the (surplus) value than those working at lower levels, is supported by monopolistic structures of control, demand-supply structures of the market, the pull of location forces, size (as indicated by the importance commonly attached to economies of scale) and - obviously - also the use of power as the ability to blackmail or otherwise enforce somebody to give up surplus value. All of these forces - as well as important and often decisive control mechanisms outside the system of production and distribution as such (as the military apparatus, etc.) - will often, although not always, work in the same direction. And this gives rise to competing accumulation.

Monopoly and location on a global scale is indicated by concentration - the share of a sector/activity of production/distribution. A list of world-wide activities and some data on their concentration on regions gives at least a surface picture of the geographical mapping of the structure, cf. Table II. Information available at present does not permit us to draw any major conclusions from the Table. But we may infer from the data presented that our working hypothesis seems a fruitful one.

These are the aggregate (regional) patterns of distribution. Obviously, the geographical location of activities need not correspond to actual control over, nor possession of, the value created by these activities. 'Sectors of activity' are increasingly vertically integrated - which simply means that the center increasingly possesses or otherwise controls value located and
Table II. Shares of world activities at different levels of the production process. In percentages

<table>
<thead>
<tr>
<th>Sector of activity</th>
<th>OECD</th>
<th>CMEA</th>
<th>UDC's</th>
</tr>
</thead>
<tbody>
<tr>
<td>R &amp; D</td>
<td>85</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea transport</td>
<td>81</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Tourism</td>
<td>80</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Trade (total world)</td>
<td>72</td>
<td>1T</td>
<td>17</td>
</tr>
<tr>
<td>Production:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufactured goods</td>
<td>62</td>
<td>32</td>
<td>6</td>
</tr>
<tr>
<td>Energy (crude oil)</td>
<td>33</td>
<td>7</td>
<td>60</td>
</tr>
<tr>
<td>Minerals</td>
<td>52</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Food</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Notes:
1. Includes registrations in Liberia, Panama etc., the 'convenience flag' states.
2. Data from UN Statistical Yearbook, 1971.

created in periphery areas. This seems particularly true of the bauxite-aluminum sector, which is highly vertically integrated and strongly monopolistic in character. Two big corporations, Alcan and Alcoa, control more than half of world production and distribution at all levels and are world 'price leaders' within their sector.

In the case of aluminum, monopolistic control would seem to override or direct such factors as location concerns and the 'free play' of demand-supply forces. Thus, the completely vertically integrated production and distribution structure, which this sector is approximating, would seem the most efficient control structure. But is this necessarily true? Is the nationalization of mines and energy supplies - such as those now taking place in the copper and petroleum sectors and which remove metropolitan on-the-spot control of lower levels of production (extraction) - a threat and thus a counter-strategy to the domination structure?

We would contend that this is not necessarily so. In fact, it may be argued that the direct penetration of the periphery, establishing some form of direct control over it, may be both a more costly (and thus dis-accumulative) and at the same time a not-more-efficient way of having the periphery assume its proper place in the production hierarchy through indirect means of control. As long as production occurs for a market and needs marketing services, as long as it needs technology and information and management, and as long as these 'factors' are monopolized at higher levels of control and accumulation, then the state of dominated dependency may remain constant despite the assumption of self-control over the actual extraction-production. This is the 'new international division of labor' by domination via the global structure - the opposite of the 'old' direct control through vertical integration of all components of production and distribution. The two coexist in the present world, but it is possible to envisage the 'new' structure replacing the 'old' one, and that such a development is in the interests of the center.

So far we have conceptualized an analytical framework for describing the present hierarchical structure of domination on a global scale, and we have sketched out - in admittedly rather rough terms - a 'model' structure. Let us end this section by describing the concrete mapping of the structure on geographical and social space. In the next sections we present some evidence on the proposition of an emerging 'technological' structure, the merger of capital and social value into the latest stage of domination, and we discuss in more detail some of the processes at work.

Obviously, high control and accumulation is for the few: the hierarchy preserves opportunities in a highly pyramidal structure. This pattern of centralization is also expressed in monopolistic and agglomerative patterns. There will be a tendency for these patterns to reinforce each other, agglomerations of high-level control developing into monopolistic structures which again will reinforce agglomerative tendencies.

We have, literally speaking, placed the three level corporate structure of control hierarchies onto the surface of the real world: the primary level, where the structure is in direct confrontation with Nature as fixed value and as elementary consumable value. Here at least half of mankind - the great mass of poor, disadvantaged and often exploited people all over
the dominance world - find themselves positioned most if not all of their total (often very short) life cycle. This is the periphery, at the same time the satellite society and the lower class of the world. It is made up of peasants, small tradesmen, industrial workers, miners.

The center is equally easily identifiable. It would be represented by the fourth level decisionmakers, the actors, based in the métropoles of the system in North America, Europe, and Japan (plus Moscow and Peking if the system is extended). The sub-centers would be found in the subpoles of decentralized (regional etc.) control, the ‘general agents’ of the metropolitan center with some local decisionmaking power and with a degree of self-control.

Whereas we see the métropole-satellite structure as the geographical expression of the center-periphery scheme, the class structure of the world does not correspond so closely to the scheme. At the medium level of the structure, between the easily identifiable top and bottom, clearly belonging to the upper and lower classes, respectively, control and accumulation opportunities often do not overlap. This is because the center - whether as a ‘consolation prize’ for giving up control, in order to stimulate productivity, or as a concession to labor demands for a higher share of the accumulated value, or a combination of such motives - has let social units, people, share in the accumulation in a proportion higher than their actual share of control. This is true with the local elites of periphery areas, in particular such subpoles as São Paulo, Kuwait, Cape Town, and Abidjan, but also for subpoles closer home, in Canada and Western Europe. And it is true of a number of medium status groups performing service functions for the actors in and around the metropoles.

These units and people constitute the upper class of the world, as described so well by Time Magazine: “

They spend freely for their families and influence their company purchasing. TIME readers constitute an international community of the affluent and influential, responsive to new ideas, new products and new ways of doing things.....

This probably is a representative and therefore indicative expression of how the center of the system defines itself: as influential, innovative, affluent, and integrated. ‘Cosmopolitanism’ is another word for the integration or assimilation of these persons; indeed they do constitute an international community.

A global middle class would include the relatively well-off who perform a variety of lower management functions against a differentiated share of the value accumulated. This is a heterogeneous, mostly non-integrated class, even in conflict with itself through the competition for a greater share. It consists of the clerks, civil servants, merchants, industrial managers at the factory level, and perhaps even the ‘labor aristocrats’. They derive their individual or group statuses from their positions as intermediaries at the global and/or at national levels: they are dominated and dominating, relatively deprived as well as relatively well-off.

These structures penetrate and cut across nations and nation-states, making them - in highly differing degrees of hierarchization - miniatures of the global system. This does not mean, however, that the nation-state is finished as unit in the real sense of an actor, actual or potential. The corporate structure cannot, at the top level, that is, free itself completely from the world of nation-states, as some analysts of the internationalization of capital as well as the corporate PR-divisions will have it. This is one of the main contradictions of the system: on the one hand, its tendency to structure itself across national boundaries, from the top and down; on the other, its need for recourse to ‘safe bases’ of protection, mobilization of support, and loyalty to the structure.

This contradictory tendency is presently being manifested in the increasingly competitive relationships between the US, the European, and the Japanese metropoles. There is
growing corporate interpénétration between the metropoles, as witnessed by patterns of direct investments. At the same time, metropolitan actors are feeling the need to protect themselves against the loss of control and accumulation opportunities which may result from this interpénétration. The state still may offer the best insurance opportunities and it is still easiest to command the support of the nation, the 'home country', whenever mobilization of popular support becomes necessary.

The nation-state as a base is probably also the best prospect for a fourth, still relatively rare unit in our scheme: former objects (perhaps even smaller agents) wishing to establish themselves as actors. Within the system there is a category identifiable as the 'new independents', or potential actors, still inferior in their accumulation capacity, but in the process of achieving greater (self-) control. They are, at different levels, units such as peasant movements, nationalistic local upper classes, or leaderships wanting to restructure the hierarchical society in which they live and introduce equality. Invariably, they will find that the society is part of the larger, global structure and thus dependent on it. As they therefore will find it necessary to attack it, they become a potential threat, an opposition and a potential break-away from the dominance system. Moreover, they act in clear contradiction to the agents in terms of differing interests and class relationship - a fact which explains much of the conflict dynamics of such attempted groupings as the 'Group of 77' and the Conferences of Non-aligned states.

4. The 'technocapital'

The new, still emerging, structure has been referred to above as the 'technocapital' structure. What is the empirical evidence for such a proposition? How does it relate to the concrete world of domination? And how does it relate to mechanisms of domination not a direct, constituent part of the corporate structure?

By technology we refer to the totality of phenomena which make up modern industrial production and which are the product of the science of transformation. We may distinguish between innovation, application, and the resultant means of production (reflecting ideational and social value in our scheme). By information we refer to knowledge about the (total) production and distribution system, its various component parts - markets, products, competitors - as well as the total structure and the position of oneself and others in it. We are referring to specialized knowledge - information which gives its possessor an advantage: strategic knowledge, information on information. As we are dealing primarily with dominance relationships under 'capitalist' conditions, we refer to the top level of the control structure and the merger of technology, information, and capital as the technocapital.

The evidence for such a proposition is found partly according to qualitative, theoretical reasoning, partly in the empirical facts about the functioning of the system. A number of theoretical studies support, from differing points of view, the crucial role of technology in dominance relationships and social development in general. There is the Galbraithian 'technostructure' (Galbraith 1967); new groups of actors referred to as the 'technocrats'; technology as the driving force in the 'qualitative arms race' (Senghaas 1973); technological capital (Karpik 1972), and there is a wholly new type of 'technological society' which, according to Ellul, develops rapidly into a stage where the technology as such, on its own momentum, takes over control (Ellul 1965).

The global hierarchy of technological (self-) control and the process whereby the 'technocapital' is imposed, or imposes itself, onto the existing structure are indicated by patterns of concentration or monopolization, patterns of growth and rates of surplus accumulation. Superior domination occurs where there is high concentration and at the same time high growth and surplus rates.

At the global level, the United States and the Soviet Union alone account for 61% of total world expenditure on R&D and 63% of all research personnel, the US alone accounts for more than 50% of each category. (Albertini 1967, p. 242.) As to the R&D performance
shows, most countries or areas outside these 'independents' are strongly dependent on the technology of the métropoles. The trends and patterns shown in Table III become even more dramatic when it is realized that many of the patents of domestic origin registered in dependent countries are owned by subsidiaries of foreign firms.

The trading of patents, e.g. in the form of licensing, has become an important business. This trade is dominated by the United States, which alone accounts for 70% of all the royalties due in respect of licences in the 'capitalist' world. Three fourths of these royalties were earned through subsidiary production of US corporations. The monetary value of this trade in 1970 amounted to some $3.5 billion. As US purchase of licenses accounted for only 7% of the world total, the net effect of the licensing surplus to US corporate income and national balance-of-payments deficits was considerable, in 1970 amounting to $2.3 billion. (Wolf 1973.)

This is the visible structure. Under the surface, there are even more clearcut indications of domination. Patents as a highly protected value is a mechanism which its possessor may use, and in fact often does use, to control technology dependents, the licensees. Such control takes the form of e.g. non-use of patents: the patent taken out in a given country is not used for productive purposes, but for protective ones; and the prohibition of exports of products realized through the acquisition patents. In Peru, out of the 4872 patents granted between 1960 and 1970, only 54 were later put into production. The proportion of foreign technology contracts which contain prohibiting or limiting clauses on exports has been estimated at 99% in Peru, 97% in Mexico, 93% in Chile, 83% in Bolivia, 79% in Colombia, 75% in Ecuador, and 43% in India.

Technology has not only become a commercial goods, giving its seller high accumulation capacities. It would seem to be the way of exploiting a position of monopoly and superior bargaining power, of superimposing oneself upon practically all aspects of the planning and decisionmaking process on production and distribution policies of a subordinate 'buyer'. As examples of the opportunities which are created, Wionczek mentions the following types of such impositions from a study of technology import contracts in Mexico:

Stipulations in the contract giving the seller powers to fix the prices of the products, limiting or preventing research by the recipient enterprise, forbidding the use of alternative technology, stipulating that the seller shall be the sole purchaser of the product, appointing the technical staff, collecting royalties for patents or trade marks which were not used, and obliging the buyer to use patents or trademarks which did not involve technical advances, acquiring the exclusive agency for sales in Mexico. (Wionczek 1973)

The patent system is a good indication of the structure as well as the practice of control and accumulation. It is, however, only part of it - and often a small part. For instance, UN economists work on a number of such means and mechanisms, some of them referred to as 'restrictive business practices'. They represent both offensive and defensive, strategic as well as tactical forms of control and accumulation. Direct investments and overpricing are fairly broad examples of the offensive form of control and accumulation (strategic and tactical) respectively. Non-use of patents, export prohibition, and tariffs and the whole range of 'non-tariff barriers' are specific examples of the defensive form. It is important to study how these various forms help reinforce the structure, as intended and clearly actor-dependent forms of domination. But only when their integration into the total dominance structure is fully taken into account will we see correctly the role which they are playing.

UNCTAD estimates show that underdeveloped countries' payments for only two out of six categories of 'transfer of technology' rose at an annual yearly rate of 20% in the 1960s. They are estimated to increase sixfold from the end of the 1960s till the end of the 1970s, from $1.5 billion to $9 billion (1970 rates). If figures for all six categories of payments were made available, it would be possible to show a huge and rapidly growing
flow of capital as payments for technology and information and a corresponding depreciation of other aspects of value connected with it (brain drain, enclavization of the economy, exhaustion of resources, deterioration of balance of payments, etc.). If these flows are added to other types and processes of accumulation, it will not be difficult to show an aggregate net flow of value from lower to higher levels that will, at least in part, be of a highly exploitative character. According to one estimate, the ‘invisible flow’ of payments for technology from underdeveloped countries at present is between $5 and 9 billion a year. (Maxwell 1973.) Only in isolated cases will the positive effects of technology trade - such as higher productivity, know-how, jobs, and infrastructure - balance the negative ones.

Overpricing, a typical case of tactical (short-term) offensive accumulation, has been the subject of a number of case studies. Vaitos (1970) studied a sample of foreign subsidiaries in the pharmaceutical sector in Colombia. He found cases of overpricing on intermediate products of more than 6000 %, while average overpricing was 155 %. If overpricing is compared to two other components of what may be referred to as effective returns (or ‘real’ profits), reported profits and royalties, again the Colombian case is revealing: on the average, reported profits made up 3.4 %, royalty payments 14 %, and overpricing 82.6 % of the effective returns of the pharmaceutical firms. Similar, if not as dramatic, patterns of pure exploitation have been found for other branches and areas, even areas close to the metropoles, as the Hoffman la Roche case in the United Kingdom shows. (Maxwell 1973.) It seems that the branches generally yielding the highest offensive accumulation opportunities are the electronics, pharmaceutical, and chemical industries.

These are branches or sectors characterized by high technology and information ingredients. They show typically high real profit and growth rates, the two obviously being closely related. And they often control markets in highly monopolistic ways. An example which seems to meet all these counts perfectly is the electronic monopolist, IBM. It ranked (1970) no. 5 on the Fortune list of corporate size, according to sales; in terms of income, it ranked no. 2. In 1970 its sales were six times larger than in 1958 when its Fortune rank was 28 (among US corporations). In other words, it has grown at an average annual rate of close to 16 %, presently controlling some 1A of world computer markets.

This highly dynamic image of IBM, however, is not the entire picture. The corporation is the perfect expression of the ‘technocapital’: a unit combining superior technology and information with a monopolistic position and a high degree of self-sufficiency of capital. It produces the technology necessary to manipulate information, and with highly effective outcomes in terms of control and accumulation.

Another ‘specialist’, despite its increasingly conglomerate character, is the IT&T, best known for its monopolistic position in the telecommunications field and its recent uses and abuses of power, notably in Chile. Its highly sophisticated systems for supervising people, production, etc. have not only made it a powerful part of the control structure. It is resented in the case of a Chilean government trying to modify the position of its country in the global structure and redistribute value domestically; it is actively courted in the case of a Soviet government wishing - so it seems - to utilize the superior corporate technology to improve its ability to control the state, the population, and hence the production apparatus.

The political purposes and/or effects of such technology deals belong to the field of a global political economics theory. Is the Soviet-IT&T deal simply business as usual; or does it entail a modification or a strengthening of the dominance structure, at the global level, at the level of the ‘Socialist world’ and in West-East relations? What made IT&T have no second thoughts in making a deal with the Soviet Union, while actively trying to topple the government of Chile? What made US technology owners impose serious restrictions on the French-German TV satellite ‘Symphonie’
under the INTELSAT agreement,' while they seemingly had no hesitations about entering into close space cooperation with Soviet space research programs a few years earlier? It seems quite obvious that such questions do not belong solely to the field of East-West 'international politics', but to the development of domination (also including possible corporate domination of Socialist countries) as well.

Working in positions as agents of the metropolitan actors, in close relationship to them and/or as actors in their own right exercising control over lower level managers, are information specialists like the consultancy ('think tanks') (Gross 1972), and the marketing firms. The consultants and marketeers are typically specialists in information on information within production and distribution, respectively. They work from the top levels of the system; their role (to which we briefly return) is to have units and areas outside the metropoles assume production and distribution tasks at lower levels of the system.

Employing size, monopoly, growth, and profit parameters, it would be possible to locate and identify the actors of the system more precisely than we have done so far. Such an identification would have to be carried down to the level of individuals, roles, and institutions, as they constitute the elements common to all the various denominations we are using: Actor, Upper class, Metropole, Center, the 'Technocapital'.

At the role-level, we have already specified some of them: the taking of decisions, innovation of new goals and products, the dissemination of decisions, goals and products, etc. We imply a certain degree of role specificity and a corresponding institutionalized specialization. This specialization gives rise to a division of power among controlling and accumulating actors. The owners of capital, whether they own in the formal sense ('financial capital', the shareholders or the state) or in the sense of managing accumulated capital on behalf of formal owners (as 'industrial capital' may be said to be doing) are not independent of, and in fact often not the same as, those who possess the keys to technological innovation and information on information - as e.g. 'orthodox' Marxist theory would have it.' Capital, in our opinion, can be directing technology according to some more or less specified goals, such as when the state military establishment asks R&D divisions to produce certain types of weaponry to achieve specified degrees of destructive or protective capability. And the capitalist (including the government who intends to export this weaponry) may ask the division to make the weaponry as cheaply as possible so that he can recoup his outlays with correspondingly higher profits and/or with increased sales through mass production. But neither of them would seem to be able to control and thus intervene with the specifics of the R&D task as such; hence, neither can be said to control the R&D institution completely.

If such an analysis is correct, actor identification becomes more problematic, but also more correct. It follows that within and among actors, even of the same métropole, there may be conflict, as they all share in the control and accumulation opportunities at the highest level. 'They' would include capitalists, top corporate managers, government or state leaders, military, and the top people of technology and information institutions. What joins them together (and what may even contribute to structure the relationships between these tops in hierarchical ways) are first of all the bonds of class (the fact that they belong to the same upper class of common interest), métropole (the fact that they are competing with other métropoles), and of nationality or even 'race'.

As to the métropoles, we have implied throughout this article that there exists a multiplicity of them: in the United States, Europe, and Japan. This, we believe, is more a dynamic than a synchronic view of the present world. Much evidence points to a hierarchy even among métropoles, with the US pole on top of at least West European ones, to a lesser extent also on top of the Japanese. Such evidence includes the well-known strong US leadership in the electronics or in general high technology sectors and branches, and the almost complete US domination of the information sector. Only 4% of the R&D budgets of US multinational
corporations are spent outside the United States, and these satellite research centers are established primarily to steer foreign technology to the US metropole and exploit local, foreign innovative capacity to the advantage of the same. (Dunning 1970.) In the marketing business, 23 out of the world's 25 biggest public relations firms are US-based, the biggest of them, J. Walker Thompson, at the time being the biggest one in the local markets of seven other industrialized, 'capitalist' countries. This is indeed 'Madison Avenue Imperialism'. (Schiller 1972.)

It is not the purpose of this article to discuss in further detail inter-metropole relationships and the degree and nature of US supremacy. We simply assume - primarily on the basis of the comparatively high Japanese technological and financial independence, and the size and growth of its economy and its external penetrative capacity - that past asymmetric inter-metropole relations are at present being turned into symmetric ones. That the military, economic, and lately political turmoil in the foreign and domestic operations of the US metropole itself contribute to this development is a fact too well known to need comment here. That metropolitan US corporations cannot let themselves physically loose from the geographical and social space on which they have been based, and thus resolve problems of declining US power, is a point to which we now turn.

5. Domination old and new

In our discussion of the global hierarchy, we have identified three types of control structures: the direct on-the-spot type of control (‘complete vertical integration’); control via agents - the bridgehead type; and control via the structure. These types coexist in the present world. At the same time, they represent stages in the development of the dominance system. It is assumed that the actors within the system would be able to exercise control efficiently through the third type and that they may consciously be working towards that stage.

However, there are also forces and processes working in other directions, making it necessary to maintain and/or establish a direct type of control. The maintenance of a military apparatus in bases, alliances, and arms trade obviously may be motivated by purposes only partly related to the global production and distribution system. And the same applies to the political-diplomatic apparatus. They both belong to a state-to-state threat, bargaining, and exchange system with elements and structures of its own. At the same time, there is considerable overlap, or symbiosis. And it is this range of overlap which concerns us here.

If mechanisms of control, for analytical purposes, may be referred to as ‘political’, ‘economic’, etc. (Galtung 1971), it is necessary to show how they coexist, or overlap, and also how one form may be transformed into another or be replaced by it. Military bases may still be needed as protection against what is perceived as a threat to the system of domination from outside it. But the actual domination as such may be exercised through forms not directly dependent on the support of this type of physical force.

In conceptualizations of power and control found in the literature there exist several proposals for classifications and distinctions, some of little relevance to a more concise definition of these concepts. Control may be derived from physical force (military) or ‘intellectual force’ (‘achieved’, e.g. technology and information) or based on some social institution like private property. Or it may entail ‘tough’ or ‘soft bargaining’, etc.

We propose to distinguish between three forms of control: enforcement, assimilation, and the demonstration effect. It is assumed that they typically correspond to the direct, the bridgehead, and the indirect types of control, respectively. Enforcement is the use of physical force including occupation, tough bargaining, blackmailing, etc., to establish a relationship of direct control over some unit. Assimilation is the process of having the social units over which control is wanted behave in the interests of the controlling unit through education, propaganda, or socio-economic ‘seduction’. (Seduction means the inclusion of the controlled unit into privileged positions of accu-
mulation, similar or close to positions held by the controlling unit.) We know both these forms from the history of colonial rule - enforcement representing the establishment of it; assimilation the subsequent policy of having local elites assist in the exercise of control by sharing the goals and values possessed and produced by the colonial system.

Demonstration is the new form. Its power lies in the existence of a global upper class, Time Magazine's community, 'the affluent and influential' who are 'responsive to new ideas, new products and new ways of doing things' and in the modern communicational facilities which may be used to spread these ideas, products, and ways. The process through which the demonstration effect is obtained has been called the 'trickle down' process.

The importance of 'trickle down' has been pointed out by marketeers studying US home markets; but, as Hymer (1972) has shown, it may be adapted to the global society as well. A new idea, or product, or method of production (technology) is first introduced at the métropole level into the world upper class - who is homogenous, affluent, and receptive enough to respond immediately to the new. Once accepted by this class, the new idea etc. spreads or 'trickles down' to other groups or classes through the demonstration effect.

What makes demonstration effectful from the point of view of the métropole is the way it corresponds to the hierarchical social structure. As Fallers has pointed out, 'trickle down' is a mechanism for maintaining the motivation to strive for success, and hence for maintaining efficiency of performance in occupational roles, in a system in which differential success is possible only for a few. (Fallers 1966, p. 403)

Productivity and adaptability are increased by having people, groups, and perhaps even whole classes (such as the middle class of a periphery area) work hard in order to achieve a status and income higher up, closer to those 'demonstrating' maximum achievement from the top. Social mobility is defined as something which can take place within, and only within, the system. Hence people are induced to accept those tasks in the production and distribution system allocated them by those controlling the system, or into which they have been forced or assimilated. Thus, the hierarchical structure becomes more efficient, and it becomes legitimized. At the same time, it becomes even more 'entrenched'; mobility is and can only be for the few, and the relative distance to the top of the structure will be constant, or even increasing, even for those who move upwards. As has been pointed out above, this is due to the cumulative hierarchization, the continuous development of new levels of control and accumulation. In relative terms, striving for status and success from lower levels in the structure may - for most people - be an endless Sisyphos task.

The 'trickle down' process is increasingly one global process, radiating consumption patterns and production tasks out from the métropole. The multinational corporations with their superior marketing and communication capacities, speed up the process, which is an important part of their offensive strategy. 'Trickle down' is the creation of markets, of demand. It is turning objects into willing workers and demanding consumers.

The structural constants - the principles of hierarchy which do not change over time - are verticality in the differentiation of control (the 'international division of labor'), inequality in the distribution of value, both having been discussed above, and feudality. What is changing are the actors and the mechanisms, the types and forms of control.

The constant feudal character of the system may be illustrated in different ways." Feudality is a situation with high interaction at the top of the structure, little or no cohesion and interaction at the bottom; the bottom level groups (among other things, for lack of cohesion among themselves, for contact, information, and jobs) have to orient themselves - or are being oriented to top levels. Whereas the top level has many alternative sources of contact (markets, energy, labor, etc.) supply, at lower levels, the latter has practically no alternative. Thus, feudality is an important element
of the dominant-dominated dependency relationship.

To the feudality element also belongs the phenomenon of sub-pole development or pocket growth. This refers to the pattern of developing parts of periphery areas, of having some sub-poles grow and become agents or 'general agents', often (but not necessarily) at the cost of others. Such development is presently taking place in the form of industrialization through vertical, but in a few cases even horizontal integration, in sub-poles such as Sao Paulo-Rio and Hong Kong. Such sub-poles and their upper and middle classes experience a growing share of accumulation whether intended or unintended by the metropole, whether due to economies of scale, to the existence of rich resources, or to the role of such sub-poles as crucial communication nodes.

One related phenomenon is the growing gap between those belonging to the same nation or country who are within, and those outside, the sub-pole development. Another related effect is the potential for creating new conflict, as e.g. between the regional sub-pole and the countries or nation-state objects in the regional hinterland of the sub-pole. This effect will contribute, and is already contributing, to a dampening of the antagonism that may be directed against a dominating metropole and a reorientation of antagonism to be directed against the regional agent, the sub-pole. This process of 'envy your neighbor first' may, intended or not, function as a safety valve for the position of the metropole and direct conflict potential into clashes between groups and units at the lower levels of the system.

Protected colonial systems and the more recent 'spheres of influence' are concrete expressions of the feudality principle. As shown by e.g. the patterns of stocks of direct investment and trade in former colonial areas - the 'underdeveloped' countries - 'spheres of influence' policies still seem to be a protected principle and at the same time a potential for inter-metropole conflicts. Our own study of direct investment patterns has revealed strongly monopolistic tendencies at the national and regional levels and a consequent feudal structure at the global level: in 25 countries of the underdeveloped category, the United States held more than 60% of the total stock of direct private investment by foreigners as of 1967 (if a 60% 'holding' may be considered a 'safe' monopoly position). The monopolistic position of the EEC as a whole is 'safe' in altogether 45 countries, of which 16 are the monopoly of France, and 15 of United Kingdom alone. Oligopolistic foreign investment patterns are found in countries like Iran, Brazil, Argentina, Kuwait, Lebanon, Hong Kong, Singapore, and Thailand. At present, inter-metropole competition is, however, most probably increasing - oligopoly not necessarily meaning conflict, or more conflict than in one monopoly case: oligopolistic rule may be coordinated in cartel-like agreements. This is mainly due to the recent run for energy and raw material supplies in which all the metropoles have been involved.

It is our assumption that a perfect system of control and accumulation might be obtained if the demonstration effect and the process of 'trickle down' could make all parts and units of the world accept the hierarchy and their own position in it. As there is a degree of inter-metropole conflict, as there is also an actual or potential threat to the system from outside ('socialism' as an alternative system), and - perhaps most importantly - as there is continuous opposition and even threat-like action by some parts of the system from within it and from lower levels, the actors cannot conceivably base their control and accumulation on the 'automatic functioning' of the system. It must be constantly reinforced, protected, recreated.

This is where the direct, offensive, on-the-spot and the intermediate, bridgehead types and forms of control still may be crucial. The new domination through the global corporate production structure needs the support of the old types and forms of control: imperialist occupation, the possession of some strategic raw materials located in a periphery area, military bases, diplomatic pressure, etc. in many cases - although not as a general rule - control functions may be transferred to the agents,
the local sub-poles of control. Arms trade and aid and the provision of military know-how may be an equally efficient and less expensive way to keep up control as may military bases. Sub-pole military fortifications may perform not only local control functions, but regional as well. The British retreat from East of Suez is not leaving any major vacuum of metropolitan control. The US métropole first, then an Iranian sub-pole assisted by the métropole, fills the vacant control post in the Gulf.

Although we suggest that there has been, over the past decades, a movement from metropolitan control through direct on-the-spot presence to decentralized control via agent or bridgehead relationships and - as the global hierarchy became more structured and stable - an increasing trend towards control via the system, such a unilinear trend is a far too simplistic way of presenting changes in the system. There are no doubt contradicting trends, largely due to changes in the forms of control: direct investments as market penetration are taking over the role played by trade via the international market, representing at the same time a more offensive form of control. While physically omnipresent, the metropolitan military apparatus as a form of control of the objects of the dominance system is probably taking on a more decentralized structure: metropolitan bases are being replaced by sub-pole military apparatus. As e.g. the Peruvian and Libyan military take-overs have shown, such decentralization may make metropolitan control less secure. The métropole may, and in fact does, maintain control by making the sub-pole dependent on it for the supply and maintenance of the means of control. However, arms trade is no longer the exclusive monopoly of the métropoles of the 'capitalist' world.' On the other hand, these métropoles may counteract potential extrametropole purchases through other means and forms of penetration. And the duopolistic patterns of world control implicit in recent US-Soviet agreements would seem to make 'tough' competition between dominating actors for control of the periphery less probable.'

Penetration of already peripherized parts of the system - the objects - is continuing, and peripherization of new parts into objects of the system is taking place. Why? The answer seems rather simple: once control is established, it has to be maintained for a variety of reasons (including for its own sake); as growth is the goal of metropolitan, in particular corporate, interests, peripherization will add new value to that already accumulated; as profit is a goal in itself and a way of growing, it must be constantly sought in areas and among people where there may be new and/or unexploited opportunities.

Penetration aims at establishing control. Before we ask whether some active penetration is (still) taking place and start trying to identify the processes at work in some concrete geographical or social space, we must assess the state of penetratedness of an object. Is control sufficient and accumulation at least satisfactory - if not maximum of what it might be - as seen from the métropole? Such questions must be asked before we start deriving any conclusions from observable trends in the patterns of penetration. If there is a decline in metropolitan economic aid to agents and objects, does it mean less penetration and domination? Similarly, stagnation or relative decline in the amount of new direct investments made in periphery areas in recent years does not necessarily indicate, as several authors propose,' that these areas have become less important to metropolitan accumulation. As Goux and Landeau (1971) have shown, reported repatriated profits from US operations in 'periphery areas' (underdeveloped countries) still comprise an absolutely and comparatively larger share of the global profits from direct investments than do operations in areas closer to the métropoles, Western Europe and Canada, both of which are at present taking a comparatively larger share of new investments.

In order to show the multidimensional face of present penetratedness, we developed an additive index based on the following parameters: stock of direct investments by métropoles, imports from métropoles, and economic aid received from métropoles (these three representing 'economic penetration'); military alli-

2 - J. P. R.
ance co-membership with metropoles, and military aid received from metropoles (as 'military penetration'). In addition, we include voting agreement with the United States in the UN General Assembly as an indicator of 'political penetratedness'. On the other five parameters, the métropole was defined as all OECD (DAC) countries."

A detailed discussion of these parameters and presentation of the basic data is made elsewhere (Hveem 1973a). The overall state of penetratedness should be sufficiently indicated by this composite measure, despite possible weaknesses in the separate paramètres which have been trichotomized in the index. At the same time, they may point to some of the major variations in the types and forms of control, although such variations can be fully seen and understood only through a more concrete, disaggregate analysis.

While the index ranks periphery or underdeveloped countries in terms of overall penetratedness, rank is at the same time indicative of the degree of penetratedness, as a comparison of the composite index and the ratios on individual indicators of 'economic penetration' will show. A first analysis of the data offers the following conclusions:

1) The degree and extent of penetratedness in periphery areas of the system is remarkably high and indicates considerable, often complete metropolitan control over these areas.

2) The extent and degree of penetratedness clearly justifies naming most parts of the periphery 'objects of domination'.

3) Large parts of periphery areas are, as indicated by the degree and extent of 'economic penetration', sufficiently penetrated and controlled by the system of production and distribution (as expressed by direct investments and trade, in particular). Such 'sufficiently economically penetrated' countries are Cameroon, Gabon, Guyana, Jamaica, Kuwait, Liberia, and Saudi Arabia, among others.

4) In certain areas, control by 'military penetration' still seems to make a difference. Such countries are Brazil, Colombia and several other South and Central American countries, Iran, South Korea, South Vietnam, Taiwan, and Thailand. Some of the larger of these countries - like Brazil and Iran - are important sub-planes, or regional 'prefects' of the system.

5) Only a very few countries seem to represent the position of potential or actual 'independents' at the level of nation-states: Afghanistan, Burma, Cuba, India, Nepal, Syria, and UAR. Some of these, however, are the objects of alternative domination: Cuba, UAR, and Syria by the Soviet system (cf. Hveem & Willetts 1973); Nepal by India; or they may be borderline cases - like e.g. India.

In the present paper we have covered the greater part of the global dominance system, of the dominated. To that system also belong areas, countries, and classes closer to the metropol, in positions that may be higher up but are still dominated - as the cases of Spain and Israel as well as the sub-pole Western Europe and Canada show.

6. Conclusion: some more questions

Much research is still needed and a number of important questions are still open for discussion within the framework of a theory of global political economy. We have discussed only some of them in the present context.

One obvious field for further research concerns the exact nature and degree of dependency relationships. An identification of interest actor relations is equally important. We have provided empirical support for the existence of continued and probably increasing 'objective-absolute' metropolitan dependency on resources of energy and raw material (fixed value) located in satellite areas. What will be further explored are the conditions under which 'independents', or independence-inclined objects, may extricate themselves from such relationships of dominated dependency in which they find themselves at present, and how they may take advantage of the location of strategically important fixed value on their territory. We have identified actors and interests in rather general terms. What will have to be further developed is the exact (albeit changing) relationship between actors and interest. This invites an analysis of 'capitalism' - a
concept employed throughout this paper in rather unspecified terms, more as a catchword than an analytical tool. But - as indicated above - the actor-interest analysis must go beyond 'capitalism' and the drives and motives related to any such more or less identifiable mode of production.

It must include an analysis - mostly outside the framework of the present study - of the 'socialist system'. We have advanced the proposition that in general, this system shares the purpose and basic types of domination of the 'capitalist' system. If it is less dominant, that is largely due to the fact that Western capitalist expansion and penetration has historically been a frontrunner, and that Socialist competition has been less successful in catching up with the West. There is clearly a difference in scale, the West being far more entrenched in the global periphery. The socialist competition suffers from having to operate in a system already penetrated and controlled by the capitalist. In addition, the Socialist 'trickle down' apparatus is probably less efficient, suffering from such disadvantages as a technology inferiority. On the other hand, the Socialists may compensate such disadvantages through their politico-military apparatus, by which they have penetrated into the Middle East, Cuba, Somalia, etc.

Equally important is a further discussion of conflict, its nature and dynamics, and its global as well as local potentials. If the continuation of the structure is not dependent on any single actor or any type or form of control, then the configuration of actors and types of control, as well as the potential for rivalry and open clashes between them, may well become a major threat to the system. Another important conflict potential lies in the following paradox: the more efficient the process of 'trickle down' and the more efficient the demonstration effect, the more probable is also a growing antagonism against the métropole upper classes from groups and people who are growing more relatively deprived at lower levels as they discover they cannot 'make it' to the top - as promised by the system. They may work as hard and as perfectly as possible according to the principles set down by the system itself: that increased control and/or accumulation is taking place only within and according to the functioning of the system itself. But because of another rule set by the system - that upward mobility is for the few only, and that the selection of those few takes place according to the current distribution of power and to bonds of nationality, class, and race - they are with few exceptions predetermined never to reach the top.

Underdeveloped countries classified (ranked) according to 'overall control penetration' by 'capitalist' métropoles (OECD)

Penetration index score

|----------|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|

* Data missing on one or more of the indicators.
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**NOTES**

* This is a much revised and much shortened version of two papers intended as an introduction to a project on *The global dominance system*. The titles of these papers are *The global 'technocapital': On a cumulative international division of labor* (Hveem 1973b) and *Dependency, interdependence, and independence in a dominance system* (Hveem 1973a) both mimeos, April 1973. The present paper, which was presented in absentia at the IX Congress of the International Political Science Association, Montreal, 19-25 August 1973, can be identified as PRIO publication no. 27-20.

1. We refer to the works of Hymer, Amin, Palloix, Murray, and Galtung, but also to earlier 'classical' works of e.g. Hobson, Bukharin, and Schumpeter. See for references notes below and the bibliography in Senghaas 1973.

2. For a similar view and a more detailed discussion of these points, see Senghaas 1973.

3. For a critique of the notion of 'independent processes' as it is used by certain integration theorists, see Hveem 1973c.

4. For further discussion, see Hveem 1973a.


6. For further discussion of the concept, see Hveem 1973b.


9. The Congolese (Zaire) nationalization of its copper industry is a case in point. Taking over the majority share in the Union Minière du Haut Katanga, the Congolese government in order to secure export and marketing outlets, let the former majority-holders and some other foreign interests take charge of these parts of the production-distribution process.


11. We will discuss these aspects in more detail in a forthcoming paper entitled 'Multinational corporations and the nation-state'. See also Palloix 1971.

12. OECD Observer, No. 57, April 1972; figure is for 1971.


14. They include, according to the *UN World Economic Survey*, 1963 (p. 191):

1) Foreign trade policies: Licensing requirements, Quota restrictions, Negotiated export limitations, Foreign exchange restrictions, State trading, Procurement policies favoring domestic products, Anti-dumping and similar regulations, Subsidies to exports.

2) Administrative practices: Classification of goods for custom purposes, Documentary, marking and packaging requirements, Incomplete or delayed publication of customs, information.

3) Internal economic policies affecting imports: Internal taxes for revenue purposes, Taxes applied to imports to compensate for indirect taxes borne by comparable domestic goods, Pricing policies and price control regulations, Restrictions on advertising of goods.

4) Internal health and safety regulations affecting imports: Similarity regulations, Technical specification requirements, Regulations applied for national security reasons.

15. Vaitos 1970 defines overpricing as:

\[
\text{f.o.b. price paid by the recipient} - \text{f.o.b. price quoted in different world markets} \times 100
\]

The six categories referred to are:

(i) for the right to use patents, licences, know-how, and trademarks;

(ii) for technical knowledge and know-how needed both in the preinvestment and investment stage and in the operation stage;

(iii) through over-pricing of imports of intermediate products and equipment ('hidden' costs or 'price mark-ups');

(iv) through profits on capitalization of know-how (acquisition of equity participation in place of other means of payment for transfer of technology); profits on these equity holdings are therefore to be regarded as, in part, payments for the transfer of technology;

(v) through a portion of repatriated profits of the wholly-owned subsidiaries or joint ventures which do not make specific provision for payment for the transfer of technology;

(vi) through imports of capital and other technical equipment, the price of which usually allows for the exporter's valuation of the cost of technology.

16. Cf. Riegel 1971. The INTELSAT agreement meant that the French/West German TV satellite only could be allowed to be put into the orbit by American rockets (the US technological advantage
in this case) on condition that it be used for experiments, not ordinary TV transmissions.

17. For a representative example and an argumentation in sharp contradiction to our own, see Janco & Furjot 1972.


19. For a discussion, see Galtung 1971.

20. This process of 'intra-periphery' conflict due to perceived status differentiation was causing much concern - and was to some extent purposefully exploited - at UNCTAD III in Santiago. See Hveem 1972.

21. For a detailed presentation of the data, see Hveem 1973a. For an empirical analysis of spheres of influence in international trade, see Barratt-Brown 1972.


23. Recent reports indicate that there is a high degree of mutual understanding and in fact a 'division of labor' between the United States and the Soviet Union in parts of the global periphery. In the case of Bangla Desh, the United States has been providing arms to the army, while the Soviet Union has equipped the police force. Another recent case of joint Soviet-US venture is the plan for a (banana) production unit to be set up in Colombia by Soviet state organs and United Brands. See Transnational Monitor, I, 1973.

24. We are referring to observations in numerous studies by IMF World Bank or UN organs, and to e.g. Schuler 1968 and Barratt-Brown 1970.

25. This is not fully compatible with our own line of argument - that parts of the so-called developed capitalist world (OECD) belong to lower levels of control and accumulation, not to the metropole. As those parts belonging to metropolitan levels, however, make up for most of the actual penetration, this weakness in the empirical analysis of aggregates does not represent any serious problem. An offprint of the basic data on penetratedness is obtainable from PRIO.

SUMMARY

The article is a contribution to the development of a theory of global political economy. Its main aim is to develop further the conceptual basis for such a theory and to reformulate some central theorems. While proposing that the world is increasingly becoming one system with globalized patterns of domination, the article builds mainly on the 'world capitalist system'.

The author describes and explains the cumulative character of the system; the development of an international 'hierarchical division of labor' where new levels and centers of control and accumulation are developed whereas the structural constants - vertically, inequality, and feudality - are retained. Four such levels are identified, corresponding to the levels of control in the multinational corporation. To these levels also correspond differential control and accumulation opportunity: a power structure of actors, agents, and objects; its geopolitical mapping into metropoles, subpoles, and satellites; and a global class structure. In the very center is found the 'technocapital' - the combination of capital and political-military power with superior technology and information. Data on the functioning and the growth of this structure are given. Processes of penetration and relationships of domination-dominated dependency are also given.

Finally, the author discusses the relationship between the various types and mechanisms of control. Several problems necessitating further research are identified, mainly bearing on the processes of creation and recreation of dominance relations and the interests of, and conflicts between, the actors of the system.