

FROM THE EDITOR

Volume four of the *International Journal* focuses on the issue of the conceptualization of the State in the context of global agriculture and food. The issue of the State has been a central concern of members of the Research Committee on Sociology of Agriculture and Food for years. More recently, coordinated efforts have been carried out to study the empirical dimensions of the transformations undergone by the State as well as the manners in which these transformations are expressed theoretically. The relationship between the State system and the socio-economic sphere has traditionally been studied employing a nation-centered concept of the State. However, changes at the international level, culminating with the emerging globalization of production and consumption processes, have made a nation-centered concept of the State increasingly questionable. Indeed, the emergence of global production and consumption systems has created limits to the traditionally assumed sphere of action of the State and opened up discussion of the inability of the State to carry out its historical role in society. Simultaneously, these changes have prompted scholars to argue the emergence of a new State. This wealth of empirical studies, however, has not been paralleled by a rigorous rethinking of the concept of the State.

The relevance of the identification of a new concept of the State becomes evident in light of the role that the State plays in developing, promoting and implementing agricultural and food policies. Though State policies have often advanced the interests of dominant groups in society, they have also benefited subordinate

groups. For instance, in many countries the State has attempted to stabilize the rural economy as well as stimulate and control production and consumption through various programs, such as supporting agricultural prices, enhancing agricultural and rural infrastructures and assisting producers and consumers to make informed decisions. Additionally, the State has intervened to protect the environment, provide food and agricultural products to needy segments of society worldwide, and advance rural economic development, rural education, health and services. In this respect, the reported limits imposed on the action of the State have significant implications vis-à-vis fundamental issues such as those of democracy, equality and sustainability.

A grant from the Rural Research Initiative Competitive Grant Program of the United States Department of Agriculture allowed the realization of a three day workshop which was held in Wageningen, the Netherlands, in the Summer of 1993. Its primary objectives were to discuss the role of the State in the new global economy and to identify and analyze transformations undergone by the State in regard to components of the agro-food sector such as: labor and production processes, the firm, the organization of superstates, regional development, the environment, and the regulatory process. Its program consisted of the presentation and discussion of papers addressing changes in the State with respect to the above mentioned components of the agro-food system. Revised versions of the original manuscripts are contained in this issue. They

are preceded by an introductory article summarizing the overall discussion carried out during the workshop.

"Global Post-Fordism and Concepts of the State" contains an illustration of the characteristics of the global post-Fordist era and identifies some of the fundamental elements for the reconceptualization of the State. Here, the State is defined in terms of its actions, i.e. the historical manifestations of the relationship between the political and economic spheres in capitalism. State actions are identified in terms of the so-called "imperatives" of the State, i.e., the processes of accumulation of capital, social legitimation, mediation among various conflicting societal groups, and social and physical reproduction. The empirical evidence relating to these imperatives is then analyzed in order to identify ways in which they are carried out in the globalized socio-economic system and the limits of the national State. The article is jointly authored by those who presented papers at the workshop, but was also enriched by comments from other participants. In particular, Reidar Almas, Alberto Arce, Ana Barbic, Maria Fonte, Sergio Gómez, Mary Hendrickson, Joe Molnar, Marie-Christine Renard, and Frank Vanclay provided insightful contributions to the discussion. As the contributors to this issue point out in their articles, this analysis is far from complete. The position of the State in the global system is still rapidly evolving and too many aspects have not been given due consideration. In this respect, the works contained in this issue should be viewed as initial rather than final steps.

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Global Post-Fordism and Concepts of the State

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Following a review of the literature on the State and some of the basic features of global post-Fordism, it is maintained that global post-Fordism can be synthesized through a set of four dialectical relationships: deregulation/regulation, fragmentation/coordination, mobility/embeddedness and empowerment/disempowerment. Moreover, it is argued that: 1) the State in global post-Fordism cannot be thought of exclusively in national terms; 2) its re-conceptualization must entail a transnational dimension; 3) the State cannot be conceptualized exclusively in terms of formal public appearances, agents and agencies; and 4) non-public apparatuses, agents and agencies must be included in the analysis.

Introduction

The Wageningen workshop was the last of a series of meetings initiated in Columbia, Missouri, in 1991 with an international conference on "The Globalization of the Agricultural and Food Order." At that time it was decided to create a research group that, through a series of workshops, would seek to identify the changes undergone by the State in the context of the development of the new global socio-economic system. In essence, the basic assumption was that the relationship between the polity and the socio-economic sphere has traditionally been studied employing a nation-centered concept of the State, which the globalization of production and consumption processes has made increasingly questionable. It was, therefore, decided that the new forms through which the economy-polity relationship is developing and the analytical tools to study it need to be investigated.

The outcome of these workshops has been the production and circulation of a wealth of research that has addressed various aspects of the process of transformation of the State and of the global economy. Moreover, through discussion and debate it has been possible to identify some fundamental elements for the re-conceptualization of the State. These elements will be presented in the following pages. As a note of caution, it should be stressed that these reflections remain tentative due to the limited

amount of time spent by this group studying the issue and to the rapid change occurring at the socio-economic level. Further research and discussion are needed.

This article is divided into three sections. First, a brief review of the literature on the State in the global economy and on the emergence of the "new" state is presented. This review, circulated previously to those attending the Wageningen meeting, served as background for the preparation of papers to be discussed. This section is reproduced here to maintain continuity in the discussion. The second section is another review of the most relevant aspects of the new international division of labor, and reflects our overall understanding of the organization of the global economy. The new international division of labor has often been referred to as globalization, post-Fordism, sloanism, and a host of other names. For convenience only, the term "global post-Fordism" will be used. The final section focuses on elements for the re-conceptualization of the State in the period of global post-Fordism.

Theories of the State in the Sociological Literature

The role of the State in society has been a central theme of sociological debate in recent years (Block, 1980; Domhoff, 1979; Offe, 1985; Poulantzas, 1978), and theories of the State have been increasingly employed to address issues in the area of sociology of agriculture (Bonanno, 1987a, 1987b; Friedland, 1983; Friedmann and McMichael, 1989; Gilbert and Howe, 1991; Green, 1987). In this debate, the State has been identified as exhibiting one of the following characteristics: (a) an institution instrumentally controlled by elites; (b) an entity endowed with relative autonomy; (c) an entity that has its own agenda and is autonomous; and (d) an institution in which

the instrumental dimension and the autonomous dimension are both contained in the State's historical role.

The Instrumentalist Position

The instrumentalist account views the State as either an instrument for promoting the common interests of elites (Offe and Ronge, 1979) or as a committee manipulated by these elites (Carnoy, 1984). Drawing from interpretations of historical accounts of the development of capitalism, the instrumentalist approach emphasizes the direct control that the ruling groups exert in all fundamental aspects of society including the economy and polity. This direct control is the condition for the existence of the existence of institutions such as the State. In the current debate two types of instrumental theories have emerged. The first calls for an identity between elites and the State officialdom (Domhoff, 1967; 1979;¹ Miliband, 1969, 1970). In this case, State bureaucrats tend to belong to the same class or classes that dominate society and are bound to it by common educational backgrounds, friends, and family relations. The second theory, which has been labeled "State Monopoly Capital Theory," indicates that the monopolistic-corporate fractions of the economic elite exercise direct control over the State (O'Connor, 1973a, 1973b). Essentially, it is maintained that the control that monopolistic-corporate groups exercise over the economy entails, almost automatically, control over the State.

The Relative Autonomy Position

The theoretical and empirical bases of the instrumental approach have been criticized by studies that have emphasized the complex character of the relationship between the economy and the polity. Moreover, empirically observed discrepancies between the action of the State and that of the ruling groups have cast

doubts on the ability of these groups to directly control the polity. Drawing from classical works developed within the political economy approach, and more recent formulations that emphasize the role that ideology, the polity and the superstructure in general play in the process of the development of capitalism (Gransci, 1971, 1975; Habermas, 1975; Horkheimer, 1974; Horkheimer and Adorno, 1972; Lukacs, 1971; Marcuse, 1964), the relative autonomy approach underscores the partial independence of superstructural elements from the economic structure. Accordingly, it calls for the relative autonomy of the State (an element of the superstructure) from the economy (the structure) (Block, 1977, 1980; Poulantzas, 1978; Offe and Ronge, 1979).

It is argued that the State reproduces class relations not because one class or fraction of a class directly controls it, but because the State is interested in reproducing the social relationships that support the dominant socioeconomic system (Offe and Ronge, 1979). Proponents of this approach (Block, 1977, 1980; Poulantzas 1978; Offe, 1985) suggest that the independence of the State from the elites derives from its ability to mediate the short term interests of class fractions within the dominant bloc and, simultaneously, to ensure the continuation of capitalism as a dominant mode of production. At the same time, however, the State can only favor the economic elites to a certain degree because of its need to legitimize its actions. Legitimization involves developing a consensus on political strategies which are conducive to the maintenance of the status quo.

As indicated by Offe (1985), the inability of capitalism to maintain adequate levels of economic growth increasingly requires the intervention of the State. Such intervention tends to penetrate new and expanding spheres of action outside the traditional regulatory competence of the State (Block 1980). Accordingly, the problem of implementing legitimation in-

creases with the recurrent crises of accumulation of capital. Accumulation and legitimation, then, remain the conditions under which modern capitalism can expand. However, legitimation contradicts accumulation, as resources are withdrawn from the social actors in charge of accumulating (economic elites) to be utilized by the social actors in charge of administration (the officialdom of the State). Changes in favor of one or the other group of actors triggers crisis. A reduction in the economic solvency of the State could generate an inability to regulate the socio-economic sphere and to overcome present elements of crisis. An increase in transfer of resources from the economic elites to the State would signify a reduction of the potential for accumulation and a drainage of capital which would be detrimental for both groups in question. It follows that the State is called upon to mediate the contradiction between accumulation and legitimation, a task that the State is only partially able to manage.

The State-Centered Theory

Yet another view of the State comes from state centered theorists who contend that the polity has its own interests and agenda apart from the dominant elites, but that the autonomy of the polity can rise or decline in significance (Hooks, 1990; Orloff and Skocpol, 1984). This approach emphasizes the politicized workings of the State in developing and implementing new policies. Skocpol and Finegold (1982), using studies of the agricultural policies of the New Deal, assert that the polity acts autonomously by implementing policies contrary to the wishes of the capitalist class. Prechel (1990) uses the steel industry during World War II to show that the government chose production targets and forced expansion of production against the wishes of the steel manufacturers, supporting the idea of the polity's autonomy.

The Mixed Approach

The theories cited above have generally been employed in exclusive terms (for the debate in rural sociology see Bonanno, 1987a, 1987b; Green, 1987, 1989). An analysis explicitly rejecting the separation between the instrumentalist and relative autonomy positions has been provided by Friedland (1983, 1991) who contends that the role of the State in society is not given or fixed; rather it depends upon specific historical circumstances. Indeed, these circumstances are the sources of an instrumentalist or autonomous posture of the State in society. Employing the cases of various agricultural commodities, he demonstrates that the State is simultaneously called upon to organize various interests of dominant elites and to mediate between the elite's interests and opposing interests emerging from other classes (relative autonomy theory). He also demonstrates that in specific instances the State operates as an instrument of dominant elites, as the latter directly and effectively control the action of the former (instrumentalist theory). Empirically, he concludes, neither theory is sufficient to describe the complex patterns of State involvement in society. Paradoxically, each theory becomes correct under differing circumstances.

As underscored by many students (Bonanno, 1987b; Carnoy, 1984; Green, 1987; O'Connor, 1973a, 1973b, 1986), the various theories of the State contain a number of important similarities. Among these are the overall tenets that economic growth and capital accumulation are not possible without the aid of the State and that the State cannot exist without the continuous existence of an accumulation process. In more specific terms this signifies, first, that accumulation of capital, economic growth, and the established position of the elites in society depend upon the ability of the State to maintain the conditions necessary for the reproduction of capital. Second,

accumulation of capital must be legitimated and the State provides such legitimation through the mediation of the various interests in society. This phenomenon refers to both mediation among various elites and among these elites and other groups. Third, the State obtains its financial resources from the taxation of revenue generated through the accumulation process. Accordingly, the continuous existence of the accumulation process through economic growth is paramount for the existence of the State. In essence, for all the above mentioned schools of thought there is an intrinsic relationship between the process of capitalist development and the existence of the State apparatus.

Another similarity shared by these approaches, central to the present research, is the nation-centered conceptualization of the State. Specifically, these approaches assume that the polity and the socio-economic sphere are bounded within the same spatial context represented by the nation-state. It is in this context that the polity can aid and regulate the development of the economy and the latter can provide the basic financial resources for the continuous existence of the former.

A host of recent studies, which have carried out empirical analyses adopting the nation-centered concept of the State, exemplify this position. Hooks (1990) examines the USDA and its actions within the agricultural sector in several different time periods to find support for a state-centered theory, identifying the State within the U.S. political apparatus. A similar understanding of the State is employed by Devine (1985), who examines social investment and social consumption outlays in the U.S. to support a political economy perspective. Quadagno (1984) looks at the Social Security Act of 1935 to support the theory of the U.S. State's relative autonomy in operating within the national sphere. Within the sociology of agriculture, Gilbert and Howe (1991)

attempt to demonstrate the superiority of the relative autonomy theory in regards to the Agriculture Adjustment Administration's socio-economic impact on farmers, again within a national context. Finally, Green's (1987) examination of the structural changes within the national flue-cured tobacco industry posits that capital has gained power from the State.

The debate on the role of the State has been redefined by scholarship in the sociology of agriculture and sociology of the economy. This scholarship has underscored the emergence of new forms of the State that transcend the nationally-centered forms discussed in the literature. Various authors have hypothesized the existence of embryonic forms of supranational or transnational forms of State. Following is a brief review of this literature.

Current Status of the Literature on the "New" State

The recent debate on the relationship between the transnationalization of the economic sphere and the State underscores the effects that changes in the former have generated for the latter. In previous socio-economic phases, i.e., the national and multinational phases (Bonanno, 1987a, 1991:21-22), the primary roles of the State were those in support of capital accumulation and social legitimation (O'Connor, 1973, 1986). The manners in which the State performs actions aimed at fostering accumulation and legitimation have been called into question now that the accumulation of capital has entered its transnational phase. A number of analyses have delineated both the limits of State action domestically and the emergence of a transnational State. Four positions exemplify the various understandings of the role of the State in globalized post-Fordism.²

The first position interprets the State in terms of class control. This position is exem-

plified by Friedland (1991, 1994) who has emphasized that transnationalization of the economy requires the emergence of a State apparatus which can assert its powers beyond the boundaries of the nation. Historically, the State has emerged to minimize uncertainties in the accumulation of capital, to create a climate of business confidence. This process must be continued in the new transnational scenario if accumulation is to continue without unbearable contradictions. More specifically, given the continuation of conflict among various fractions of capitals (particularly between domestic capital and transnational capital) and between the interests of capital in general and subordinate social groups (environmental movements, consumer movements, ethnic and minority groups, organized labor, etc.), the organizational, mediative, and legitimizing roles must be performed in the new global scenario. Following Hechter and Brustein's (1980) historical analysis of the emergence of the capitalist State, Friedland argues that the emergence of the transnational State must be linked to the issue of control of social opposition. In fact, it was through the action of controlling opposition that the domestic State emerged in the early phase of the expansion of capitalism. The question of the State, then, is recast in terms of what opposition is developing at the global level which, in turn, will shape the terms of the emergence of a transnational State. Despite the availability of a number of possible outcomes, Friedland concludes that the path for the emergence of a transnational State is still unclear, though some embryonic forms of transnational State can be detected in the regulatory attempts of international organization in the agricultural and food sector such as FAO and OECD.

The second position maintains that the domestic State has already been transformed into a transnational State by economic forces. This posture is exemplified by the work of

McMichael and associates (McMichael, 1991; McMichael and Myhre, 1991). McMichael criticizes the regulationist literature that argues global arrangements stem out of negotiations among nation-states (Aglicta, 1979; Gordon, 1988). This critique is centered on the fact that, by assuming a nation-centered system, regulationists (a) are unable to understand the recently established global mechanism of regulation, and (b) reify the concept of nation-state. Conversely, McMichael argues that the transnationalization of the economic sphere has already transformed the State and the State system. This process is based on the integration of the State into capital circuits that are increasingly transnational. First, the State is faced with diminishing control of the activities of transnational financial structures. This decreased control, in turn, affects the existence of the State by generating a shift of power within the State in favor of finance ministries and to the detriment of program-oriented ministries. Second, the establishment of a global agro-food system has diminished State capacity to control the composition of local food and agricultural production. Agriculture is increasingly extroverted and oriented toward the production of inputs for livestock feeds and processed foods for affluent markets. The net result is that the State is no longer a "political mediator" between global capital and national bourgeoisie and the working class. Rather, it has assumed the role of "facilitator of the requirements of global capital."

The third position emphasizes the limitations to the emergence of a transnational State by underscoring the importance the domestic State retains in processes of accumulation of capital and social legitimation. As illustrated by Koc (1994), the domestic State plays fundamental roles that are still unresolved transnationally. First, at the legitimative level, the domestic State has historically been an agent

that has homogenized and controlled ethnically, religiously and politically diverse groups. These groups have been brought together through processes of legitimation that have culminated in the establishment of the "nation" and the ideological and normative dimensions associated with it. In this respect, the identification of diverse social groups with a country has allowed the creation of more or less cohesive social formations. The existence of an entity that could mediate and eventually resolve the differences among these groups at the international level is embryonic and certainly does not have the same powers of the domestic State. Second, and at the level of accumulation of capital, the domestic State continues to organize and maintain conditions amenable to capital accumulation within its territory by controlling labor and protecting capital. The globalization of production has altered these conditions so that protectionist measures are called for by various segments of capital while others advocate State action in opposing directions. In this respect, the ability of the domestic State to perform actions in protection of some segments of capital has been somewhat eroded. As far as labor is concerned, the transnationalization of production processes has not been accompanied by the transnational mobility of labor. Despite some partial exceptions such as the EC, the regulation of fluxes of labor at the transnational level is unresolved at best and could become the source of a resurgence of nationalist and racist sentiments among the working class.

The fourth position focuses on the concept of contradictory convergence and the resulting relationship between TNCs, the State, and subordinate classes in the transnational phase (Bonanno, 1992, 1994). Bonanno argues that the previous three approaches pay considerable attention to the attempts of TNCs to bypass State action and/or to direct State action toward the fulfillment of their interests but have

missed an important component of the emerging transnational State. Little discussion is provided on the interests that both TNCs and subordinate classes would have in the emergence of a transnational State and the implications and contradictions that this process would entail for all groups. Both TNCs and subordinate classes have a strong interest in the development of a transnational State. TNCs need a political mediator/facilitator at the transnational level to provide a business climate of accumulation and mediate legitimation demands from subordinate classes and between capitalist class fractions. Subordinate classes need a transnational State to help regain many of their losses centered around health and safety for workers, consumer protection, and environmental regulations which the transnationalization of the economy accomplished. Some cases in point are the Amazon Basin/Rainforest issue, global warming concerns, the Circle of Poison problems, and challenges arising from the decline of unions.

Bonanno (1993) argues that the emergence of supranational organizations such as the European Community (EC) and the North American Free Trade Agreement (NAFTA) are early attempts at forming transnational States. He sees the strengthening of supranational organizations as the most advanced effort to establish political and legal elements of the States beyond national boundaries. In particular, the EC, with its 30 year history of movement toward economic and political unification, is the "most advanced and sophisticated case" of a transnational State (Bonanno, 1993:349).

This literature indicates that there are a variety of reasons to argue for the continuous existence of the State at the domestic level. Simultaneously, there are numerous reasons to argue that a form of a transnational State should also exist. These arguments echo posi-

tions developed in fields outside sociology of agriculture (e.g., Borrego, 1981; Fine and Harris, 1979; Pitelis, 1991; Picciotto, 1991),³ which conclude that the collapse of the international order typical of the Fordist regime requires the emergence of new transnational forms of the State. However, neither the empirical nor the theoretical form of the "new" State is clear at this juncture.

The New International Division of Labor or the Transnationalization of the Economy

As indicated above, the emerging debate on the State is contextualized in the broad process of transnationalization of the socioeconomic sphere. This change has often been referred to as the transition from Fordism to post-Fordism (Friedmann and McMichael, 1988; Kenney et al., 1989; Lipietz, 1992, 1987; Piore and Sabel, 1984). In essence, Fordism refers to a system of mass production and mass consumption based on a stable employed and well-paid labor force in core countries and sectors, intensive exploitation of labor and resources in the Third World and relatively large and concentrated production units (see Lipietz, 1987; Piore and Sabel, 1984). While the character of the post-Fordist regime is yet unclear, a few of its characteristics have been stressed in recent works.

More specifically post-Fordism denotes a restructuring of postwar capitalism that clearly got underway by the middle 1970s. A central feature of post-Fordist change is the concerted effort to diminish rigidity and increase flexibility. Although this tendency involves many multifaceted processes, operating in a relatively autonomous fashion in different spheres (i.e., spatial, cultural, ideological, organizational, etc.), one decisive dimension, having wide consequences, is the effort to

eliminate constraints to the free mobility of capital and to maximize its speed of movement. In the 1980's, the new business-government "partnership" emphasized weakening or eliminating the State's capacities to regulate business environments. While this strategy sometimes has been successfully opposed, it has also intensified deregulatory and re-regulatory pressures throughout capitalist societies and has led to many important victories (often at the costs of the underclasses and other groups that lack political voice and representation). Most importantly, post-Fordism has been implemented internationally and is inextricably entwined with the increased "globalization" of capitalism. Accordingly we can talk about global post-Fordism. Following are several dimensions of global post-Fordism, all related to the strategy of maximizing flexibility.

First, production is decentralized among different owners in various locations. Under Fordism, production was unified in vertically integrated firms, often with operations located in a limited number of central locations. Post-Fordist production has been decomposed into many subunits and subprocesses carried out by numerous firms spread widely across regional and national boundaries (Harvey, 1990; Mingione, 1991:198202). But such decentralization of production should not be mistaken for deconcentration of large capital. Rather this strategy enhances corporate control. For example, by divesting certain aspects of the productive process, firms are able to break the bargaining power of unions, transfer risks to other producers, and exploit inexpensive labor or resources of other strategically located firms (Reich, 1991; Strobel, 1993). It also enhances the leverage of capital in bargaining with the State. Smaller decentralized operations can choose locations where regulatory and welfare costs are low and organized labor is weak (Calasanti and Bonanno, 1992; Mishel and

Bernstein, 1993; Strobel, 1993). Firms use "global sourcing" to seek the least expensive factors of production on an unlimited worldwide basis and decentralize operations accordingly (Constance and Heffernan, 1991). Workers understand that higher wage demands or unwillingness to accept cuts will "force" local operations to be relocated. Public bodies operate with the same awareness. Decentralization of production is also used to make concentrated financial holdings more profitable and secure (Sassen, 1993). For example, resources from divestments can be re-invested in entirely new forms of production and products, which provide hedges against different possible shifts in the economic environment. By contrast to vertical integration, financial ownership of diverse types of smaller scale production enables firms to act more quickly and efficiently in rapidly changing and fluctuating markets (Bonanno et al., 1994).

Second, while production is dispersed in many localities, regions, and nations, financial and research capacity remains concentrated in countries of the first world. Here, financial global cities (Mingione, 1991; Sassen, 1993) orchestrate and control worldwide production; similarly, research and development activities remain close by (Busch et al., 1991). Contrary to the positions that portray current conditions as chaotic, disorganized, or decentered, global post-Fordist flexibility depends on the maintenance of strong centers, anchored in extremely rationalized control of most essential fiscal and intellectual resources, which are the key for exerting command over more widespread people and resources than ever before. Regardless of post-Fordist firms' lack of national identity and their tendency to weaken the State's capacity to constrain the operations of capital, they still require the benefits of the legal, social, political, technical, and material infrastructure provided by the most advanced and effective State structures. But a primary

contradiction of the current situation is that the overarching emphasis on flexibility diminishes recognition of the continued need for coordination (Friedland, 1993).

Third, "spatio-temporal" compression facilitates the maximum extension and velocity of economic processes (Harvey, 1990). Geographically dispersed, decentralized production combined with concentrated control requires new forms of instant communication, transport, credit, and other innovative technologies that connect distant operations and rapidly changing locations. The network of transactions is much more complex and depends on multiple and flexible informational and financial linkages. Simultaneously, new technology has also accelerated the speed with which material commodities are exchanged. The fresh or semi-processed food sector is perhaps one of the best examples of increased global spatio-temporal compression. As indicated in a number of works (e.g. Bonanno and Constance, 1993; Friedland, 1993; Gomez and Goldfrank, 1991), transnational corporations (TNCs) have developed new forms of technology and organization that allow them to take advantage of lower production costs and more favorable environmental legislation existing in some countries while maintaining a foothold in affluent markets. Spatio-temporal compression, however, has also involved a reduction in the political blockages, that slow the movement of goods and information. Economic policies oriented toward open markets and corporate strategies to by-pass local protectionist policies have also facilitated the global flux of resources (Llanbí, 1994).

Fourth, the spatial-temporal unity of the polity and economy, characterizing the earlier phases of capitalist development, has been fractured with the consequence that the State's capacity to mediate between market and society has been weakened. The Fordist conception of market-centered democracy presumed the

State's capacity to establish socio-cultural limits to capitalist development and provide community and national institutions with relative autonomy and safety from the forces of unrestricted economic rationalization. During the late 1970s and 1980s, the State was not able to assure growth and, at the same time, contain capitalist dynamism without eroding its capacity to limit socially unacceptable costs. In particular, post-Fordism substantially reduced the local, regional, and national State's control over its economic and non-economic environments (Constance and Heffernan, 1991; Koc, 1994; Ross and Trachte, 1990). Post-Fordist firms sought settings with good "business environments." While this concept often includes such qualities as a skilled labor force and a highly developed and maintained infrastructure, it also very frequently means low wages, weak unions, and lax regulation of the workplace and environment that disempower people and communities. Moreover, States use tax abatements and various other subsidies to attract or simply hold businesses. For many, "economic development" means States encouraging competitive rollbacks in all these areas (Lambert, 1991:9; Mingione, 1991). In this fashion, post-Fordism's "flexible" organizational features generate external flexibility (i.e., pliable labor forces, publics favorable to deregulation, and cooperative States) outside the firm in a wide array of interorganizational settings.

Fifth, the nature and quality of work is transformed. Full-time employees are being replaced by part-time and temporary workers and manufacturing and farming occupations by service positions. As indicated by Pugliese (1991:148-9), the nearly universal Fordist model of work has been replaced by a multiplicity of employment arrangements (Bluestone and Harrison, 1986; Calasanti and Bonanno, 1992; Mingione, 1991; Newman, 1988). Part-time or temporary laborers are

hired and released according to market conditions, and keep the operation running continuously, without overtime pay. In addition, the workday is reconfigured to enhance flexibility. For example, workers are put on sliding shifts or are "beeped" in during off-hours. This labor regime has generally reduced the bargaining power of remaining full-time workers. Older workers are aware that they would not be able to find equally favorable employment if they lost their current positions. Consequently, they are more likely to accept "givebacks" in order to maintain job security. At the same time, the new flexible arrangements benefit other workers. For example, many highly skilled and well-paid, high-tech professionals prefer non-traditional schedules in order to work in more relaxed settings (e.g., in their homes), to meet family responsibilities (e.g., dual parenting), or to blend work with other life-style priorities (Leinberger and Tucker, 1991:300-51). Even less advantaged workers sometimes benefit from such flexible arrangements. However, the post-Fordist reshaping of work has meant poorer working conditions, lower wages and benefits, and less job security for the vast majority of workers. Low-wage (especially minimum wage) jobs are being created much more rapidly than high wage ones (Harrison and Bluestone, 1988; Newman 1988), and workers are working longer hours with less vacation and time and sick leave. Schor (1992) contends that the intensification of labor has been so great that many workers cannot meet the demands of other aspects of their everyday life. Lipietz (1991:105) argues that the postwar capital-labor accord has been restructured into a one-sided vision of the worker as a commodity, who can be freely "borrowed and declined at will by the employer." This costly pliability is at the heart of post-Fordism's coercive flexibility.

Sixth, a new form of transnational capitalism has emerged, qualitatively different from

the Fordist type of multinational capitalism (Borrego, 1981; Friedland, 1991; Picciotto, 1991). Under Fordism, it was possible to identify corporations with country of origin (Sassen, 1988). In this context, international operations were treated as extensions of entrepreneurial activities designed and engineered in the home country and supported by its state apparatus. By contrast, in the transnational phase, corporate products and overall identity cannot be identified unambiguously with a particular country (Reich, 1991). The automotive industry exemplifies this change. Until a few decades ago, automobiles were built primarily from domestic components and assembled in plants located in the same country. Today, components have diverse national origins and relatively few might be made in the nation where final assemblage takes place. However, companies still utilize national identity as a marketing strategy (e.g., Chrysler's flag-waving, America's back" advertisements). The lack of national identity increases flexibility by reducing loyalty and responsibility to national entities and their economic, social, and political requirements. Maximum flexibility means operating as purely as possible in accord with the bottom-line.

Toward a New Concept of the State

The changes indicated above raise the question of the distinction between the State and the nation-state. While it was possible in the Fordist era to equate the State with the nation-State, in global post-Fordism this equation can no longer be maintained. As documented above, the creation of supranational states, the delegation of nation-state imperatives⁴ to non-national entities, the by-passing of State action by economic actors, and other similar phenomena indicate that simply equating the State with the nation-state will

capture only a limited dimension of State action. If this is the case, the operational definition of the State employed by studies that assumed a national center concept of the State must be modified. The issue of the modification of the operational definition of the State can be addressed by identifying the imperatives of the State in capitalism and by tracing their evolution in global post-Fordism. By illustrating this process it is possible to identify, (a) the limits of action of the nation-state, and (b) the evolution of such imperatives above and beyond national spatial boundaries. What are, then, the State's imperatives in capitalism? In a recent paper, Friedland (1993) discusses the action of the State in terms of four interrelated imperatives: maintenance of processes of accumulation of capital, maintenance of processes of social legitimation, mediation among various conflicting societal groups, and social and physical reproduction. Furthermore, Friedland distinguishes between the formal quality and non-formal quality through which these imperatives can be carried out. In this case he refers to the fact that these imperatives can be carried out through either recognized "formal" channels or alternative "nonformal" channels.⁵ Finally, he identifies four spatial levels in the context of which these imperatives are carried out. In global post-Fordism these levels consist of the national, the international, the supernational, and the transnational.

Focusing on imperatives signifies that the State manifests itself through the actions of its various elements. This posture translates into an operational definition in which the State is to be understood as the set of apparatuses, agents and agencies which carry out the imperatives at various levels and with various qualities. To be sure, imperatives, qualities, quantities, and levels are not static elements. On the contrary, their existence is to be verified empirically. In other words, they should

not be treated as axioms, but rather as aspects which can be exhausted and/or maintained in the process of evolution of the socio-economic system.

Following the above definition and the recent group research, the re-conceptualization of the action of the State must include the following:

- The State can no longer be conceptualized exclusively in national terms since the imperatives of the State have been delegated and/or subsumed by greater than national entities.
- Conversely, any re-conceptualization of the State must entail an international dimension. More specifically, State action has to be verified through the inclusion of more than national elements. This involves international, supernational, and transnational activities, yet must not mandate the exclusion of the national dimension; all four levels should be part of the analysis.
- The State cannot be conceptualized exclusively in terms of formal public apparatuses, agents and agencies. As documented by the group's research, the delegation of State imperatives to a set of new actors mandates the consideration of alternative spheres. Accordingly,
- The re-conceptualization of the State in global post-Fordism must include non-public apparatuses, agents, and agencies. The concept of non-public should not be equated exclusively with private. Private entities should be considered as part of the nonpublic sphere, yet they should not be automatically equated with it. In this context, non-public has a broader meaning which includes quasi-

or semi-public entities as well as quasi- or semi-private apparatuses, agents, and agencies and all the various possible combinations that can be found in the continuum between "private" and "public."

One of the pre-conditions for the re-conceptualization of the action of the State lies in its contextualization within global post-Fordism. This requirement can be difficult to operationalize if we take into account the fact that global post-Fordism is characterized by a complex set of phenomena often involving contradictory trends. Accordingly, it is necessary to create a framework which synthesizes global post-Fordism without diminishing its complexity and its dynamic character. For this purpose, global post-Fordism can be conceptualized as an ideal type characterized by a set of dialectical relationships. In this case we speak of relationships of opposing forces that symbolize the evolution of this phase of capitalism. Four dialectical relationships have been identified: deregulation-re-regulation; fragmentation-coordination; mobility - embeddedness; and empowerment - disempowerment.

First, deregulation/re-regulation. Strategies such as global sourcing and the implementation of neo-liberal economic policies have allowed observers to argue the deregulation of socio-economic processes. More specifically, it has been claimed that the State is either unable to regulate or has diminished or withdrawn from regulatory activities. The diminished intervention of the State has been paralleled, however, by two related phenomena. First, withdrawal of State intervention in some spheres (particularly the social sphere) has been accompanied by strengthening of intervention in other spheres. Accordingly, the withdrawal of State action has been developing only partially and contingently. Second,

the space left from the withdrawal of traditional forms of State intervention has been claimed by other regulatory processes that involve the action of either public or non-public entities. In essence, global post-Fordism involves both deregulatory processes and, simultaneously, new forms of re-regulation.

Second, fragmentation/coordination. As indicated earlier, among the most important characteristics of global post-Fordism are the spatial dispersion of production processes and the differentiation of consumption. In general, these processes have been associated with the concept of fragmentation. Post-Fordist fragmentation has been conceptualized as a strong departure from the Fordist concentration of production and consumption. Research has indicated, however, that the fragmentation of economic processes requires sophisticated systems of highly specialized coordination as decentralized production processes need to be coordinated at a number of levels. They need to be coordinated, for instance, at the level of control (e.g., control of the standards of production, control of quantity of output, and control of the quality of products). They must also be coordinated at the level of specialized markets. In this case, increased production of specialized commodities must be channeled to specific markets with very high levels of accuracy and rapidity. As illustrated by the case of the fresh fruit and vegetable sector, coordination between fragmented production and specialized niche markets is key for the continuous existence of the production system. Finally, coordination is needed at the level of type of output. As perhaps best demonstrated by the cases of durable foods or computers, the various dispersedly-produced components of each individual product must be generated in such a way that they can immediately be utilized in the creation of the final good. This situation refers to the cases of both ingredients and specific parts.

The third dialectical relationship is the dichotomy mobility/embeddedness. Global post-Fordist flexibility is synonymous with the rapidity of mobility of capital. The mobility of capital is paralleled, however, by relatively less mobile productive structures and much less mobile labor (Bluestone and Harrison, 1982:18; Strobel, 1993:84-87). While capital can be moved electronically, allocation of investments depends on a set of variables such as availability of land and other required natural resources, infrastructures, and structures that require a greater amount of time to assemble than the simple electronic transfer of capital. Reallocation of labor depends upon an even greater quantity of time consuming and spatially constraining items. These items can include getting out of current housing situations, paying for moving expenses, finding alternative employment for significant others, etc. (Strobel, 1993). Aside from the material logistics involved, numerous human realities keep labor tied to particular places. Places are often connected to personal and familial histories, as well as social and affective networks that are not easily left behind (Mingione and Pugliese, 1994). In short, the mobility of the various productive elements transcends the existence of spatial enclaves that are touched by global post-Fordism. In locales left behind by the hyper-mobility of global capital, the negative consequences are often most evident in terms of unemployment, underemployment, environmental degradation and community decay. Simultaneously, localities that "receive" global capital also experience a host of consequences, some positive and some negative. Global capitalism thus entails a local dimension that certainly touches processes involving labor, production, consumption and institutions.

The fourth and final dialectical relationship is empowerment-disempowerment. Global post-Fordism has been viewed by many as a strategy to weaken subordinate classes in

society. The crisis of unions, the generation of "bad" jobs that are increasingly replacing well-paid employment, and the proliferation of part-time and/or flexible occupations are a few of the most significant cases in point. Similarly, capital hyper-mobility has been identified as one of the reasons for the economic decay of regions and communities. The severity of these phenomena has been so great that global post-Fordism has been interpreted as a totalizing phenomenon leaving little room, if any, for resistance. While this scenario has a significant degree of validity, research has also shown that, along with the disempowering of some social groups, movements that resist global capital have emerged. In the sphere of agriculture and food, the growth of the environmental movement and some consumer interests are certainly significant examples. Moreover, it has been argued that within global post-Fordism TNCs have reached unmatched levels of power. Their ability to by-pass regulations created to protect other social groups attests to this claim. However, research has also shown that TNCs are not exempt from experiencing significant contradictions and problems. Perhaps one of the most relevant of these is the limited level of inter-corporation coordination generated by the restructuring of the State.

Notes

1. It must be noted that Domhoff (1976, 1990) has rejected rather forcefully the label of instrumentalist attached to his theory. In this case, the inclusion of Domhoff's early work in the instrumentalist school should be treated as an heuristic device rather than as a specific classification of his work in this category.

2. The classification of these authors into four groups should be viewed as a heuristic simplification of a much more complex and differentiated debate.

3. Pitelis argues that capital needs both the nation-state and international organization on the grounds that, domestically, it needs to control and exploit labor through the existence of some form of local state. Internationally, capital needs international organizational forms, particularly in relation to the crisis of American hegemony world-wide. Furthermore, Fine and Harris (1979) argue that transitional organizations better serve transitional capital.

4. In several of his papers (e.g. 1991, 1993) Friedland calls these imperatives "functions." As neither he nor the authors of this paper adopt a functionalist posture, the term "imperatives" will be used to refer to Friedland's term "functions of the state" in order to avoid possible confusion.

5. This term does not exclusively refer to informal channels. It is a more inclusive term of which informal activities are just a part.

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Globalization, the State, and the Labor Process

William H. Friedland

After defining key terms, state and labor processes in pre-globalization capitalism are examined and the nation-state is found to be the key constraining element in state imperatives of accumulation, legitimation, and mediation of class conflict. In the globalization period, the labor processes in four commodity systems—automobiles, petroleum, sugar, and bananas—are compared. The main changes in labor processes in agriculture during globalization involve the elaboration of the division of labor and combined and uneven development. Both are examined in the context of several agricultural commodities. It is concluded that globalization creates greater degrees of freedom from the constraint of nation-states for capital to install new labor processes.

Introduction

Since various authors in this symposium are defining critical concepts, let me begin with my own definitions of globalization, the state, and the labor process. *Globalization* is a the process which, while primarily economic in character, has obvious socio-political implications as to how production and distribution take place on a global scale. This includes the movement of capital and commodities and, more restrictedly, of human beings who provide labor. Globalization implies the development of production/distribution systems beyond local, regional, or national levels. Further, it represents a stage beyond *internationalization* in which forms of capital extend beyond the nation-state but where the nation-state remains the significant unit of analysis. When corporations such as Nestle, General Motors, or Fiat develop beyond national production/markets and begin production/distribution in other nations, they *internationalize* but production/distribution continues to be geared to specific national markets (other than the original home national market) while profits tend to be repatriated to the original home country. When, however, a firm such as Ford builds a "world car," the term *globalize* or *transnationalize* should be used to describe the changing character of that company; it is no longer an *international* corporation but has become *transnational*. Ford's "world car" required the organization of production in different countries and built redundancies into

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production and marketing. This globalization made Ford less vulnerable to production stoppages in any particular factory, whether because of transportation, supply, labor, or other local problems. In addition, when Ford distributes and markets its "world car" in a host of countries, no longer making distinctive models for a national market or a cluster of national markets, Ford has truly become a globalized *transnational corporation* (TNC). Defining the state poses more difficult problems, mostly because of the way in which the term "the state" has been mystified by Marxists and non-Marxists alike.¹ Marx and Engels (1976 [1848], Vol. 6: 486) stated: "The executive of the modern State is but a committee for managing the common affairs of the whole bourgeoisie." This definition gave rise eventually to an enormous conceptual literature in the 1970s.² Most of that literature, I believe, represents a mystification in that the meaning of "the state" is, in effect, the "nation-state" or, even more specifically, "the government." The major test for this definition can be found by substituting the words "the government" anytime one reads the term "the state" in a text.

In this paper, I will use the state in two ways. First, the *nation-state*, refers to a political entity that has formally congealed with territory and formal government.

In its second meaning, the state connotes neither the "executive committee of the bourgeoisie" nor some metaphysical Hegelian entity. Rather, the state consists of a *set of processes* necessary to maintain the political-economic organization of complex societies; the state is *superorganic* in the anthropological sense of being above the level of concrete social realities, or *metasocial* in the sense of being beyond or transcending society, as having a distinct life of its own.

The state in this sense is defined by four processes or imperatives³ necessary for mod-

ern political economy to be sustained; **accumulation**, necessary for capitalist societies in particular (O'Connor, 1984); **legitimation**, whereby the political-economy is justified and accepted by a population (Habermas, 1975); **the mediation of class conflict**, since classes and strata, economic and non-economic struggle for position; and **reproduction**, biological and social, including the physical reproduction of the population and its social reproduction. When referring to the state in this meaning, I will use the convention "the state." The state takes on social reality in specific manifestations such as national and local governments, laws, police and prisons, schools and universities, marketing orders, and many other forms such as the National Labor Relations Act, and Ordinance No. 223 of the City of Santa Cruz, etc. These processes are the consequence of different groups/strata/classes in society seeking to maximize their economic, political, and social relationships and, in the process, give rise to formal instrumentalities such as government, regulations, taxes and tariffs, schools and universities, etc.

Finally, the *labor process* not only refers to those processes regarded as "production" but, in my meaning of the term, have to do with any kind of remunerated labor.⁴

This definition of the labor process departs from the implicit definition imposed on the labor process since its resuscitation by Braverman (1974). Because of Braverman, the labor process has been given more modest and restricted definition, focusing strictly upon direct production. Thus, in automobile manufacturing, it is only the physical production of the car that is usually dignified with the term "labor process." This formulation leaves out entire sequences of labor activity critical to manufacturing, let alone distribution and marketing. Auto manufacturing requires many different processes of control, usually con-

ducted by people wearing white collars and not directly involved in production but without whose labor the intricacies of car production would be impossible. Similarly, a car has to be transported from the factory to a place where it can be sold. While most who conceptualize of the labor process would probably "allow" that transportation constitutes a segment of the labor process, it is not one which has preoccupied students of the labor process nor would they necessarily include "control" workers as part of the labor process.

Complexes of processes necessary to direct production -- inventory control, inspection, design engineering, specific parts engineering, time study, maintenance of tool cribs, etc. -- should be included under the rubric "labor process." All of these processes -- many of which manual workers, directly and immediately involved in production, refer to as "overhead," (i.e., activities that are "not really necessary" but are "carried" by the efforts of direct production) and to which labor process analysts have paid little or no attention -- must be included as part of the labor process. This definition of labor process includes the distribution, marketing, and sale of the automobile. While the tendency is to reject the salesperson of an automobile as engaging in a labor process, how shall we handle the store clerks who prepare fruits and vegetables for the produce section of a supermarket? Or the clerk who rings up the purchases in the supermarket? Their activities should also be dignified as being within the "labor process" but the tendency is to ignore or overlook them.⁵

The Pre-Globalization State and Labor Processes

Let us begin by considering how state imperatives operate with respect to labor processes prior to globalization, i.e., the period in which production and markets are focused

primarily within the context of the nation-state.⁶

There is considerable variability in the pre-globalization period in the ways in which nation-states facilitate accumulation. As the earliest of the nation-states entering into capitalist production, Great Britain fostered "free trade", i.e., the elimination of barriers to trade, because it could produce a host of industrial goods -- beginning with textiles -- cheaper than other nation-states. Other nation-states, seeking to develop their own capitalist industries, set trade barriers. Each nation-state's position affected its capacity to accumulate.

In terms of labor processes, variability in time and technological development affected the rate of industrial development. In early capitalist industries in nation-states such as Great Britain, the rate of development was gradual. Later arrivals could skip the earliest stages of primitive accumulation to more advanced stages.

Trotsky (1969), noting the enormous size of Russian factories, formulated his theory of *uneven and combined development*. This theory held that, precisely because Russia's capitalists arrived on the scene of industrialization when technology permitted large-scale factories, Russia skipped over the various stages through which earlier nations such as Great Britain had passed. Russia's working class was gathered, as a result, in much greater concentration in individual factories and spatially. This accounted, according to Trotsky, for the proclivity of the Russian working class to be revolutionary.

Almost all nation-states developed ideological systems legitimating capitalist socio-economic relations. From Adam Smith's wonder over the power of the industrial division of labor to Horatio Alger's popular tales of social mobility, capitalism's superiority over pre-capitalist social formations became well-established. Embodied in school curric-

ula, touted through the media, capitalism justified the new forms of social relationships, promising a better life to all through ever-increasing wealth.

Legitimation of the new forms of class formation could be found in doctrines such as Weber's Protestant Ethic and Sumner's Social Darwinism. Rather than legitimizing principles such as "the mandate of heaven" in China or its European formulation, the "divine right of kings," the political justification for most capitalist nation-states originated in "the people" and was validated by elections. Over time, the franchise was extended to the lower classes in each nation-state thereby legitimating the growing nation-state bureaucracies.

But privileges for one set of classes meant a lack of privilege for others. The organization of the working class led, in most nation-states, to the formulation of legislation by the nation-state of various protections. Germany, with its powerfully organized social democratic party and trade unions, provided economic security protection. Other nation-states, particularly the United States, had capitalist classes that resisted these tendencies until the Great Depression of the 1930s. The introduction of a battery of labor protective legislation created the situation in which a major segment of the working class became attached to the next stage of capitalist development in the US.

If labor protective legislation provided legitimacy to the capitalist state within the context of the nation-state, it also involved the imperative of mediation of class conflict. Nation-states intervened at different levels at different times in the development of each state system and economy. In Great Britain, for example, the growth of trade unionism led to attempts to integrate labor in production processes through "joint consultation." Unsuccessfully pursued for decades by the British nation-state, joint consultation sought

to draw workers organized through their trade unions into the accumulation activities of individual firms (Clegg, 1976). At the same time, in periods of economic crisis such as the 1920s, the British nation-state intervened directly in specific events such as the General Strike of 1926 to undermine working class action (Arnot, 1967).

The intervention of the nation-state in the US remained crudely on the side of capitalists until the 1930s and, to a less vulgar extent, after 1947 when the Taft-Hartley Act was passed by Congress. Working class actions were frequently met by the direct repressive power of the state through the courts and/or the application of violence. During Franklin D. Roosevelt's administration in the 1930s, repressive courts and police forces became somewhat mediated by the New Deal, collective bargaining was legitimated, and the level of violence was reduced, making the nation-state more of a class arbiter.

An interesting aspect of class formation and trade union development occurred in Italy where the agricultural working class was among the earliest of social classes to organize itself. The Italian case stands in sharp contrast to that of the United States where agricultural worker organization was delayed until the 1970s and, even then, was essentially limited to California. As for legislation protecting agricultural workers and mediating class conflict, only two states -- Hawaii and California -- established protective legislation. In a number of other western states, fear of organization of farm workers led to grower-employers initiating legislation that effectively precluded farm worker organizing.

In Germany in the post-Nazi period, the working class was built directly into the accumulation process through *mitbestimmungsrecht*, co-determination or the principle of union representation on company supervisory boards (King and van de Vall, 1978: Chap. 4).

The mediation of class conflict occurred in myriad ways in different states at different time periods. These developments facilitated the establishment of regularized and standardized relations at the point of production and had the consequence of permitting the evolution and development of labor processes under the basic control of capitalists.

In Europe, major wars which decimated whole populations led to the establishment of economic actions to encourage population growth. Allowances encouraged the working class to produce more children to re-staff the working class. In the United States, immigration became a primary mechanism for the production of the working class.

Policies which increased the size of the working class also conflicted with legitimation imperatives. While capitalists in a nation-state might want to increase the working class to create labor surpluses with the concomitant reduction in the cost of labor, working classes organized politically to limit labor importation. Thus the physical reproduction of the working class was effected in most nation-states through incentives to bear children, a palatable cultural process. It was mainly in "new world" nation-states that immigration was acceptable as the means to increase population.

In all capitalist states, there developed the recognition that basic skills such as reading and calculating were critical to employment. The elaboration of publicly-funded school systems as primary state mechanisms of social reproduction therefore became universally established.

State and Labor Process

In fulfilling the logic of capitalist development, nation-states grew in size and influence. In the meantime, state processes with respect to specific labor processes was essen-

tially one of facilitating the growth of capitalist economy with minimal interference in the elaboration of labor processes.

There was some involvement, however. It became clear that left to themselves, capitalists would largely exploit workers unrestrainedly. The nation-state, therefore, to legitimate its existence to the working class and to mediate the violence of class warfare, introduced *protective labor legislation* which affected labor processes.

This legislation took many different forms. In the US, for example, protection was provided in the 1930s on the number of hours that could be worked and in preventing (with many limitations) the employment of children. Rules were set on the operations of machinery to protect the safety of workers on the job. At a later stage, more complex regulations and a more effective (but still inadequate) enforcement system was established to protect the health and safety of workers.

Such developments affected labor processes. Employers had to live with rules that somewhat slowed the pace of labor and impeded access to dangerous machinery; few labor processes were acmally shut down.

Throughout the pre-globalization period, all such actions occurred with the context of the nation-state. Although an inter-nation-state organization, the International Labor Organization, occasionally adopted "conventions", these depended entirely on their acceptance by individual nation-states.

Agricultural labor processes in the pre-globalization period were marked, on the whole, by the relative retrograde status of agricultural workers. In most countries organization lagged behind that of other workers. In the US, as has been noted, no significant organization took place until the 1970s and even that was limited. In Great Britain, despite early organization, the condition of farm workers remained backward because of the

way in which farm labor and housing were integrated (Newby, 1979).

As for agricultural labor processes, all were marked by the incredible variability of agriculture itself. From day-labor in southern Italy, to the peasant-like producers of Germany and France until just after the Second World War, to the hired hands and cowboys and the many-splendored ethnic/racial workers of California in the US, agricultural labor processes were highly differentiated.

State activity with respect to agricultural labor and the labor process in the US was two-fold: maintaining control over labor and a steady oversupply (Fisher, 1953). Control was effected by eliminating farmworkers from the protections accorded industrial workers during the 1930s and by the application of legal and informal sanctions when workers organized. Thus, injunctions, the police, the courts, and the legal system were invoked when workers organized time after time. The formal system was buttressed by vigilantism, mob action, night riding, and other forms of informal and illegal control processes. All of these control forms kept workers "in their place" and permitted employers to specify the character of the labor process.

An oversupply of labor was institutionalized in the 19th century through the encouragement of successive waves of immigration. In the western US, after exhausting the Native American population as a labor source, sequentially Chinese, Japanese, and Filipino workers were brought from Asia. During the 1930s, they were replaced by Americans from the Dust Bowl midwest. During World War II, the flow of labor from Mexico was institutionalized in a government-to-government agreement intended to alleviate the labor shortage caused by the war. Despite the war's end in 1945, agricultural capitalists were able to maintain the flow of labor through the wartime program until 1964. This *bracero* pro-

gram provided unlimited supplies of Mexican workers to southwestern (predominantly California) agriculture and helped to perpetuate grower control over labor processes (Galarza, 1964). Thus, the state facilitated agricultural accumulation.

Labor Process and the State Under Globalization

Two major conditions describe labor processes in agriculture under conditions of globalization: the elaboration of the *international division of labor* while local divisions of labor remain relatively unchanged; and *uneven and combined development*.

The Comparative Analysis of the Political Economy of Globalized Commodities

Before explicating these developments in the labor process, it would be useful, for heuristic purposes, to examine four globalized commodities, agricultural and industrial, to consider some ramifications of globalization, the state, and the labor process. These examples come from different stages in the development of capitalism and exemplify the variations that occurs in labor processes and state imperatives under conditions of globalization. The examples are petroleum and automobiles as non-agricultural commodities, and sugar and bananas from agriculture.

Petroleum and automobiles are globalized commodities that lost their national base after the second world war. Until World War II, both commodity systems were built around national markets with nationally-based firms dominating or significant in each national market. Politically, neither involved direct colonial systems and were therefore unlike either sugar or bananas. Sugar appeared on the scene much earlier than either petroleum (which did not become significant as a commodity until approximately a century ago) or

bananas. Banana production appeared somewhat after petroleum but had a much slower growth. Once automobiles began to be produced on a mass production basis by Henry Ford, petroleum production expanded enormously, but still retained much of its national base.

Sugar represents one of the earliest commodities in mass production and trade over long distances. Sugar, once produced, is a relatively stable commodity: it can be stored, transported, handled in a variety of different ways and, as long as it is kept clear of contamination of foreign elements (especially water), it will remain stable for long periods of time. Sugar represents a *processed* commodity whose processing gives it long shelf-life and stability.

The banana, in contrast, is a fresh commodity which, except for some minuscule other purposes, is consumed relatively unprocessed. Harvested at the right moment and kept under temperature control, bananas can be transported long distances. Near the point of sale, bananas have to be "ripened" by exposure to gas and heat. Before "ripening," bananas have a relatively short (especially when compared to sugar) life but that life is long enough not only to bear long-distance transportation but additional storage before ripening and moving into consumption. Once ripened, bananas have a very short shelf-life as a *fresh* commodity.

Sugar, as a commodity in mass production and distribution is relatively ancient, tracing back to the origins of capitalism in the 17th century (Mintz, 1986). Bananas are a more recent commodity in mass production, originating in the last part of the 19th century and entering into mass consumption later, when refrigerated shipping became feasible.

While these two commodities represent two major strands in agricultural commodity systems (ignoring agriculture intended for fi-

ber production), neither represents very well the forms of production-distribution under conditions of modern capitalism. Both systems still are substantially dependent on production under tropical conditions and in colonial or semi-colonial social relationships. Sugar has undergone significant change in social relationships as a result of the cultivation of sugar beets which are a more modern, truly capitalistic, form of agriculture. In contrast, bananas have not made such a transition and remain largely characterized by the kinds of social relationships found in colonies (economic and/or political).

The contrast with the two industrial commodities, petroleum and automobiles, is substantial. While a great many products are made nowadays from petroleum, until automobile production began on a mass production basis, petroleum was used primarily to make kerosene (or some similar form) for cooking and lighting. Once automobiles became commonplace rather than an exotic substitute for horses, petroleum began a long and complex process of industrial differentiation.

Although petroleum as a commodity source globalized significantly after the First World War (Yergin, 1991), petroleum firms retained their national bases until much later. And even to the present time, most petroleum firms, despite their size and influence, retain much of their national origins, with firms like Exxon being associated with the US, Shell with Britain and the Netherlands, etc.

Automobile production followed a somewhat similar pattern with car-making firms retaining much of their national bases up to the present. Auto manufacturing varies substantially in production from petroleum. Petroleum represents a single original resource, although with variation based on its chemical composition when extracted from the ground. It must then be moved, usually over great distances, to locations where it can be

processed into a great variety of products. Autos draw their materials from enormously dispersed locations, process them in many different locations, and then assemble thousands of components into a small number of commodities, differentiated according to markets such as automobiles, trucks, tractors, etc. (Womack et al., 1990; Chap. 2).

While petroleum and autos are both capital intensive systems, petroleum is refined into different products at very large installations requiring huge amounts of capital and relatively few workers. Auto production is also very capital intensive but requires large numbers of workers, especially when compared to petroleum. With petroleum, the raw commodity is transported over great distances and the refined products are moved over lesser distances. Auto production requires equally great movement of some components (rubber, jute, etc.) but lesser movement of the majority of components which are made of metal.

As agricultural commodities, sugar and bananas are less capital-intensive than the two industrial commodities. Because of their tropical locations (until well into the 20th century when sugar beet technology began to be understood better), both sugar and bananas developed under colonial and semi-colonial conditions. Sugar production began shortly after the new world was "discovered" with the establishment of colonies. As sugar moved into mass production, the labor process depended upon the importation of slaves from Africa. When slavery ended legally, sugar production maintained the subordinated social relations of production through colonial systems; these relationships remained substantially unchanged after the colonies became politically independent.

Probably the most significant change in sugar as a commodity system developed as a result of the capability of making sugar from sugar beets, a plant appropriate to the temper-

ate climates of the industrial world. After passing through a period of the use of large volumes of labor, sugar beet production was mechanized and is now more capital intensive, using very low volumes of labor (Mamer, 1958).

Bananas, with tropical production sites and northern metro-industrial markets, involve careful logistical planning (Wilson, 1947). Bananas have to be scheduled in production so that an appropriate flow of the raw commodity fits the arrival of refrigerated ships. In the early stages of the commodity system, banana production occurred under colonial conditions imposed by the northern European countries (especially Britain and France), as well as in the US semi-colonies (of Central America and more recently South America). The latter were countries that were politically independent but under the domination of the US which intervened directly with military force or subversion from time to time.

While sugar and bananas are simple systems compared to petroleum and automobiles, sugar requires an integrated production system to grow and harvest sugar cane and deliver it rapidly to processing before the cane loses its sugar content. Sugar plantations are complex up to the point of processing; once processed, sugar is (relatively) stabilized and can be moved great distances for additional processing and use. In contrast, banana production involves logistical planning of production, transportation, storage, ripening, and delivery on tight schedules to consumers before the fruit becomes unsaleable.

State imperatives with respect to these four commodities are highly variable. Automobiles represent *national* development in which the nation-state plays a significant role in facilitating accumulation through systems of taxation and import and export controls. Petroleum is variant by virtue of the different resource endowments of nations. In the case of the US,

because of substantial indigenous resources, petroleum development occurred as an internal process. In the case of other nation-states, petroleum development occurred beyond the spatial confines of the nation. Thus, British and French petroleum capabilities were initially based on investments outside the nation. This meant the development and cultivation of client states, particularly around the Persian Gulf, but also elsewhere.

The differences between these two commodity systems meant that something like the auto industry tended to be treated like any manufacturing sector. State formation and development involved "standardized" processes of accumulation, legitimation, conflict mediation, and reproduction applicable to all industrial products. In the case of petroleum, because the resources were found beyond the spatial bounds of the nation-state, state involvement took the form of direct or economic colonialism. Until the petroleum crisis of 1973, the colonial character of relationships between capitalist metropole and "developing country" was profound; after 1973, the formation of the OPEC monopoly required amelioration of inter-state relations but the fundamental imbalances in power relations between metropole and periphery remained largely intact.

State imperatives with respect to sugar and bananas were very different by virtue of the tropical origins of both commodities. While the development of beet sugar capability gave temperate core nations such as Britain, France, and the US access to sugar within national borders, the historic development of sugar came with the growth of tropical colonies of the metropolises, except for the US where there were semi-colonies, ostensibly independent "nations" in the Caribbean and Central America dominated economically by the US. State relations in sugar, therefore, were characterized primarily by the exploitation of

colonies and semi-colonies with the nation-state dominating the political system either directly (in the case of imperial Britain and France) or indirectly (in the case of the US).

The banana system operated similarly to sugar; the hegemonic metropole supported the firms which produced and exported the fruit from the periphery to the metropole. Accumulation remained national in character. The US situation was slightly different because of the formal political independence of the banana producing countries. In the case of Cuba and Central America, until the 1960s the main loci of banana production, political domination was masked by the formal independence of the countries although there was universal recognition of their economic domination by the US nation-state. When the "natives got restless" on occasion, the US nation-state became habituated to direct interventions.

The main agency of the US in this accumulation process was the United Fruit Company (now known as Chiquita), a firm which exercised political dominion in much of Central America and Cuba until the Castro revolution. After that period, the forms of accumulation shifted as different firms entered banana production and became significant players in the US market.

Changes in Globalized Labor Processes

The two major changes in labor processes under conditions of globalization, the elaboration of the international division of labor and uneven and combined development, reflect the ways in which production and distribution organization change as production and markets become globalized.

The changes in the division of labor reflect the introduction of new production processes, in particular, in non-traditional locations. This involves the development of electronic

industries in places like Malaysia, on the industrial side, and the introduction of *non-traditional export agriculture*, in the agricultural realm. I will not deal with industrial divisions of labor other than to note that the agricultural division of labor takes on industrial characteristics, just as it has long experienced in the Sunbelt USA. Essentially there is a transfer to Third World locations of agricultural production technologies replicating to a considerable degree advanced capitalistic agriculture.

Technology transfer does not mean, however, that the social relations of production are also transferred. All too frequently, the tendency is for traditional social relations to be modestly changed to accompany the transferred technologies. Thus, at the level of wages and remuneration, the tendency is to utilize an already-existing wage structure in which wages are inordinately low compared to advanced capitalist settings. The local nation-state usually facilitates capital accumulation by setting low wage standards and often not enforcing them.

Working conditions show similar primitive characteristics. The hours of labor, the treatment of workers at labor, and, in particular, exposure to agricultural chemicals are even less rigorous (Wright, 1990) than in the sloppy and loose enforcement found in advanced capitalist nation-states.

Most Third World nation-states, anxious to create employment for their populations, facilitate the accumulation process by encouraging the development of the labor supply. In places such as Mexico, new sources of labor are encouraged, recruiting populations previously isolated from modern economic sectors, drawing workers into an expansive export-oriented vegetable production system (Kearney and Nagengast, 1989). Countries such as France draw on labor supplied by migrants, initially from Portugal and when that labor supply dries up, from North Africa

(Martin, 1984). In North Africa, export agriculture for the European Community (EC) draws thousands of former peasants into the agricultural proletariat.

And, all too frequently, as agricultural (and industrial) workers begin fitful attempts at dealing with low wages and miserable condition, the repressive state comes into effect, responding to the demands of a bourgeoisie, comprador and foreign, to maintain poor existing conditions and low wages. The later stages of nation-state development involving legitimation and mediation activities have not yet, on the whole, begun to be noticeable in most Third World situations.

The division of labor itself, however, is not fundamentally changed -- other than with respect to the kinds of divisions of labor that existed prior to the introduction of globalized production. A "California pattern" of division of labor is introduced involving external capital, local bourgeois owner-operators, the introduction of technical agronomic expertise (to produce non-traditional commodities or traditional commodities new to markets in advanced capitalist societies), small numbers of permanent employees, and large numbers of seasonal workers for periods where labor demand is high, such as the harvest. This division of labor is not new; rather its "newness" consists of the introduction of a division of labor previously unknown in the local setting.

In the processing of agricultural products, from the point of view of uneven and combined development, globalization makes little difference since most large-scale capitalist firms -- such as Nestle and Del Monte, among other -- introduced production facilities many years before, often to develop the local market but also at the beginning stages of their globalization as firms.

Uneven and combined development applies more appropriately when considering the introduction of non-traditional export-oriented

agricultural systems for the fresh market, rather than for processing. Fresh market production, whether for locally-grown traditional commodities or for non-traditional new crops, introduces the most modern agronomic practices and technologies. Thus, to feed fresh markets at continental distances from the point of production requires a complex planning process and logistical system to deliver perishable commodities. This entails two major effects in uneven and combined development: first, change and adaptation in social relations of production; second, the imposition of the complex logistical system to move produce.

In the first instance, production can no longer be left simply to the vagaries of nature. While nature in the form of weather conditions, insects and plant diseases, etc., always is an "actor" and introduces uncertainty, modern production requires greater control. This is effected by the introduction of complex irrigation systems where rainfall is uncertain or low, the establishment of agronomic practices that maximize predictability in production, and a host of other practices. Third World agricultural practices are transformed as the most advanced technologies are introduced.

In places like Chile, the most advanced California techniques, directly from the agricultural scientists at the University of California, Davis, are introduced (Goldfrank, 1989, 1990). While grape growers in the Coachella and San Joaquin valleys in California already have long-standing investments in vines and trees, the Chileans can adopt the latest technologies, leaping over (at least in part) Californians who must first recapture their investments before they can replant vines and trees.

When the Brazilian nation-state initiates a massive development in the Sao Francisco Valley, the Brazilian and foreign investors that move in to take advantage of the infrastructural development can introduce the most

modern techniques on the largest scale conceivable (Ferreira-Irmao, 1992; Collins, 1992).

In a similar fashion, French and Norwegian investors have moved into southern Portugal to take advantage of extensive hydroelectric and irrigation potential created by the Portuguese nation-state. Large-scale industrial agricultural organization is put in place on thousands of hectares, complete with the most modern division of labor. In one case personally observed, French capital began production of vegetables for the EC winter market using French and Italian managers, Portuguese agronomists, and local women agricultural and packing workers by the hundreds. The equipment, machinery, division of labor, agronomic techniques are as technologically advanced as can be found anywhere in the world and co-exist side-by-side with remnants of peasant agriculture.

The second element in combined and uneven development flows from the need to establish the complex logistical system to deliver fresh fruits and vegetables to advanced capitalist markets. This is no trivial matter as producers and distributors in places such as Africa and Asia have discovered. In such cases, the commodities can be produced and delivered to airports or shipping centers but the non-availability of refrigerated containers or space on aircraft or the non-arrival on schedule of refrigerated ships produces a total loss for investors.

It is necessary, therefore, to establish a logistical network, the *cool chain*, from the point of production to the point of consumption whether by road transport, sea, or air (Carter and Turner, 1988). Where there is spatial contiguity or propinquity, this problem may be overcome by infrastructural development of roads, bridges, and ferries. But even this task is non-trivial. Anyone who has driven Portugal's congested roads to its pocked and pitted tertiary local roads leading to its modern

latifundia can understand the problems of road transport. This is even more complex when the distance between continents dictates the need for air or sea transport. Air transport is very expensive, costing far more to transport commodities than to produce, harvest, and pack them. Sea transport is cheaper but requires a critical mass of volume of production; unless such volume can be obtained, sea transport is economically and logistically unfeasible.

The requirements of logistical control and careful planning have produced another aspect of combined and uneven development: the economic concentration of distribution (Friedland, 1994). Whereas, in the pre-globalization period, there were large production organizations of bananas (such as Chiquita and Standard as US firms, Geest in Britain, and Fyffes in Ireland), these firms, and a handful of others, have moved into the distribution of other fresh fruits and vegetables and begun to dominate this segment of the labor process. Unlike their banana enterprises, where they are often actual producers of the fruit, as they move into other tropical exports and non-traditional export commodities, these firms are less likely to grow the crop than to contract with local compradores to grow on their behalf. They must, however, maintain logistical control over the total labor process so that production-transportation-distribution can be effectively scheduled to reach distant markets.

Globalization, in other words, takes one segment of the FFV production system and produces economic concentration where the system was hitherto deconcentrated and diffuse.

And what are the roles of the nation-state and state in the globalization process? The nation-state, whether advanced or relatively underdeveloped, experiences some ambivalence about globalization.

The capacity of capital to move means that local societies and economies are disrupted, either when capital moves in to initiate production or moves out to produce elsewhere. When moving in, the nation-state is called upon to make investments in infrastructure, install appropriate socialization processes, provide abatements of taxation, relax or ignore restrictions on the use of chemicals, etc., as stimuli to attract capital flow. When capital moves out, the nation-state is left to pick up the debris: unemployed workers, workers who have been maimed and injured by industrial processes, and contaminated local environments, among other problems. On the whole, however, nation-states and their various local jurisdictions usually stand themselves on their heads to attract new capital and its concomitant employment.

The exquisite ambivalence of nation-states on these matters is manifest in the debates over the North American Free Trade Agreement (NAFTA) and the development of the EC after Maastricht. But Third World nation-states are usually less finicky -- not that advanced capitalist nation-states reject the advance of new capital. The generalization can be made that, except in unusual cases, most nation-states welcome or accept the capital flow that accompanies globalization. The example of the maquiladora belt that runs on the Mexican side of the US-Mexico border is exemplary (Fernandez-Kelly, 1983).

State imperatives -- accumulation, legitimation, conflict mediation, and reproduction -- continue within the context of globalization. These can be found within the confines of the nation-state but, again, there are manifestations of ambivalence. This occurs because the bourgeoisie in any nation-state is unhomogeneous. Some segments of the bourgeoisie, usually but not always the large ones, are the globalizing segments. Powerful not only economically but also politically, they argue

for the importance of globalization along the lines of "progress," the need for "free trade" and its benefits, etc. Other segments of the bourgeoisie remain national in character, with national production intended for national markets. The low wage characteristics and low levels and lack of enforcement of environmental regulation of global capital place national capitals at a disadvantage. National capital becomes trapped between wanting to get larger and the need for self-protection. The nation-state becomes involved in such battles and its politicians and bureaucrats can exercise various degrees of freedom that lead scholars that study such matters to the analysis of the state as structural rather than instrumental.

In the meantime, the nation-state itself becomes problematic since state imperatives are no longer limited to and regulated at the level of the nation-state. Even though superstate organizations -- such as the UN, the Food and Agricultural Organization (FAO), the International Labor Organization -- exist, these are relatively weak in character because their representation derives from nation-states usually representing national interests.

The imperative for state processes at the global level continues. These needs are satisfied through superstate organizations, on the one hand, and commercial and private agreements by global capitals, on the other. In the case of agricultural products, for example, the Organization for European Cooperation and Development (OECD) convenes groups of technical experts coming from nation-state agricultural ministries to write specifications for fresh produce (OECD, 1983). In other cases, an agreement is reached to specify the degrees brix (percentage of sugar) in frozen concentrated orange juice which is universally used but which has no relationship to the ostensible international standard set in the *Codex Alimentarius* of the FAO (Friedland, 1991).

But most problematic of state imperatives in globalization is that no formal transnational state bodies exist. While the United Nations and its agencies might have become such an entity, continuing control by nation-states and preoccupation with national interests within the context of the superstate organization have precluded the UN and its agencies from significantly carrying these imperatives although they sometimes, idiosyncratically, carry some in truncated form. Most important, however, is that these agencies have little to do with labor processes, leaving these in the domain of the nation-state.

This creates a "clear field" for the mobility of capital which can move into new areas of production and establish technologically advanced labor processes that conform to the geophysical limitations of particular environments. In a word, globalization creates greater degrees of freedom for capital to install labor processes.

Conclusion

The world is currently experiencing a fundamental restructuring in the globalization of production and distribution which poses many problems for scholars seeking to understand where the world is going. A major debate has been unleashed as to the significance of new transnational forms of organization, the significance of transnational corporations, and whether nation-states are losing power and the comparative importance (or lack thereof) of international organization. While some scholars argue that a new phase in the development of capitalism has reduced the nation-state to impotence in confrontations with transnational capital, others contend that, while transnational capital is of growing importance, it must ultimately come "to rest" in some physical location and therefore the nation-state remains the fundamental unit of analysis.

These arguments will undoubtedly continue for some time; the forms of transition that we experience in any historical period are best understood sometime after the fact. Those experiencing such transitions often cannot "see the forest for the trees" of immediate experience. In the meantime, the concrete analyses of specific social phenomena such as the labor process provide some indications as to relative distribution of power and importance of different units in the globalization process.

The analysis offered here is that globalization provides new opportunities for capital to escape to some degree the forms of control exercised by any particular nation-state. In many respects, what globalization accomplishes is the development of new "degrees of freedom" for capital. But such movement is not always completely "free"; Malaysia may become a new major center for electronics manufacturing but it is notable that this is not the case with either Chad or Nepal. This is because each labor process requires certain geophysical and social structures and these are not always present in any given location.

Agricultural labor processes also experience these limitations. It may be possible to overcome some aspects of these limitations but this does not mean that each case will be successful. The attempt, for example, to introduce fresh vegetable production into Senegal for the European market proved unsuccessful (Mackintosh, 1989) but the process has been successful in other African loci. Transnational capital, in other words, has developed considerable skill in movement and, as a consequence, has weakened the power of many nation-states. Other nation-states, e.g., the US and those of the EC, remain so important as markets that most TNCs must remain proximate to them and, therefore, fall under the control of the nation-state.

In this dynamic situation, the main role of those of us who study such developments is to

continue to monitor them to understand what is taking place, their effects on different strata of the population, and to seek to mitigate some of the less salubrious effects of the transition.

Notes

1. For some of the definitional problems on the state, see for example Boudon and Bourricaud, 1989:374; Fried, 1968; Hall, 1993; Kolb, 1964; Miliband, 1983; Minogue, 1985; Sabine, 1962; and Watkins, 1968.

2. See, for example, Evans et al. 1985.

3. In the original paper presented at the Wageningen meeting, I used the term "functions" instead of "imperatives." This usage drew a number of objections since it linked my conceptualization to functionalist theory, something which was unintended. I have, therefore, shifted the terminology. It was also suggested, at that meeting, that I broaden the imperatives to include at least two more: protection of the nation-state and taxation. For the moment, I am not prepared to expand the imperatives beyond the original four.

4. I am aware of the problems involved with spouses (overwhelmingly women) not engaged in remunerated labor. Such people contribute to daily reproduction without which society and economy would grind to a halt. This issue will not be dealt with in this paper.

5. I suspect this blue-collar Marxist snobism derives from Marx's arguments which emphasized the direct process of production in earlier stages of capitalist development. By the 1930s and 1940s in the Old Left, this snobism continued to focus on the blue-collar manual proletariat as "the proletariat" and ignored the shifting structure of the labor force and labor market. While C. Wright Mills (1951) (and others) recognized that a fundamental shift had created a massive new proletariat, the "white collar" or "pink collar" proletariat -- Marxists have remained focused more on blue-rather than white- or pink-collars and have approached the enormous growth of the skilled professional classes tentatively and with hesitation.

6. Included in this period are the labor processes associated with colonialism and imperialism. Despite extending spatially beyond the geographical confines of the nation-state, colonial labor processes are integrally linked with metropolises.

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State and Devolution: Economic Crises and the Devolution of U.S. Superstate Power

by Robert Schaeffer

This paper examines the incorporation of superstate power by U.S. state organizations after World War Two and the subsequent "devolution" or transfer of U.S. authority to superstate organizations in response to contemporary economic crisis. After analyzing the crises that led to the devolution of U.S. agricultural and monetary authority, the paper discusses the implication of these developments for a theory of states in the interstate system, arguing that the seizure of state power may no longer be a useful or relevant objective for social movements.

Introduction

After World War II, organizations within the U.S. state acquired "superstate" powers. That is, their power began extending beyond U.S. borders, affecting people and practices in other states around the world. And for the next 30 or 40 years, superstate "powers" were synonymous with U.S. state "organizations," which included not only government institutions and agencies but also "private" groups associated with them.¹ But in recent years, the organizational location of superstate power has shifted. Various economic crises in the 1970s and 1980s forced U.S. officials to "devolve" or transfer some superstate power from organizations *internal* to the U.S. state to organizations that are largely *external* to the U.S. state.

Although officials of U.S. state organizations initiated the devolution of power as a way to address the problems associated with serious economic crisis, and they may have hoped that devolution might conserve their power in another organizational setting, devolution has shifted real power to multiple superstate organizations. As a consequence, it is more difficult for any single state to exercise power unilaterally, and it is more difficult for individual classes or social movements to "capture" power in the way that Lenin imagined in *State and Revolution*.

Ever since Karl Marx identified the capture of state power as a goal of the international socialist movement in 1885, and since Lenin argued that state institutions should be

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seized by force, the state has been the focus of scholarly research and the object of political struggle. But if important global economic powers are being devolved to superstate organizations largely external to nation-states, even from strong "superpowers," then theories of the state, which assume that states are the crucial locus of power, may be seriously flawed.

After first examining the causes and consequences of the devolution of U.S. agricultural and monetary powers, I will explain the significance of these devolutionary developments for contemporary theories of the state.

The Incorporation and Devolution of U.S. Agricultural Power

After World War II, U.S. state organizations acquired superstate agricultural power. The wartime destruction of agricultural production in many regions gave U.S. organizations enormous power because they possessed the capacity to produce and deliver food to people in states around the world. They were able to do this because U.S. farm programs developed in the 1930s enabled U.S. producers to survive the global economic depression. And the long world war expanded the demand for food, which stimulated agricultural production and raised prices without exposing U.S. farmers to wartime destruction.

But U.S. agricultural organizations would not have been able to exercise the power acquired during the war unless people in other states could become regular consumers of U.S. produce. So U.S. state organizations developed the Marshall Plan and food-aid programs in the 1950s to increase the consumption of U.S. agricultural products around the world, extending in the early 1970s even to socialist bloc states (Friedmann, 1993:20). These developments made it possible for U.S. state or-

ganizations to assume superstate authority. The passage of successive U.S. farm bills, for example, helped set global commodity prices, shaped the agricultural policies of states from Senegal to the Soviet Union, changed the farming practices of Third World peasants and First World family farmers, and altered the dietary habits of urban consumers the world over (see Friedmann, 1991:71-74).² Because U.S. state organizations could effectively exercise superstate power, they could prevent the General Agreements on Tariffs and Trade (GATT), a superstate organization that was largely external to the U.S. state, from acquiring superstate agricultural authority.

But the ability of U.S. officials to exercise superstate agricultural powers began to change as a result of an agricultural crisis that emerged in the late 1970s and early 1980s. In 1978, the Iranian-led oil embargo raised oil prices for a second time in a decade. Because oil is the most important U.S. import, "accounting for nearly three-fourths of the U.S. trade deficit since 1970," according to Romm and Lovins (1992/93:47), rising oil prices increased the cost of imports, which worsened the U.S. balance of trade, and spurred inflation. To combat inflation and to raise money for increased military expenditures without raising taxes to pay for them, officials in the Carter and Reagan administrations in 1979-81 raised interest rates. This, coupled with massive tax cuts, led to large and growing federal budget deficits, amounting to \$2.5 trillion between 1980 and 1992 (Skidmore, 1992:16). The resulting high interest rates triggered a debt crisis both for peripheral countries, whose borrowing from core countries increased "from \$64 billion to \$810 billion" between 1970 and 1983 (Walton, 1989:301),³ and also for U.S. farmers, who had borrowed heavily to purchase land and expand production in the 1970s.⁴ As interest rates rose, indebted countries spent more

money on interest payments and less on the purchase of U.S. agricultural goods, which meant that demand contracted. And to meet their rising debt obligations, U.S. farmers intensified production, which increased agricultural supplies. The combination of falling demand in indebted countries and rising U.S. supplies resulted in lower prices, growing debt and widespread bankruptcy, both for peripheral states and for U.S. farmers.

At the same time, producers in other states around the world increased their production of agricultural goods. Farmers in the European Community, assisted by large subsidies, and farmers in peripheral countries like India, aided by Green-Revolution productivity increases, sold mounting surpluses on overseas markets. India, for example, increased grain production by nearly 20 percent, from 131.15 million metric tons (mmt) in 1980 to 190.23 mmt in 1989 (Orr, 1992:65-66). Watkins (1991:40) notes that "rising self-sufficiency in key Asian markets, including India, Pakistan and Indonesia...further constrained import demand." As a result of these developments, U.S. agricultural exports declined from \$41 billion in 1980 to \$29 billion in 1985 (Hufbauer, 1989:162), and its share of the overseas wheat market shrank from 55 to 36 percent between 1980 and 1986 (Watkins, 1991:40). Clairmonte (1991:12) concluded that "U.S. agriculture had fallen on hard times, from 27 percent of world exports in the mid-1970s to 10 percent [in 1990]."

Officials of U.S. state organizations regarded agricultural exports as critical because agricultural products accounted for one-fifth of all exports and were one of the few industrial sectors (along with chemicals and high technology) that recorded substantial trade surpluses. Agricultural was more dependent on exports than other industries, exporting one-third of its cereal production, which accounted for half of world trade. And in political terms,

farmers and agricultural organizations provided important electoral support for the Republican Party in the 1980s.

To boost agricultural exports and reduce growing trade deficits, the Reagan administration used the 1985 farm bill to cut loan rates to farmers so that U.S. grain exporters like Cargill could purchase and sell lower priced goods on overseas markets, thereby regaining market shares. As Republican Senator Rudy Boschwitz argued, "If we do not lower our farm prices to discourage these [developing] countries now, our world wide competitive position will continue to slide....This [discouragement] should be one of the foremost goals of our agricultural policy" (Watkins, 1990:2). But because lower loan rates meant higher deficiency payments to farmers (the government pays the difference between the loan rate and the target price, which is supposed to cover the costs of production--it does for large farmers but not for smaller family farms), the cost of farm subsidy programs increased to \$30 billion in 1986, ten times the 1980 level (Watkins, 1991:40), which added to the growing budget deficit.

In the short run, the Reagan administration was willing to use subsidies as a way to lower world prices and wrestle over market shares with the European Community, which increased its own subsidies to remain competitive on overseas markets as prices fell. U.S. Agriculture Secretary John Block described this strategy as "squeezing the CAP [Common Agricultural Policy] until the pips squeak" (Watkins, 1990:2). But in the long run, they sought a more durable, less expensive solution to these problems. So U.S. state officials decided that if U.S. and EC agricultural subsidies could be eliminated through trade agreements, they could reduce the federal deficit, undercut competitors in the EC, recapture overseas markets, increase U.S. exports and improve the U.S. balance of trade.

In response to this cumulative crisis, U.S. officials began using free trade agreements and superstate trade organizations like GATT to defend the fading U.S. trading position in the world, which led to the devolution of power from U.S. state organizations to organizations external to the U.S. state. In the mid-1980s, they initiated a two-track process to negotiate more favorable trade relations for agriculture and other sectors of the U.S. economy (Schaeffer, 1993).

U.S. officials began by initiating bi-lateral trade agreements with other countries. U.S. officials negotiated and concluded free trade agreements with Canada in 1988 and with Mexico and Canada in 1993. These were intended to serve as models for the new round of GATT negotiations, which began in 1986, and were designed as a fall-back position should GATT negotiations fail to achieve U.S. policy objectives. While pursuing bilateral agreements with its neighbors, U.S. officials also used Section 301 of the Trade Acts of 1984 and 1988 as a unilateral weapon to force other states to comply with U.S. trade demands. Section 301 permitted U.S. officials to retaliate against states that denied U.S. corporations reasonable access to their markets, dumped goods in the United States at below-market prices, or failed to protect U.S. patents and copyrights (Davidow, 1991:47). The threat of retaliation was used to force peripheral states to comply with U.S. trade demands in bilateral negotiations and in multi-lateral forums like GATT. As Watkins (1992:36) notes, "By 1990, more than half of the 32 cases under Section 301 investigation involved developing countries...."

While U.S. officials pursued bi-lateral trade agreements, they also turned in 1986 to multi-lateral forums like the GATT to address problems associated with the crisis. Since it was founded in 1947, successive GATT rounds had been used to reduce average tariffs on

manufactured goods from about 40 percent in 1950 to about 5 percent in 1990 (Orr, 1992:118). Because tariffs were already low, and the original aims of GATT--tariff reduction--largely achieved, U.S. officials argued that GATT widen its agenda, asking GATT members to do more than simply lower tariffs and promote uniform treatment by member states.⁵ For the first time, U.S. officials argued that agriculture should be included and pressed for the adoption of measures that would: 1) promote the monopoly power of transnational corporations; 2) reduce sensible regulations designed to protect consumers and the environment; 3) cut the prices of agricultural goods and natural resources; and 4) guarantee supplies for food, fiber and natural resources in peripheral states for producers and consumers in core states (Schaeffer, 1993).

In addition to GATT, U.S. officials also used debt-crisis negotiations, which have been conducted by superstate organizations like the International Monetary Fund, to press for the reduction of tariffs, an end to restrictions on foreign investment, the privatization of state assets, the devaluation of currencies so that privatized assets could be purchased cheaply by foreign investors, the elimination of subsidies to domestic producers and consumers, and the protection of real and "intellectual" (patents and copyrights) foreign property (Schaeffer, 1993:176).

In Mexico, for instance, debt-crisis negotiations in 1982 led to the reduction of average tariffs from 40 to 10 percent, and the devaluation of the peso from 25 pesos to the dollar in 1982 to 3,100 pesos to the dollar 10 years later, which has enabled U.S. firms to purchase privatized state assets at bargain prices.

If U.S. proposals are adopted, small producers, consumers, taxpayers and political parties will find it more difficult to use state power to defend or advance their interests. For

example, consumers and environmentalists have passed legislation or persuaded some state officials to adopt measures regulating pesticide use, unionizing farm workers, protecting consumers with labeling requirements, conserving natural resources, and requiring agricultural producers to pay fees or observe costly regulations. Because state officials want to eliminate the regulations and "protections" that different social groups have managed to obtain, U.S. state officials have tried to devolve power to superstate organizations that are more difficult for subordinate social groups to capture.

U.S. proposals in GATT and language in NAFTA are explicit about devolving power from state organization they regard as vulnerable to capture by other social groups. Language in GATT requires contracting parties to "take such reasonable measures as may be available to it to ensure observance of the provisions of this agreement by the regional and local authorities within its territory" (Grimmet, 1991:38). And the NAFTA text goes even further, requiring members to "take all necessary steps, where changes to domestic laws will be required to implement their provisions...to ensure conformity of their law with these agreements" (Wallach, 1991:2).⁶

The superstate powers that sub-state and state organization now have would be assigned to the dispute arbitration panels called for in free trade agreements or to superstate bureaucracies like Codex Alimentarius. Codex, which now has little superstate authority (adoption of its standards for trade in animal and food products is now voluntary), would acquire considerable power under free trade agreements. And because participation in Codex decision-making is reserved for official government delegations consisting of bureaucrats and food industry representatives, the power invested in it would become more functional for social groups like transnational corpora-

tions and more autonomous with regard to social groups--representatives of consumer and environmental organizations--who are excluded from participation in Codex (Ritchie, 1990:217; Schaeffer, 1993).

One of the interesting features of contemporary free trade agreements is that they do not contain any provisions regulating monopoly or requiring the extension of U.S. anti-trust law. If they were really "free trade" agreements in the sense used by Adam Smith and the classical economists, for whom monopoly was as much an enemy of trade as tariffs, they would contain anti-monopoly provisions. The omission of anti-trust provisions demonstrates that free trade agreements are selectively "anti-protectionist." That is they undermine the "protection" obtained by subordinate social groups but permit dominant classes to use monopoly as a way to protect their interests.

The devolution of superstate agricultural power has several important features. First, the devolution of power from U.S. state organizations to superstate organizations external to the U.S. state--from the Department of Agriculture to GATT, from the Environmental Protection Agency to Codex--was initiated by U.S. state officials, principally in the Department of Commerce and in the office of the U.S. Trade Representative. They did so because they saw devolution as a way to address the agricultural crisis of the 1980s and as a way to create organizations that would be more difficult for subordinate social groups to capture. The devolution of power will prove beneficial for some groups but costly for others. In agriculture, FTAs will likely benefit transnational agribusiness firms, but harm family farmers and producers of subsidized agricultural commodities, and reduce the power of state organizations like the Department of Agriculture or Environmental Protection Agency.

Second, officials of U.S. superstate organizations devolved power to multiple superstate organizations--through bi-lateral and multi-lateral agreements--each with somewhat different authority, not to a single superordinate organization. They did this because multiple global organizations are more difficult for social groups or other states to capture and because these organizations are relatively non-bureaucratic and inexpensive. For example, free trade agreements use temporary arbitration panels rather than huge, expensive bureaucracies to administer and enforce provisions of agreements.

If U.S. officials can use FTAs to reduce competition from some producers in Europe and the periphery, extend transnational corporations' property rights and profitability, eliminate environmental, consumer and worker regulations, and guarantee the supply of cheap resources, then the devolution of power may enable some U.S. agricultural producers to regain overseas markets, improve the U.S. balance of trade and reduce the federal budget deficit. But it is unlikely that they will reestablish the kind of power enjoyed by U.S. state organizations prior to 1980.

In recent years U.S. state organizations have not only devolved considerable agricultural power, they have also devolved monetary power acquired during World War II.

The Incorporation and Devolution of U.S. Monetary Power

During World War II, U.S. state organizations began acquiring superstate monetary authority. In addition to food, U.S. allies also needed money, which the U.S. officials were willing to lend them so long as the Allies ceded important monetary powers to the United States (Block, 1977). Using the leverage afforded them by wartime and postwar

loan and aid programs, U.S. officials began constructing a new superstate monetary system called "Bretton Woods" that assigned special monetary authority to U.S. organizations, particularly the Federal Reserve, a state organization that retains great autonomy relative to elected officials and government institutions (Greider, 1987). The object of the Bretton Woods system was to make currencies convertible with each other and use the dollar (backed by gold at a fixed price) as the standard in a system of fixed exchange rates. As Gilpin (1987:133-34) said, "The Federal Reserve became the world's banker and the dollar became the basis of the international monetary system."

Although other states had the authority to print money, they could not set the rate of exchange. Only U.S. state organizations could do that. And they used this superstate authority to print and spend money abroad, much of it to maintain a global military presence and wage wars in Korea and Vietnam.

U.S. state organizations possessed considerable superstate monetary authority during the 1950s and 1960s. But monetary crises in the early 1970s and mid-1980s forced U.S. state officials to devolve considerable power over monetary policy to organizations external to the U.S. state.

The monetary crisis that emerged in the early 1970s was the result of two developments. First, U.S. military spending on the war spurred inflation, which undermined the value of the dollar. And second, the increasing competitiveness of European and Japanese goods on global markets led to trade surpluses with the United States, which strengthened the unofficial value of their currencies relative to the U.S. dollar. The problem was that the exchange rates fixed by the Bretton Woods agreements made it difficult for countries to readjust their currencies to reflect these new realities.

To solve the problems associated with this-growing inflation and increasing German unwillingness to accept U.S. dollars at fixed official rates--U.S. state officials first took unilateral action. In August 1971, the Nixon administration eliminated the system of fixed exchange rates, which led to a devaluation of the dollar vis-à-vis European and Japanese currencies, and abandoned the practice of converting dollars to gold at a fixed price (Gilpin, 1987:140).

During this first phase of the crisis, U.S. state organization did not devolve power to organizations external to the state. Instead they took unilateral action that ended their ability to exercise unilateral superstate power in the future. It was not until the second phase of the crisis a decade later that they devolved superstate monetary power to organizations external to the U.S. state.

The measures taken by U.S. organizations in the 1970s attenuated monetary problems for a time, allowing a considerable realignment of the major currencies, but largely failed to address the problems associated with endemic inflation, which was compounded by the quadrupling of oil prices during the second OPEC oil embargo in 1972 (the first, in 1967-68 had been a failure) and the third oil embargo in 1978-79 following the Iranian revolution.

To curb the inflationary problems associated with the third oil embargo, and to pay for increased military expenditures without raising taxes, U.S. state officials sharply raised interest rates. While high U.S. interest rates created a crisis for Third World debtors and over-extended U.S. farmers (see above), they also attracted capital from around the world, which greatly strengthened the value of the dollar. But the rising value of the dollar made U.S. goods more expensive and less competitive with Japanese and European goods on overseas markets, while making European and Japanese products cheaper and more competi-

tive in the United States. The result was a growing U.S. trade deficit, which quadrupled from \$25.3 billion in 1980 to \$108.3 billion in 1984 (Gilpin, 1987:157).

Faced with a rising trade deficit and a decline in the ability of U.S. firms to compete in both foreign and domestic markets, U.S. officials in 1985 again decided to devalue the dollar vis-à-vis Japanese and European currencies. A devalued dollar was supposed to make U.S. goods cheaper on foreign markets and foreign goods more expensive in America. But in the 1980s, unlike the 1970s, they could not unilaterally change exchange rates. This time they had to secure the cooperation of other states and devolve power to superstate organizations in which other states participated.

It was in this context that U.S. state officials began devolving power to the Group of Five, later known as the Group of Seven, a superstate organization consisting of the United States, West Germany, France, Great Britain and Japan (later Italy and Canada). Meeting in September, 1985 at the Plaza Hotel in New York City, U.S. officials convinced Japanese and European finance ministers to devalue the dollar and increase the value of their currencies in coming years (Funabashi, 1989). The secret agreement they concluded, which became known as the "Plaza Accords," transferred considerable superstate monetary power, long held by U.S. state organizations, to others. The G-7, Japan's Ministry of Finance, the German Bundesbank and, importantly, privately organized currency markets around the world, all acquired new power and responsibility as a result of this devolutionary process.

The devolution of monetary power to the G-7 achieved the immediate goal of realigning the major currencies. The value of the dollar fell by nearly one-half against the yen in the next few years. Together with the 1971-era devaluation, the value of the dollar vis-à-vis the

yen declined by about 66 percent, from about \$1 to 300 yen in 1974 to about \$1 to 100 yen today (Orr, 1992:167). But successive currency realignments have not accomplished what officials of superstate organizations expected, largely because private producers and consumers have acted in unanticipated ways.

The principle objective of the Plaza Accords was to reduce the U.S. trade deficit. Changing exchange rates (declining dollar, stronger yen) were supposed to make U.S. goods cheaper in Japan, and Japanese products more expensive in America, which was supposed to discourage American consumers from purchasing Japanese imports and "Buy American" instead. But rather than let a stronger yen raise their prices in the United States, Japanese producers cut their prices and accepted lower profits to retain market shares.⁷ The price of Japanese goods increased somewhat, but not at the same pace as the value of the yen. And rather than let their prices fall well below Japanese goods, which would make them more attractive to U.S. consumers, American producers raised prices to make greater profits without increasing market share or expanding production, which would entail greater costs and result in lower short-term profits.

Faced with only modest price differentials, U.S. consumers continued buying higher priced but also higher quality Japanese goods. Furthermore, continued consumer resistance to lower quality American products in Japan (and informal market restrictions there), and the unwillingness of American producers to cut their prices in Japan meant that U.S. exports to Japanese markets did not greatly increase. As a result, the dollar-yen realignment did little to reduce the U.S. trade deficit.⁸

The currency realignment also had important unanticipated consequences. The devaluation of the dollar cut the price of U.S. assets for Japanese investors by half. And in the

years following the Plaza Accords, Japanese investors bought U.S. real estate (Pebble Beach, Rockefeller Center), industrial corporations (MCA, Columbia Pictures), and raw materials (timber from the Pacific Northwest).⁹ The purchase of one of every four trees cut in the Northwest and their shipment to Japan without first being milled has resulted in rising U.S. timber prices and the export of U.S. mill jobs to Japan (Schaeffer, 1989).

U.S. producers, consumers and workers were not the only ones affected. Because the United Nations uses dollars to operate, the dollar devaluation cost the United Nations \$83 million in 1986-87, making it harder to fulfill its superstate obligations. And Panama, which used the dollar as its national currency, helplessly watched its value plunge, contributing to economic problems that led to U.S. military intervention in 1989.

These developments illustrate an important point about state and superstate organizations: they can perform complex functions and exercise superstate power to address important problems without actually solving them. In this case, U.S. superstate organizations used their power to realign currencies. But successive dollar devaluations failed to combat inflation in the 1970s or to reduce the U.S. trade deficit in the 1980s.

As with agricultural power, U.S. state officials initiated the devolution of superstate power. By relocating power in multiple organizations with greater autonomy from domestic social groups and by sharing responsibilities and costs with others, they expected to address problems associated with economic crisis and retain much of their power. But it is doubtful that they can actually address U.S. problems and maintain their power in these new venues.

Devolution and a Theory of the State(s)

The devolution of superstate power is not an entirely new historical development. It may be a cyclical process associated with the decline of superpower states. For example, many of the superstate powers possessed by British state organizations in the 19th century devolved during and after World War I, much as the superstate powers of the U.S. state are devolving today. But there are important differences between the contemporary devolution of U.S. power and the devolution of British power after World War I.

The devolution of British superstate power after World War I took place in a period characterized by a ferocious, multi-sided conflict. First-generation European colonial empires (Great Britain, France, Belgium and Holland), second-generation, would-be colonial empires (Germany, Italy and Japan), nation-state republics (the United States and Soviet Union), and republican independence movements in European colonies (China, Korea, Vietnam, Indonesia, India, Palestine, Ireland and elsewhere) were all joined in a multi-sided struggle. The conflict among these states and would-be states prevented an orderly transfer of British power to superstate organizations like the League of Nations (Schaeffer, 1990:46-57). The result was the devolution of British power to individual states, a process that led to interstate competition and global war.

Today, by contrast, the devolution of U.S. superstate power is occurring during a period of cooperation among core states. To be sure, there are inter-core disagreements, but disputes over trade policies or military intervention in the Balkans do not lead to trade wars, military conflicts among core states or attempts by individual core states to assume su-

perstate powers for themselves. Indeed, there is great reluctance to do this. This cooperation is based in part on the "shared interests" created by cross-border economic integrations of production, exchange and ownership, which was absent during the decline of British hegemony. Indeed, colonial empires and autarchic states in the 1920s and 1930s prevented and restricted these kinds of integrations, reserving production, exchange and ownership for social groups and organizations internal to the state. As it turns out, "globalization" may greatly reduce competition and war among core states, though it may sharpen conflicts within core and peripheral states.

The devolution of superstate power by U.S. state organizations cannot be seen in isolation. It has to be set in a global historical context. It is also important to note that the U.S. state is devolving powers that other states do not have. This means that theories of states cannot be based on a study of powerful states alone.

Marxist political economists have long tried to develop a theory of the state in generic terms. By analyzing the role played and functions performed by strong core states, they attempted to develop a "theory," or set of expectations, about the roles played and functions performed by modern states everywhere. Although these analysts disagreed about the precise roles and functions of state organizations, they generally agreed that an understanding of functions--accumulation, reproduction, mediation, legitimation, protection, taxation (Tilly, 1992; Lane, 1979)--would help political movements and social classes to seize state power, a goal of most socialist and independence movements since Marx first identified it as the *raison d'être* of the international socialist movement in 1876.¹⁰

There is some merit to this approach. In the early 1970s, scholars began developing a more complex and extensive understanding of the state, broadening the definition of state

power to include organizations outside government proper (O'Connor, 1973; Offe, 1985; Habermas, 1973), expanding the list of functions performed by contemporary states, specifying their relation to different social classes (Mills, 1956; Domhoff, 1983; Miliband, 1969, 1983; Poulantzas, 1975; and Wright, 1978), and tracking their historical development (Anderson, 1974; Tilly, 1975; Wallerstein, 1979; Skocpol, 1979).

But there are three problems with this approach. First, what is needed is not a theory of the state, but a theory of *states* in the contemporary interstate system. Second, the functions performed by states depend on a state's relative strength or position within the interstate system. Simply put, superstates perform functions that other states cannot. The ability to perform functions and achieve goals is a measure of their relative "strength" within the system. It is important in this context that the performance of functions should not be confused with the ability of states to solve problems or realize objectives. And third, the object of a Marxist theory of the state, which has been to assist the seizure of state power, may no longer be appropriate, if it ever was.

A theory of states must be set in the context of the contemporary interstate system that emerged in the postwar period. After World War II, the United States and Soviet Union, the two republics that acquired superstate powers as a result of the war, together created a new interstate system based on nation-state republics (Schaeffer, 1990:73-83). This required the conversion of European empires and the creation of independent republics in their colonies. By and large, the great republics succeeded in creating a system consisting of fairly uniform polities. Whether they identified themselves as capitalist or communist, states around the world called themselves "republics" (the use of the adjective "peoples" or "democratic" usually signified that the

states were communist, while the absence of an adjective usually signified a capitalist orientation). adopted republican "constitutions," established republican institutions like "Congresses," observed republican norms like holding elections for congressional representatives, and adopted common republican objectives: self-determination, sovereignty, democracy and economic development.

But while polities became relatively homogeneous--with republican states sitting next to each other in the United Nations--political power and economic wealth remained sharply differentiated. Indeed, the great republics insisted on it, reserving important, newly acquired super powers for themselves, such as the right to intervene militarily in their separate spheres of influence and prevent other states from acquiring political power or economic wealth at superstate expense. If political power and economic wealth had been made uniform, as was often promised, then one might have been able to talk about a theory of the *state* in this context. But the reality was very different. Power and wealth in the system was sharply differentiated and, over time, the gap between the wealth and power of core states and peripheral states has increased (Arrighi, 1991). The result was the creation of an interstate system characterized by uniformity and diversity, what I have called an "egalitarian hierarchy":

In the interstate system, independent states have equal rights to print their own money, to tax their own populace, and to raise their own armies. But they do not possess equal abilities to set the rate of exchange for their currency, to impose tariffs or taxes on others, or to deploy their armies outside their state's territorial boundaries. Some states--great states, superpowers--possess that ability, and some of them more than others. Their ability to do so is a measure of their position in the interstate hierarchy (Schaeffer, 1990:82).

In this setting, where states have very different political and economic capacities, it is difficult to assign each a common set of functions. Although most states have at least the capacity to levy taxes and raise armies, which finance and protect them, some states can perform additional functions, such as providing educational, communication and transport infrastructure that facilitates economic growth. And a few states, like the United States and Soviet Union, can undertake functions that other states cannot even imagine as requisite tasks. In the early 1960s, for instance, officials of U.S. and Soviet state organizations set space exploration and a manned lunar landing as a goal and created organizations like NASA to perform this function. But only the U.S. state managed to land humans on the moon. This was a "function" that no other state managed to perform.

Most states in the system do not have the capacity to function like superstates. And some states have great difficulty performing even minimal functions, much less achieving self-determination, democracy or economic development. As Basil Davidson (1992:257) says of Zaïre:

...the capital of Kinshasa [absorbed] all attainable rural resources as well as whatever might be milked from foreign donors and investors. To every practical purpose, whether legally or illegally extractive, the state was now reduced to Kinshasa and its satellites, to zones of mining or cash-crop production, and to the air communication between these....The state of Zaïre, in other words, had become a myth. Outside its coercions and corruptions the country was left to survive as it might, or else to rot. In 1960, the authoritarian but well ordered Belgium Congo had possessed 88,000 miles of usable road; by 1985 the total length of usable road was down to 12,000 miles, of which only 1,400 was paved. Vast rural areas from which no wealth could be easily or any longer extracted were abandoned to their own devices,

and it was now, early in the 1970s, that hunger appears to have become endemic across wide if otherwise silenced regions.¹¹

While state organizations continued to exist in Zaïre, and to be recognized abroad--one can still apply for a visa at its embassy in Washington, D.C.--they have disappeared entirely in other "states" like Liberia or Somalia. As de Wall and Omaal (1993:198) have noted, private and public superstate organizations--international relief organizations and military missions--have assumed responsibility for finance, trade, infrastructure and protection and have attempted to acquire widespread legitimacy in Somalia and around the world for their efforts.¹² "Every morning in Mogadishu and in Baidoa," they note, "there is a meeting to discuss security. It is attended by the representatives from the relief agencies, the United Nations, the American forces and other members of the new multi-national force in Somalia. Until mid-January [1993], virtually no Somalis attended" (de Wall and Omaal 1993:200). Is it any surprise, then, that some people have called for the recolonization of states that fail to perform the assigned functions of states? The headline for Paul Johnson's article in the *New York Times Magazine* (1993) argued: "Colonialism's Back and Not a Moment to Soon: Let's face it, some countries are just not fit to govern themselves."

One could argue that these "states" are not really states at all, simply "myths" as Davidson says, and that a theory of the states need not account for their failure or include them in a general theory. But a comprehensive theory of states should be able to analyze superstates, strong states, weak states and even mythical states. Indeed, it is only by including the weak and mythical states, which perform few functions and fail to realize even minimal goals, that one can make sense of strong states and the role they play in the world.

Because states perform different functions and have different capacities to solve problems and achieve goals, perhaps it would be better to describe protection, accumulation, infrastructure development and legitimation as "entelechies," goals or objectives that are pursued but not necessarily realized (Schaeffer, 1981) and to recognize that these entelechies change over time. In the early modern period, for example, many states adopted "mercantilist" entelechies, while today they have adopted "modernizationist" ones that seek to achieve democracy and economic development.

Since Karl Marx persuaded the socialist movement to adopt the seizure of state power as its entelechy over the objections of Mikhail Bakunin and the anarchists, who thought state power should be smashed not seized, independence movements and state officials in post-colonial countries have believed that state power would help them exercise political power on behalf of their social constituencies and promote economic development. But after a century of seizing power and trying to use state organizations in an instrumental way, officials and movements in capitalist and communist states have experienced profound economic and political crises that have revealed the fact that state power could not easily be used to make themselves powerful or wealthy. State power may have been instrumental for social classes in powerful and wealthy Western European, North American and Asian states, but it proved a blunt instrument for social classes in post-colonial states.

In this context, the goal of seizing state power may be inappropriate or irrelevant for two reasons. First, upper and middle classes created imperial and republican states as "constitutional" organizations. That is, their founders designed institutions that could perform important functions for some classes, which could not be performed, in the same

way, for other classes. And they designed institutions that could endure over time, which means that could resist capture by other social classes who might have used them in a different way. Like the classical composers who wrote music symphony orchestras, the founders of modern states wrote constitutions for a particular set of state institutions. And just as it is difficult to use a symphony orchestra to play rock and roll, it is difficult to use class-based state institutions to benefit social classes with different political, social and economic objectives. This means that social movements concerned with the equal distribution of wealth and power should not necessarily expect state organizations to help them realize their goals.

Second, as we have seen, the power associated with states may be relocated or devolved to other organizations that perform similar functions, organizations that are often external to the state. This makes them even more difficult for subordinate social groups to capture. This is particularly true when state officials devolve economic power to "markets." As social organizations, markets are hard for social classes to "lobby," "corner" or "seize." So, for example, the devolution of considerable monetary power in Europe to currency markets means that even state officials in Britain, Italy or Germany can do little to prevent currency devaluations triggered by market actors.

For example, Myerson (1993) recently reported that George Soros, who manages the multi-billion dollar investments of the Quantum Fund, which speculates heavily on currency markets, "published a letter in the *Times* of London yesterday saying that the German mark is bound to fall, causing Europe's currency to do just that. Mr. Soros has no seat on the boards of the German Bundesbank or the Federal Reserve, but central bankers might envy his power to make currency markets rattle and quake." This kind

of development makes the seizure of state power, with their finance ministries and treasury departments, even more problematic.

And the continued proliferation of states--what might be called the "glut of nations" produced by the partition of nation-state republics in Eastern Europe and elsewhere--means that it is more difficult for social groups who seize state power to use state organizations to realize their objectives. As Hopkins (1982:87) has pointed out,

Indeed, there are now actually in operation in the world-system two fundamentally different principles of organization; The one is essentially political and organizes the world's population as the subject of a series of formally distinct "sovereign states." The other is essentially economic (capitalist) and organizes the world's population as participants in a single, and *organized*, world production system.

The multiplicity of states makes it difficult for any single state to manage or control the singular world economy, which is why superstate power of the kind exercised by Great Britain or the United States is rare and also temporary.

In this context, the seizure of state power may be inappropriate for movements concerned with the equal distribution of wealth and power. And the attempt to develop theories that can help social movements realize this entelechy may be irrelevant. The contemporary devolution of state power may require an evolution in thinking.

Notes

1. In the case of agriculture, the American Farm Bureau Federation, land grant universities, the *Des Moines Register*, Cargill, and the Democratic and Republican parties could all be described as "state" organizations, at least in part, some of the time. The "state" is not simply

"government," but the groups that provide material support and ideological justification and perform important functions that are necessary to sustain the accumulation of capital.

2. As Watkins (1990:4) notes, "In corn, wheat and soybeans, for instance, the U.S. loan rate is the biggest single influence on world price levels."

3. Latin America absorbed nearly half of these loans, about \$350 billion, according to Walton (1989:301).

4. According to Friedmann (1993:21), "Farm debt more than tripled in the 1970s, fueled by high [produce] prices and speculation in farm lands."

5. As U.S. Trade Representative Carla Hills put it, "There is no question about it. This new round of GATT talks is a bold and ambitious undertaking. We want new rules governing investment, we want corporations to be able to make investments overseas without being required to take a local partner or export a given percentage of their output, to use local parts, or to meet any of a dozen other requirements" (Environmental News Network, 1991:3.3).

6. According to former California Governor Jerry Brown, there is a "fundamental conflict between intrusive international regulations and American democracy. Our constitutional system rests on democratic accountability with significant legal and regulatory differences recognized among states and localities. NAFTA...would curtail local preferences and thereby undermine the ability of diverse communities to control their own destiny" (Brown, 1992:7).

7. Much the same is true of German producers. Protzman (1992) writes that BMW "will raise prices by about 5 percent--shy of the 10 percent increase in the mark's value against the dollar this year--on its high performance cars. Karl Gerlinger, the president of BMW of North America, explained, If you base your prices only on exchange rates, you will be out of the market immediately. You have to look at currency movements as a long-term factor and figure your costs and prices from there." German, like Japanese producers, refused to let government-sponsored currency realignments determine private price policies or market strategies.

8. As Michiharu Maeda, a vice president of Adi-Ichi Life Insurance, explained, "The stronger yen will not solve the trade gap with Japan, but it may reduce public pressure on the Clinton administration to take action to open the Japanese market" (Uchitelle, 1993).

9. In 1990, the Japanese invested \$55 billion abroad, up 25 percent from 1989, much of it in the United States, often purchasing "small firms and new technologies" which "may attract less attention than a few big ones." As Intel chief Andrew Grove put it, "The Japanese are learning how to make their acquisitions less high-profile" (Sanger, 1990:C1).

And Judis (1993:24) writes, "According to the Economic Strategy Institute, Japanese companies acquired 426 American high-tech companies between October 1988 and October 1992."

10. As I have written (1990:44),

Independence movements adopted sovereign state power as a goal rather slowly, in part because the seizure of state power had only recently become identified as a necessary component of social change. The international socialist movement had adopted the seizure of state power as a goal only in the late 19th century, and then only after the rancorous debate between anarchists and Marxists which dissolved the First International in 1876.

11. According to Attali (1991:73; see also Noble, 1993),

Europe's periphery, Africa, is a lost continent. It is one of the last places on earth in which famine persists. The terrible facts of having fallen into an economic black hole speak for themselves: since 1970, Africa's share of the world markets have been reduced by half; its debt has been multiplied by twenty and now equals its total gross product; and income per capita in sub-Saharan Africa has fallen by one-quarter since 1987.

12. "In 1992, private voluntary organizations raised tens of millions of dollars from ordinary citizens, and hundreds of millions from govern-

ments...channeled more aid to the third world than the World Bank...handled a half-million tons of food aid and were a major influence on the policies of poor governments from Cambodia to Angola," write de Wall and Omaal (1993:198). This is a good description of the superstate powers of private superstate organizations.

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The Restructuring of the Venezuelan State and State Theory

Luis Llambí and Lourdes Gouveia

A central objective of this article is to examine the restructuring of the state apparatuses and decision-making processes of economically "small" and politically "weak" nation-states as they adjust to the emerging global economic and social order. We focus most specifically on the impact of the above-mentioned projects on two different state restructuring projects--one "endogenous" the other "exogenous"-- of the Venezuelan Ministry of Agriculture (MAC) and related agencies.

In our analysis, we find that the reorganization of state systems is determined both by structural forces--a particular "logic of capital"-- and by conjunctural factors and contingencies such as the particular balance of social forces and institutional structure present at each juncture. Transnational forces enhance the complex determinacy of state power and autonomy, but their effect is far from clear at this point. We conclude that globalization theory may have been too quick in its generalizations about the current and future fate of the nation-state. The restructuring of current state forms is a highly heterogeneous and contingent process, suggesting the need for a substantial dialog between additional research and formulation of state theory.

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Introduction

Two different state restructuring projects are currently in process in Venezuela. One was "endogenously" conceived in the early 1970s by a domestic entrepreneurial group and later adopted by successive government administrations. The other was "exogenously" formulated by multilateral agencies in the late 1980s, though partially informed by earlier, domestically-based, policy formulations.

Although they have changed over time, the principal objectives of the "endogenous" project were aimed at achieving greater efficiency within the state apparatus. This was to be accomplished via such mechanisms as the decentralization of the different state powers, privatization of some state functions and the democratization of decision-making mechanisms. The "exogenous" project constitutes the principal component of the various structural adjustment reforms advocated by major multilateral institutions, such as the World Bank (WB) and the International Monetary Fund (IMF), as a result of the debt crisis of the 1980s.

A central objective of this article is to examine the restructuring of the state apparatuses and decision-making processes of economically "small" and politically "weak" nation-states as they adjust to the emerging global economic and social order. We focus most specifically on the impact of the above-mentioned projects on the restructuring of the Venezuelan Ministry of Agriculture (MAC)

and related agencies, as well as on the resulting policy changes.

From a theoretical standpoint, our case study serves as an empirical foundation from which to reconsider concepts such as state power and state autonomy which are central to theories of the state, and which are necessarily problematized by the internationalization of the economy. In this context, it is also relevant to insert our analysis within the terms of a recent debate in the sociology of agriculture literature concerning the changing relationship (spatial, social) between the polity and the economy in the emerging global order. Briefly, there are two major lines of argument within this literature. One is represented in the works of sociologists such as McMichael (1993) and McMichael and Myhre (1991). They perceive the gradual erosion of national regulatory mechanisms as parallel to the emergence of "supra-national" forms of global regulation. These supra-national forms include both the capacity of transnational corporations to establish their own norms (thus bypassing nation-state regulations), as well as the empowering of multilateral institutions charged with disciplining "deviant" nation-states and creating a new regulatory framework. This erosion of nation-state power, McMichael suggests, is asymmetric. For example, among Third World debtor states subjected to IMF's "disciplinary actions," the erosion of national regulatory mechanisms and resultant loss of nation-state capacities is particularly salient (McMichael and Myhre, 1991:89). In a similar vein Vacs suggests that:

The development of self-regulated markets and the establishment of minimalist states in a context of growing transnationalization and global interdependence reduces the capacity of these states to influence the evolution of crucial economic, political and social variables (Vacs, 1992:31).

This process, McMichael and Myhre (1991:89) contend, "does not necessarily eliminate the state," but demands the restructuring of the state apparatus as well as the reformulation of the state's traditional role in the capital accumulation process. McMichael concludes:

Global regulatory mechanisms, anchored in international financial institutions, depend on the withdrawal of state protection of national markets in money, labor and commodities, and the reorganization of the state to secure transnational circuits in money, labor and commodities. Arguably, the state is no less important in this process than it was in the recent era of national regulation. While the state has always been the political scaffolding of the world economy (McMichael, 1987), it has recently fulfilled a particular national function. However, current institutional and private forms of financial and productive internationalization threaten the coherence of national forms of political and economic organization (McMichael and Myhre, 1991, as quoted in McMichael 1993:204).

The second position, best represented in the aforementioned literature by Alessandro Bonanno and Bill Friedland is built upon a different epistemological basis and contains a more definitive prognosis. Similar to McMichael and Myhre, Bonanno and Friedland assume a weakening of domestic state institutions and, consequently foresee an increased capacity of transnational corporations (TNCs) to by-pass state regulations. Based on what we might characterize as an updated version of a "logic of capital" thesis,¹ Friedland and Bonanno postulate the "logical" and/or "historical" necessity for the emergence of a transnational state--in congruity with the regulation of requirements of transnational capital. Unlike Friedland (1991), however, Bonanno (1992, 1993) argues that this need for a transnational state is felt not only by TNCs, anxious to evade costly regulations,

but, contradictorily, by subordinate classes as well. As the domestic state becomes incapable of adequately performing its traditional accumulation and legitimation functions (i.e. of mediating between economic and social needs), a transnational state form is required to fill this power vacuum.

To tackle these issues, we would like to submit two preliminary hypotheses for discussion. First let us make clear that we agree with the observations of other authors that the IMF/WB's project for restructuring indebted Third World economies was initially premised on "national" de-regulation and a "minimalist" state (Vacs, 1992; Callaghy, 1989). However, we disagree with those who, we believe rather hastily, have tended to postulate an irreversible "diminishing" or "weakening" of the nation state's defining functions, based partly on such observations (Vacs, 1992; Griffin and Khan, 1992; Smith, 1992; Bonanno, 1992, 1993; McMichael, 1993). Instead, our first "hypothesis" is that the actual restructuring process is significantly more complex. While such "functional shrinkage" has indeed taken place in the short-term, a longer-term analysis of such restructuring projects suggests that in fact the opposite is at times the case. In other words, at least in some cases, nation-state institutions have been strengthened, though unquestionably transformed.

Second, the final outcome of these restructuring processes are far from determinate. At the national level, we can point to a series of increasingly contradictory reform projects, only partially internalized by either transnationalized elites or subordinate classes; both of which are currently experiencing serious internal splits. By the same token, at the supra-national level, the indeterminacy of the globalization process--and of its multiple effects on the nation-state system--is evidenced by the difficulties which hampered negotia-

tions (as in GATT) among the major post-Cold War super-states (US, Japan, EC), to arrive at a new set of rules governing the emerging global economic order.

The article consists of two main sections and final conclusions. In the first section we examine the origins and evolution of the Venezuelan state's current restructuring process. The analysis is grounded on a historical review of the two projects which have been at the center of the state restructuring process: 1) COPRE's project² and 2) the multilateral agencies' project--primarily, but not only, that of the World Bank (WB) and the International Monetary Fund (IMF). In the second part of this paper we highlight the key comparative and contrasting features of these two projects and conclude with some final theoretical implications.

Venezuela's State Reform: The History of Two Projects

Copre's Project: An "Endogenous" Reform Project

Venezuela's "endogenous" state restructuring project, which in time came to be identified as "COPRE's project," was initially formulated by a coalition of entrepreneurs and state officials. As the formulation and initial implementation of this reform project advanced, however, a different coalition of subordinate forces, nationally confined capitals, and provincial elites began to articulate an alternative version of this same endogenous project. We will call the first version, the "top down" version and the second, the "bottom up" version of the endogenous reform project. In the following paragraphs we examine these two versions of the endogenous project, and the tensions that emerged as they battled for ideological prominence.

From Punto Fijo to COPRE: antecedents to the reform project

In 1958 the Venezuelan coalition of political and social forces credited with toppling the dictatorial regime of Marcos Perez Jimenez signed the so-called Punto Fijo Pact. This pact is widely regarded as having laid the foundations for the nascent Venezuelan democracy. The Pact contained three basic components. The first was *economic development* whereby the state was allocated a central role in the promotion and regulation of economic growth through the adoption of an import substitution industrialization (ISI) strategy. A second component was *social development*, to be accomplished via a significant redistribution of state-controlled oil rents in order to create an internal market capable of absorbing national industrial production and of providing the state with an adequate dose of political legitimacy; Finally, a *pluralist democracy* was to be achieved through the consolidation of a multiple party system capable of channeling demands emerging from different social sectors (Gómez, 1993; Kornblith, 1993; Gómez and López, 1990).

This often-called "pacted democracy" generated highly disparate and ultimately contradictory outcomes which have become clearer over time. On the one hand, Venezuela enjoyed almost three decades of political stability, inter-elite consensus and political legitimacy. On the other hand, the clientelist mechanisms that underlay this democratic project and the accompanying increase in corruption among public officials gradually eroded the basis for sustained political stability and political-ideological legitimacy (Kornblith, 1993). Furthermore, the unequal distribution of oil revenues resulted in the extreme concentration of wealth within a relatively small private sector (del Búfalo, 1992; Gómez and López, 1990). By 1983 the debt

crisis precipitated the financial, and thus final, collapse of the Punto Fijo Pact.

The "top down" version

Already in 1972, an entrepreneurial group headed by Pedro Tinoco, a prominent financial entrepreneur, began to question public sector inefficiencies and demanded the "modernization" of the states central institutions and "parastatal" enterprises. Within the early formulations of the "endogenous" reform project, the "mixed economy" (state/market) model, which characterized Venezuela at the time, was not in question. Tinoco and his followers were simply calling for the instilling of a market logic within the state apparatus, and most specifically within the parastatals enterprises.

Tinoco's group and its various successors (e.g. the Roraima Group) made significant inroads shaping public opinion to accept the idea that an overhaul of the state system had become an imperative necessity. However, the groups still lacked the final catalyst to convince governmental elites and popular sectors to lend their support to the project. The opportunity arose in 1983 as the initial macroeconomic readjustment policies began to be enacted and, most certainly, after the shock caused by a 170% devaluation of the national currency. It is at this point that the idea of reducing the state's role in the economy, i.e. of modifying the mixed-economy model via decentralization and privatization, began to form part of the reform project. Almost simultaneously--although not entirely divorced from the modernization discourse--would-be reformers intensified their attacks on an increasingly delegitimized political system.

This project gestation period culminated in 1984 with a presidential decree creating the Commission for the Reform of the State (COPRE). Curiously enough, the man called to head the Commission was Ramon J.

Velasquez who, subsequent to the impeachment of President Carlos Andres Perez amidst corruption charges, became acting President of Venezuela. J. Velasquez is a respected academician from the provinces whose new position afforded him a grand opportunity to add credence to the decentralization and democratization components of the reform project. In time, the "democratization component" would acquire new, expanded (and probably unintended) meanings among those who from "the top down," wished to instill the project with more social and political content.

The "bottom up" version

Two events constitute the backdrop against which COPRE's project was gradually appropriated and redefined by popular forces. First came the food riots of February 27, 1989--which forced the state to give social issues a greater weight within proposals to reform the state; and the first directly-held elections for state governors which took place in December, 1990³. These elections had the effect of transforming the newly elected governors into the main protagonists in the emerging, "bottom up" version of the reform project (Ugalde, 1990, quoted in Beverly, 1991).

At this point in the evolution of the endogenous project, calls for "modernization" and "decentralization" came to occupy an even more central space and acquired renewed meaning within both the "top down" and the "bottom up" discourses. Within the "top down" version, decentralization was used in the most restrictive sense and simply referred to the transfer of centrally-controlled state functions to regional (states) and local (municipal) administrations. It particularly referred to those functions related to social services (health, education, sanitation, etc.). Conversely, within the "bottom up" project, decentralization was viewed as a much more diversified process which involved issues

ranging from the redistribution of wealth towards the most economically depressed regions and social sectors and the linking of grassroots organizations to decision-making mechanisms, to the increased popular control over the election as well as removal of public officials (Schönwalder, 1992).

Advances in the reform process

COPRE's reforms represent the most elaborate expression of the state restructuring process to date. In 1986, two years after its creation, COPRE proposed three fundamental reforms of the state apparatus: direct elections of governors, the strengthening of municipal powers, and the election of city mayors by popular vote (de la Cruz, 1988). In 1987, COPRE questioned the traditional political divisions of the country in seven regions as an effective planning base. Instead this Commission proposed strengthening state governments as principal loci of regional planning and administration. In 1988, COPRE drafted and the Congress passed two important laws⁴ which became the juridical framework for the decentralization project (Gómez and López, 1990). In 1989, as the government attempted a "great U-turn"⁵ in macro-economic policy, COPRE identified three major "distortions" in the functioning of the public sector. One was *centralism*, a progressive distancing between the loci of public decision-making of the central administration, and the loci of implementation (states and municipalities). A second was *clientelism* or the predominance of personalistic and political (party affiliation) criteria in the allocation of resources to the detriment of an alleged efficiency of free market mechanisms. A final distortion was *bureaucratization*, which meant the erosion of public sector efficiency due to a legal and normative framework full of red tape, ill-remunerated and demoralized bureaucrats, and labor unions' employment genera-

tion strategies based on clientelistic rather than meritocratic criteria (de la Cruz, 1988).

Based on this diagnosis, the government began to articulate and implement a series of state reforms. Included in these were *political reforms*, centered on the direct election of governors and mayors, *public administration decentralization* or transfer of some state functions⁶ from the central state to regional states and municipalities, and *fiscal and financial decentralization*, especially in what concerned the transfer of financial resources to the regional or local levels. In some cases, public sector and fiscal decentralization also meant privatization of certain state functions.

Up to this point, the reorganization of the Venezuelan state was carried out without any direct external intervention. It is for this reason that we have characterized COPRE's as an essentially "endogenous" project, even though some of its programmatic or ideological underpinnings were inspired by a neo-liberal discourse gaining global popularity.⁷ Yet, around 1983, when the project was still in its formative stages, Venezuela, like many other Latin American countries, experienced a debt crisis and the consequent insertion of the IMF and WB in the internal reform process. In fact, after 1990, when the World Bank called for "deeper and complementary" political and economic restructuring (WB, 1990:75) the differences between the two reform projects became progressively visible.

The Multilateral Agencies' Structural Adjustment Project

A brief retrospective view

Venezuela's "mixed economy" model was built upon four basic macro-economic policies: foreign exchange controls, tight regulation of interest rates by the Central Bank, domestic price controls, and a protectionist commercial policy based on import licensing and controls.

An additional and very important component of the Venezuelan model was the increased power acquired by the state through its control of oil rents as guaranteed by a 1960 Constitutional proviso.

This model worked relatively well for approximately three decades. As time passed, however, the ISI model became a disguised mechanism for distributing oil wealth through subsidies, captive markets, and for obtaining government favors through clientelist ties (Del Búfalo, 1992). In the late 1970s, the model began to collapse due, in great measure, to the drop in oil prices and the severe recession which plagued industrialized countries.

During Latin America's "lost decade" of the 1980s, successive Venezuelan administrations attempted various "heterodox" stabilization programs. Invariably, the tenor of all of these programs was marked by an emphasis on austerity measures and deflationary policies. The "heterodox" dimension, however, was given by the state's refusal to curtail its role as the main warrantor of economic growth and political stability. However, the recessionary tendencies provoked by these programs generated strong political pressures from nationally-confined economic sectors and, consequently, momentary policy revisions (Gómez and López, 1990). An example of the latter was the so-called "agricultural miracle policy" which was enacted during the period of 1983-1985. This policy provided incentives for domestic farm production through de-regulation of food prices and generous low-interest loans. Incentives were also given through direct portfolio requirements obliging commercial banks to allocate a portion of their resources to farmers.

In 1986 there began a process of debt negotiations. Yet, still buoyed by substantial currency reserves, the government renegotiated its debt without bowing to IMF conditionally (Beverly, 1991). Parallel to this,

Venezuela joined the group of Latin American nations attempting to create a "debtors' cartel" to strengthen their bargaining position vis-à-vis the international financial community. But, due in large part to an effective diplomatic campaign by the U.S., the debtors' cartel strategy floundered. On February 16, 1989, days after Carlos Andres Perez took office, the international banks refused to grant new loans to Venezuela unless it agreed to an *orthodox* stabilization program. Ten days later, on February 26 1989, the government signed its first Letter of Intent with the IMF.

The IMF Letter of Intent had three objectives. The first was adjusting the economy to the external shock created by falling oil prices. Second, Venezuela was to resume normal servicing of its foreign debt. Finally, access to foreign capital markets would be sought to provide for a sustained revival of economic growth (Félix, 1992; Zambrano, 1992).

These objectives were quite consonant with the functions assigned to the IMF upon its founding by the Bretton Woods agreement. But the financial strangulation now experienced by debtor nations provided the International Monetary Fund with an opportunity to assume new functions within the broader task of defining a new macroeconomic policy for debtor nations. In this manner, the IMF succeeded in establishing the following objectives:

- adoption of a single-floating exchange rate.
- reduction of fiscal deficits to less than 4% of GDP
- deregulation of markets for goods, services, credit, and wages.
- adjustment of public sector service tariffs (utilities and gasoline)
- substitution of direct for indirect subsidies consumer product subsidies (e.g. food, medicines) and the gradual elimi-

nation of input subsidies (particularly fertilizers).

- enactment of a new commercial policy opening the economy to foreign investment and trade, and meeting the conditions required to join GATT.⁸
- transfer of state-owned enterprises (banks, telephone, airline, sugar mills, hotels, port facilities) to the private sector (Republica de Venezuela, 1989).

Notably, the implementation of the above conditions surpassed the International Monetary Fund's institutional capabilities and required the intervention of the Venezuelan state. We are thus confronted with an interesting paradox whereby, on the one hand, the IMF deprives the nation-state of some of its decision-making capabilities and on the other, must strengthen at least those public entities that will be charged with the implementation of IMF policy (the Central Bank, Financial and Planning Ministries). Consequently, the national government is faced with an expanded field of contradictory demands emerging from the IMF, which demands fulfillment of the Letter's objectives and conditions, and from domestic social and economic forces, which demand attention to their own particular interests from the re-empowered state.

From the beginning, as is evident in the Letter of Intent signed by the Venezuelan government, agriculture and trade policy became two of the most contentious issues to be addressed during the negotiation period. The next two quotations, taken from the Letter of Intent and a World Bank document, give us a taste of some of the disagreements and compromises that characterized the bargaining process:

The government considers that certain goods and services should be subsidized. The preferential

interest rate for agriculture should be flexible, reaching a differential rate of 70% below the market rate (Republic of Venezuela, 1989).

Agreement was reached between the Bank and the Government during negotiations of the first adjustment loan, that liberalization of the agricultural trade regime would start in 1991. The Government postponed taking any measures to liberalize the agricultural trade sector regime until January 1991 (World Bank, 1990:44).

The signing of the Letter of Intent placed Venezuela on the list of eligible countries for the Brady Plan debt write-downs and reductions. The plan involved debts for US\$ 19.9 billion, equivalent to approximately 80% of the total public debt, annual interest rate deductions, and a seven-year grace period for payments of principal. The IMF agreed to provide \$ 5.1 billion over a three-year period, as well as \$700 million to support debt reduction. All of this improved Venezuela's chances to obtain new funds from multilateral agencies which commonly favor countries placed on Washington's approved list (Félix, 1992; Adams, 1992; Beverly, 1991).

On February 27, 1989, the announcement of the first measures contained in the adjustment package was greeted in Venezuela with four days of rioting and looting. This date marked a turning point in the state restructuring process. It was by far the clearest sign that an orthodox adjustment program could not be implemented at the expense of social and political considerations. Almost immediately the IMF, by this time operating in conjunction with the World Bank, began to design a series of "megaprojects" to address previously neglected areas such as education, health, and agricultural and rural development.

In this manner, the events of the 27th of February, and especially the response of both the government and the multilateral agencies, opened a door for the participation of domestic

subordinate classes in the bargaining processes that were going to accompany the implementation of adjustment policies.

This initial phase of readjustment also revealed that the management of allegedly neutral, macro-economic variables was insufficient to resolve the serious social and sectoral problems created by the crisis and, subsequently, the policy "package" aimed at resolving it. Hence, as the implementation of the package advanced, the pressure exerted by domestic forces led to the inclusion of sectoral and social policies in the policy package, and the corresponding strengthening of governmental ministries oriented toward domestic concerns. In the following section we examine this second phase in the implementation of the structural adjustment program, with special emphasis on its impact on those public agencies charged with the implementation of agricultural sector policies.

The Restructuring of the Agricultural Sector: The ASIL Project

Since 1990 the World Bank, along with other multilateral agencies, came to occupy a central place in the design and implementation of different structural adjustment programs at the sectoral level in Venezuela. ASIL (Agricultural Sector Investment Loan Program) was one such program.

The same year, the first World Bank "mission" was sent to Venezuela to carry out a complete diagnosis of the agricultural sector, as a prerequisite for a World Bank sectoral investment loan. This was not a "conventional" economic diagnosis, but one focused on a particular set of "structural" problems: those allegedly created by state intervention. Armed with a theoretical perspective based on comparative advantages and competitive markets, as well as doctrinal prescriptions based on minimalist state intervention, the document

directed its harshest criticisms against the agricultural development policy designed and implemented by the Ministry of Agriculture and Livestock (MAC) for the 1990-1993 period. Three main policy objectives became the target of World Bank criticism:

- a food self-sufficiency policy, "regardless of its costs."
- a "fair" farm-gate price policy--covering costs of production-- "regardless of the farms' levels of efficiency,"
- a policy of preferential farm interest rates, that "would not address the institutional problems faced by the intermediaries in the sector's financing" (World Bank, 1990).

Interestingly enough, the same three objectives, which became the target of the World Bank's criticisms involving the agricultural sectors of Latin American debtor nations, have constituted the backbone of the industrialized nations agricultural policies for decades. They are responsible for the industrialized countries' achievements in basic food self-sufficiency as well as for their phenomenal increases in food exports (Llambí, 1993).

In any case, these policies were identified by the WB as the structural problems to be addressed by the new sectoral adjustment programs. From our own theoretical perspective, these policy areas are but a symptom of the more fundamental structural problems faced by Venezuela's agriculture--and which were unsuccessfully resolved by former policy programs as well as ignored by the WB in its diagnosis. Briefly, we are referring to such structural problems as: the oil rent-induced non-competitiveness in domestic production;⁹ the prominence of oligopolistic markets--particularly in the agro-food sector--and inherited from the import-substitution era;¹⁰ and a highly skewed income distribution also inher-

ited from the ISI era. Even more serious than neglecting these domestic structural problems, was the Bank's failure to provide a real diagnosis of Venezuela's possibilities and constraints for participating in the international market. This is most surprising given the emphasis placed by the World Bank on the development of an open economy and the promotion of traditional and non-traditional exports (World Bank, 1990).

The World Bank also disapproved of Venezuela's agrarian reform and, most specifically, of the restrictions inhibiting the use of farm land as collateral. While this may be a valid criticism, the solutions suggested by the World Bank and its allies were highly problematic. Bank officials argued for a complete de-regulation of the land-market. Under existing inflationary pressures and the predominance of speculative investment in the present Venezuelan economic juncture, this could have disastrous consequences for most Venezuelan farmers.

Given the above, the next logical step became the establishment of an Agricultural Sector Investment Loan (ASIL). However, before this occurred, and rather unexpectedly, the government decided to expedite the economic opening of the agricultural sector and changed the official date, established in the Letter of Intent, from January 1991 to June 1990. Presidential Decree 988 proclaimed a unilateral opening of the economy via a leveling-off of all tariffs and the gradual elimination of all non-tariff barriers. However, between November 1990 and March 1991, a series of complementary decrees and resolutions established a certain degree of protection for "sensitive" industrial agro-food sectors such as animal feed, oilseeds and basic grains.¹¹ Furthermore, the government issued a new basic food basket price list, thus maintaining some price controls, though deregulating the rest. These decrees became the *de facto* agri-

cultural policy as any other intervention was deemed unacceptable for a country allegedly implementing a "sectorally-neutral" commercial policy (WB, 1990).

In February 1991, during its second "mission" to Venezuela, the WB completed the final draft of the ASIL document. The project, scheduled for the period 1992-1996, is co-financed by a WB loan of US\$300 million, an IDB loan of US\$300 million, and Venezuelan government disbursements totaling US\$500 million, which included budgetary allocations (US\$300 million) and the placement of bonds in the international financial markets (US\$200 million). The project has three main components.

The first is a *public sector investment program*, which includes rural electrification, irrigation, drainage and rural roads subcomponents. The second, a *sector policy reform program* includes:

- **agricultural trade reform** which means the gradual elimination of all import licenses and all import restrictions, as well as the dismantling of the coffee and cacao Trade Boards.
- **agricultural financial sector reform** which indicates the elimination of all interest rate subsidies and of credit and portfolio requirements to the commercial banks; as well as the merging of all agriculturally-related public financial institutions into a second-tier public fund working through private banks.
- **agriculture and food domestic market "pricing" reform**, which is the complete deregulation of all food, farm and input prices, with the exception of some market "sensitive" farm commodities (animal feed, oilseeds, basic grains, and sugar) and "targeted to the poor" food subsidies (e.g. a milk subsidy program).

- **a rural land census** "to pursue to a conclusive stage the agrarian reform program through delivering definitive property rights to more than 60% of all the lands subjected to this process." (MAC, 1991).

Third, there is an *institutional strengthening program*, guided by the criteria of de-bureaucratization and modernization, de-centralization and privatization. The *de-bureaucratization and modernization of the sector's institutional apparatus* would be achieved through various mechanisms such as an outright dismissal of a large number of state employees and their replacement with a smaller but better qualified staff. *Decentralization* would be accomplished through a reorganization of MAC's state and municipal units (UEDAS and AMAs) so that they would "assume the main responsibility in the preparation and implementation of the programs affecting the interests of its own localities" (MAC-PITSA, 1992). Finally, *privatization* of some functions and areas such as storage and commercialization, plant health and sanitation, technology transfer, etc. would occur.

It is beyond the objectives of this paper to discuss the merit (or lack thereof) of these profound agricultural policy and institutional changes. However, a few comments are in order regarding ASIL's role in the "strengthening of public institutions," and in shaping the processes and agencies connected with agricultural policy-making and implementation.

From early on, WB officials were aware of some of the social costs involved in their proposed structural reforms. The ASIL proposal document mentions, for instance, that:

(These policies) could result in short-term income losses for some farmers and the possible reduction of total domestic supply of non-competitive

commodities, possibly requiring an increase in food and raw material imports to satisfy demand for agricultural products. (World Bank, 1991:28).

World Bank officials also understood that their intended reforms would generate strong political opposition, particularly from domestic-oriented farmers who make up the largest proportion of Venezuelan farmers. In order to assure both passage and implementation of the ASIL project, the WB devised a strategy whereby the content and successes of other government initiatives would be directly or indirectly tied to support for the project, thus presumably insuring its irreversibility.

We can identify at least three tactics of this strategy employed during the negotiation and initial implementation stages of the project. The first tactic was loan "cross-conditionality," i.e. the sequential release of loan monies tied to the gradual fulfillment of objectives contained in all the programs sponsored or dictated by multilateral agencies. The second tactic consisted of pressing the Venezuelan government to establish international agreements with multilateral institutions such as GATT and to sign bilateral accords with other countries based on the same principles underpinning the reform program.¹² The third tactic, which is perhaps the most relevant to this work, was to attempt to insulate government officials from domestic political pressures during the initial negotiations as well as during the early implementation stages of the project. The most sensitive discussions were held behind closed doors and relevant information was invariably stamped "confidential" or "for limited circulation." In fact, the national Congress approved the project based on a draft which detailed the government's financial obligations but failed to mention any of the political economic conditions it had to fulfill and which had been discussed at the executive level.¹³

Despite successful maneuvering on the part of multilateral agencies and their allies, the implementation of project components and pre-requisites have experienced considerable delays. Congress officials have been dragging their feet in the passage of those laws considered by multilateral agencies as indispensable prerequisites for the release of loan funds. In addition, the restructuring of MAC itself proved to be a more difficult task than anticipated by the designers of the project. There is no question that such delays were at least partially the result of mounting political opposition from farmers, public officials and important political sectors, which were profoundly and negatively affected by the project.

By June 1991, a persistent climate of political instability had led to a partial reversal of the most extreme austerity measures contained in the adjustment program. Price regulations and direct food and medicine subsidies were re-established in some cases as popular unrest and political instability mounted. This served to confirm the fears expressed in initial WB documents and presaged the reversal of the reform program which bank officials had fought so hard to prevent.

In June 1993, the Venezuelan Supreme Court suspended President Carlos Andrés Pérez who was accused of corruption. The interim president appointed by Congress, Velasquez, as well as his cabinet appointments, reflected the new national consensus that the entire package of macroeconomic and state reforms had to be revised. A clear sign that the reform program was entering a period of reversal came with the appointment of the new Minister of Agriculture. Unlike his predecessor who had been recruited from the upper ranks of Mavesa (a major food conglomerate associated with Cargill), the new minister was widely known as a spokesman for those Venezuelan farmers opposed to the reforms.

Similar to what had occurred with COPRE's reform project, a "bottom up" version of the WB-led adjustment program has progressively emerged. The latter calls for a selective and negotiated opening of the economy and increased state guidance of domestic market mechanisms. This new "heterodox" structural adjustment version has also been pushed from "below" by newly elected state governors. Capitalizing on the central government's almost total loss of legitimacy, the new governors have handed together to press for a more "federalist" approach to and a larger say in the design of sectoral policies affecting their own particular regions. MAC officials, following World Bank directives, interpreted the decentralization process in its most formalistic and limited sense to mean the administrative decentralization of public agencies. In contrast, the new governors have wielded the weapon of the new Law of Decentralization to demand that, in matters concerning agricultural and rural development, the decision-making powers be removed from the central government and transferred to regional and local governments (see for example Sánchez Meleán, 1993). As these de-structuring and re-structuring movements are still in their initial stages, the final outcome of both the overall and sectoral state restructuring processes in Venezuela is still undetermined.

The Nation-State in the New Global Order: Lessons from the Venezuelan Case

As many have stated before us, the state apparatus is a highly heterogeneous set of institutions in which a complex configuration of class and non-class forces are deeply imbedded. However, within the current globalization context, and particularly in the context of "exogenously-induced" structural adjustment

programs, the particular configuration of state institutions and social forces found within Latin American nation-states has become increasingly complex. In Venezuela, for example, state officials must now respond to an increasingly diversified and expanded constituency made up of both national and transnational social agents (TNCs, other states, multilateral agencies). Consideration of these changes makes it imperative to reconsider their theoretical implications for state theory, and particularly for notions such as state autonomy and state power.

Our discussion of the Venezuelan state, and most specifically of the agricultural sector's reforms sponsored by multilateral agencies, revealed that such reform projects are effectively "exogenous." This is meant not only in the limited sense of the term exogenous whereby the project was initially conceived by non-Venezuelans. But in the more substantive sense whereby only a fraction of state officials took part in the negotiations leading to the actual approval and implementation of the project. In other words, the ASIL's "top down" project presupposed from the very beginning a high degree of accountability from government officials to the multilateral agencies, as well as a greater degree of autonomy from domestic subordinate classes. Consequently, the structural reforms dictated by the project lacked the support of Venezuelan farmers and the great majority of public officials who reluctantly accepted the conditions and ideological premises contained in the restructuring project. Only a handful of Venezuelans enthusiastically embraced the project's objectives and the ideological discourse within which they were framed. Thus the "top down" version of the reform project never achieved the status of a "national" consensus and has progressively lost the limited dose of political legitimacy it had at the beginning.

The overwhelming lack of support for both "top down" versions of the reform project (COPRE's early reform proposals as well as those of the multilateral agencies) does not contradict the also widely-held view that the restructuring of the nation-state was imminent. Large sectors of the population condemned the damaging effects produced by these top down versions of the project but, by the same token, supported the reform idea by formulating their own "bottom up" version. Thus the initial rejection to the reforms is best understood as a rejection of the undemocratic approach followed by the multilateral agencies in their negotiations with Venezuelan government officials. Multilateral agency officials, excessively preoccupied with the achievement of short-term economic efficiency, banked on their alliance with a limited, and perceived as strategic, sector of the population. This strategy failed to contain the onslaught of opposition from excluded sectors and undermined the long-term political legitimacy required to carry out the reforms.

By contrast, COPRE's state "modernization" reforms, although initially conceived by a small entrepreneurial elite, and later adopted by the government, enjoyed a high degree of public popularity. COPRE-propelled reforms have indeed become part of a long-term reform project extending for over two decades. Throughout this period, new agents have been incorporated into the project, contributing to changes in both its objectives and strategies. Importantly, among such agents are the multilateral agencies which have modified their own proposals so as to make them compatible with the "endogenous" project's goals and objectives.

Furthermore, despite multiple shortcomings, the response articulated by the coalition of "excluded" popular sectors, has been to appropriate COPRE's reforms and infuse them with higher democratic content. This is par-

ticularly clear in the case of COPRE's decentralization reforms which have provided new spaces for democratic fora. But, conversely, the reform process has also generated a higher degree of concentration of strategic decision-making power among fewer state officials. It is clear then that the reform process is riddled with contradictory, democratic and anti-democratic tendencies, underscoring the indeterminacy of the broader restructuring processes currently shaped by global forces.

State autonomy has proven to be a highly problematic concept. For our purposes we will treat it as a descriptive concept referring to state officials' capacity to mediate between a complex and expanded set of "external" and "internal" forces in the course of designing and implementing socio-economic policies.

As the above discussion suggests, state autonomy can acquire different meanings and magnitudes depending on the particular framework of institutions and the representational system within which policy-making and implementation take place. In the Venezuelan case, the relative insulation of the executive/multilateral agencies from subordinate classes led to a misreading of these classes' oppositional consciousness and organizational capacities. The fact that the reforms were framed within Venezuela's particular version of a democratic system of representation and political discourse provided an opening for countervailing strategies as well as expanded representation of subordinate forces at different levels of the civil society and state apparatus. The highly intrusive presence of transnational agents within the Venezuelan executive branch had exposed the latter's class bias and seriously eroded the legitimacy of the state. The volatile environment created by this situation ultimately led to a reconfiguration of forces within the state system, at least partially contradicting transnational agents' immediate interests--and thus undermining the pre-cond-

itions for the capital accumulation course charted by such agents .

As Potter (1992) succinctly puts it, "one part of the state may be more or less autonomous (the executive vis-à-vis the legislative) than another vis-à-vis the domestic economy or the global economy" (Potter, 1992:223). Like relative autonomy, the concept of state power must be further problematised if one is to take into account the political and economic conditions experienced by Latin American and other Third World countries in the current global context. Following Jessop (1982:225), we may view state power as "[the form (organizational, representational)-determined, institutionally mediated] effect of the balance among all forces in a given situation." In other words, state institutions (themselves a condensation of class forces) may be more or less capable of producing significant policy "effects"--given, among other things, the particular resources/strategies available to state agents and the set of structural constraints in which policy making and implementation takes place. Within the current context of globalization, a central theme has been whether, in the shorter or longer term, nation-state power (especially to direct the process of economic growth and mediate between different classes) is being eroded vis-à-vis other "supra-national" power centers such as transnational companies (TNCs) or multilateral agencies. Some also view this erosion as asymmetric and thus most severe among "weaker," or "Less Developed Countries" (LDCs)--which are faced with more severe structural constraints (Pitelis, 1990; McMichael, 1993; Hymer, 1979).

In the Venezuelan case, the IMF-WB's initial project for restructuring indebted nation-states, did initially propel a process of "national" deregulation and the shrinkage of state functions akin to what some have called

the emergence of a "minimalist" state (Vacs, 1992). As our discussion suggested, however, these transnational agents have been forced to progressively shift their initial focus away from state "de-structuring" (de-scaling, de-regulating, de-centralizing) and toward "re-structuring" (up-grading, re-regulating, re-empowering) the state apparatus. But as Thomas (1989) indicates, the "paradox of the orthodox adjustment programs" was always that:

...external actors are attempting to use what they consider the key obstacle to development --the state-- as the primary weapon in the struggle to reform third world political economies." (Thomas, 1989:116).

The analysis of the COPRE project also reveals that, while a shrinkage of the functions fulfilled by the central state did take place in the short run, in the long run, such functions were re-assigned to (or appropriated by) regional and local administrations. But we would even argue that the "modernization" of the central state has led to a partial re-strengthening of the central state administrative apparatus. This is due to two fundamental changes. On the one hand, while the functions retained by the central state are lesser in number, they are of greater strategic significance (e.g. law and order, management of macro-economic variables, international relations, medium and long-term planning). On the other hand, the central state has been endowed (largely by multilateral agencies) with enhanced technical capabilities for fulfilling these strategic functions. However, it is too early to tell whether subnational public entities, now charged with fulfilling functions previously attached to the central state, have the capacity to do so effectively.

Conclusions

The analysis of these two state reform projects in Venezuela suggest that while in the short term the nation-state experienced a process of contraction, viewed from a longer-term perspective the opposite appears to be the case. In other words, we are not necessarily confronted with a diminished but a transformed state. The extent to which these transformations are consonant with a particular accumulation trajectory is still to be seen.

While it is difficult to arrive at empirical generalizations about nation-states—even within the limited space of the Latin American continent—it is even more difficult to formulate theoretical conclusions that would address questions such as those posed at the beginning of this paper: how are "weak" states being transformed in response to the emerging global environment, and what does that tell us about our current notions of state power and autonomy. In the remainder of this paper we wish to briefly outline a limited number of conclusions.

It would be hard to deny the fact that globalization compromises the capacities of nation-states to regulate their own economic entities and social relations. It also seems clear, as other authors have suggested, that such erosion of power is asymmetric and thus globalization reproduces the hierarchical structure constituted by the differential powers of "weak" and "strong" states (Pitelis, 1991; Picciotto, 1991).

However, this is not sufficient evidence to argue that the existence of the nation-state (as a capitalist state form) is in imminent danger—even in today's "enlarged third world" where, not only in spite of the structural reforms but because of them, the nation-state is selectively re-strengthened. Contrary to the position taken by some of the authors discussed in the introduction, the historical conditions which

led to the emergence of territorial-bounded nation-states as a mechanism for mediating among social classes have not yet disappeared. The analysis of both "bottom up" versions of the Venezuelan state reform project, for example, illustrated the persistent relevance of the nation-state for generating political legitimacy as a necessary component of accumulation. But, seen in a different light, the analysis also reaffirms one of the most important insights of Marxist-oriented state theories: that the presence of dominant class fractions or blocs (in this case the transnationalized fraction of industrial capital) within the state system does not guarantee the automatic articulation and internalization of a corollary hegemonic project or the success of a particular accumulation strategy (even in "weak" states) (Holloway and Picciotto, 1978; Poulantzas, 1973; Gramsci, 1971; Jessop, 1990). These must still be secured through effective class practices, including the articulation of a "nationalist" discourse, and the consolidation of an adequate balance of class and non-class forces. Thus, contrary to the capital logic school, the needs of dominant capitals do not always dictate the actual forms that state institutions or projects take, though we may postulate them in the abstract. True, capital mobility may allow such dominant capital sectors to bypass a particular nation-state unwilling to submit to the new orthodox discipline and thus risking its badly needed participation in the global economy. But surely this has limits and costs as well, given that the advantage of capital mobility (or the threat of capital mobility) is largely premised on the existence of competing nation states (Pitelis, 1991).

This leads us back to the need to re-examine concepts such as state power and state autonomy. In the past, "the emergence of Welfare States in the developed world and of National Populist regimes in the less-developed economies" (Vacs, 1992:3) gave the state

significant power to mediate between social classes. Today, the already mentioned erosion of nation-state institutions seems to threaten this capacity. Current restructurings of nation states, especially of "weak" states, some argue, are aimed at the reinforcement of just those institutions that serve the needs of transnational capital and its agents (e.g. finance ministries). Conversely, these restructurings are aimed at weakening those institutions oriented toward the formulation of a domestic project, e.g. sectoral planning ministries, (McMichael and Myhre, 1991; Picciotto, 1990)--thus weakening the state's power to steer domestic processes. Furthermore, the highly intrusive presence of transnational agents (whether of national or foreign origins) within nation-state systems exposes the class character of the state, thus compromising its relative autonomy and rendering its legitimacy function ineffective.

Despite the unquestionable merit of these observations, they are not empirically exhaustive or sufficiently long-term to support a definitive prognosis of the future of the nation-state as a historical form of the capitalist state. Moreover, as the preceding empirical analysis illustrated, the reorganization of state systems is determined not only by structural forces and a particular "logic of capital" but by conjunctural factors and contingencies such as the particular balance of social forces and institutional structure present at each juncture. Undoubtedly, transnational forces such as those represented by multilateral agencies enhance the complex determinacy of state power and autonomy. But the effect of such determining factors is far from clear at this point. Additionally, the increasingly blurred boundaries between various social categories, political forces, and ideologies render the process even less determinate. Such indeterminacy is observed not only at the national, but at the supranational level as well. Here,

attempts to create or recreate a transnational regulatory system (which could theoretically become the nation states' substitute) has also met with serious difficulties as revealed by the failure of the three post-War superpowers (US, Japan, and the EC) to agree on new rules of the game.

In conclusion, globalization theory, we believe, may have been too quick in its generalizations about the current and future fate of the nation-state. The restructuring of current state forms is a highly heterogeneous and contingent process, suggesting the need for a substantial dialog between additional research and state theory.

Notes

1. For a review of this thesis see Block, 1987.
2. We use COPRE primarily as a shorthand to identify this particular version of the project which, although guided primarily by this institution, its long-term trajectory involved several institutions beyond COPRE.
3. In this occasion, the incumbent party, Action Democracia (AD), lost some very important party strongholds in the interior of the country.
4. Ley Orgánica de Descentralización, Delimitación y Transferencia de Competencias del Poder Público; and Ley Orgánica del Régimen Municipal.
5. In 1989, the term *El Gran Viraje* (the Great U-Turn) was used to name the VIII National Plan. This was a short-hand expression to refer to the entire package of adjustment and economic restructuring programs. It is interesting to note that while in the U.S. the term had a negative connotation, in Venezuela the opposite was the case.
6. The functions to be decentralized included "social services" (education, health), some public utilities (distribution of electricity and water), and rural development.
7. We identify here neo-liberalism as the gamut of economic doctrines which privilege the market vis-à-vis the state in the allocation of resources. In its most orthodox guise, the neo-liberal discourse

views state intervention as only introducing unnecessary distortions. Less orthodox versions give the state a role in correcting market failures or market inefficiencies, particularly when unbearable social consequences arise. In these cases, the preferred instrument for intervention is that of targeted social subsidies. What is unacceptable in all versions, however, is a redistributive role of the state.

8. Venezuela's first application to GATT membership was rejected when it failed to comply with all of GATT's requirements, especially those related to tariff reductions.

9. In the WB document there is this only one reference to this problem,

the government should continue to explore the feasibility of an oil stabilization fund to reduce the possibility that the exchange rate would again become overvalued in the face of short-lived petroleum price increases (WB, 1990:73).

That this fund would be insufficient to solve this problem, is evident in the following statement:

tight monetary restraint has led to appreciation of the real exchange rate, discouraging recovery through exports and encouraging a shift to external suppliers despite conditions of severely unemployed resources. Allowing both interest rates and exchange rates to be determined by market forces in this context has been seriously adverse for recovery (Sheanan, 1992:40).

10. The significance of this is that:

(in an environment characterized by) monopolistic competition and financial speculation... a perverse relationship has been established between the exchange rate, inflation, the interest rate and public spending. This generated an acute depression, whereby a structural inflation previously unknown in Venezuela exerts a rigid pressure over budgetary spending (del Búfalo, 1992:9).

11. The "price bands" mechanism was previously adopted by Chile after the collapse of its domestically-oriented agricultural sector in 1983.

According to Powell, in Venezuela the price bands are calculated according to the following procedure:

Reference prices for each of the commodities in the scheme are selected from international markets and the moving averages of the last five years of monthly reference prices are calculated. If the international commodity price falls further than a specified percentage below this reference price a tariff is levied at a rate commensurate with the extent to the fall in the international price below the band (Powell, 1992:5).

12. One of these bilateral agreements was signed in April 1991 with the US, establishing a US-Venezuela Commission on Trade and Investment.

13. These statements are based on confidential documents secured by the authors.

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The Firm and the State in the Globalization Process

Manuel Belo Moreira

Globalization is a process which results from dynamic economic, political, ideological, cultural or religious forces. These forces are simultaneously shaping and reshaping the international division of labor, favoring or opposing capital accumulation, and pushing toward an increasing homogeneity of human behavior and consumption or attempts to resist this movement. However, the author maintains that the driving force is economic. More specifically, the critical agent of globalization is shown to be Transnational Finance Capital (TFC) (involving both Transnational Corporations and Transnational Banks).

First, the characteristics and increasing importance of TFC is examined, which is necessary in delineating a framework for analyzing the relationship between TFC and the State, particularly as it is manifested in the agri-food sector. This framework highlights the fact that dialectical relationships between TFC and nation-States vary in different socio-economic contexts. A qualitative typology is proposed in an attempt to describe the nature of these relationships at any particular moment. The article ends with an application of this typology to different relationship patterns established between TFC and the Portuguese nation-State.

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Introduction: The Concept of Globalization¹

Globalization has been described as the confluence of various economic changes that can be grouped into three types of phenomena (Borrego, 1981; Dicken, 1992; Dunning, 1990; Kennedy, 1993; Koc, 1994; Ohmae, 1991; Reich, 1991; Ross and Trachte, 1990; and Thurow, 1992).

First, there is the increasingly rapid expansion of international trade² which has occurred since the end of World War II, coupled with the quick growth of international production and international marketing channels. This movement was initially fueled by the spread of multinational enterprises (MNE) which located subsidiaries in other countries to take advantage of natural resources, as well as to produce for local and regional markets served by these subsidiaries. More recently, the emergence and rapid development of transnational corporations (TNCs) --which have been accompanied by and stimulated the development of new technologies which lower transport costs, permit rapid communications and create new management methods--have changed this pattern.³ Thus "an increased proportion of world trade in manufactures is intra-firm, rather than international, trade. In other words, it is trade which takes place between parts of the same firm but across national boundaries" (Dicken, 1992:48). TNCs also control the commodity marketing channels of a large variety of food and raw agricul-

tural products as well as ores, minerals and metals, even when their production is nation-based.⁴

Second, the end of the Bretton-Woods system of financial regulation and the development of new technologies (mainly related to the revolution in global communications) has allowed an explosion of financial flows around the world.⁵ These flows are under the control of an increasingly important set of transnational banks (TNBs), which are in large part connected with speculative movements in stock markets and currency exchange rates.

Third, a global tendency toward a homogeneity of human behavior and consumption patterns⁶ has formed, fueled by the emergence of a global communications network (used in a broader sense to include the media and cultural industries). This tendency is illustrated by the emergence of global goods such as the "world car," the "world steer" (Sanderson, 1986), the "world soft drink," the "world pizza," in addition to a global culture exemplified by trends in fashion, hair styles, etc. (Friedland, 1990).

In brief, even if interpretations may differ about the nature, importance and theoretical significance of this global shift, there is general agreement that it is qualitatively different from the past, and is intimately connected with the acceleration of international capital flows, the growing importance of TNBs and the emergence and rapid development of TNCs in parallel with new technologies. The close cooperation and -- occasionally -- control developing between TNCs and TNBs constitute what Andreff (1982, 1984) terms transnational finance capital (TFC).

Thus, the globalization process is best conceptualized as resulting from a set of dynamic forces -- economic, political, ideological, cultural⁸ or religious -- that, at an ever increasing pace, is shaping and reshaping the international division of labor, favoring or opposing

capital accumulation, and pushing toward or resisting an increasing homogeneity of human behavior and consumption. These are the global, local, or regional forces that are acting in the socio-economic and political context of the last three decades of the twentieth century.⁸

My thesis is that the driving force behind these developments is primarily economic. That is, the critical agent of globalization is the set of strategies TFC adopts to adapt accumulation patterns to changing geo-economic and geo-political conditions. On one hand, TNCs are trying to become more competitive in markets that are increasingly globalized; on the other hand, TNBs are striving to dispose of an excess of liquidity. Thus, TNBs fuel TNC development and, by taking advantage of the end of Bretton Woods regulation, contribute to the explosive surge in speculative capital flows already mentioned (see Kennedy, 1993; Resnick, 1989; and Schuh, 1986).

Forces outside the economic arena which contribute to the globalization process -- such as the nation-state at the political and ideological level and cultural or religious forces -- usually lag far behind. The fact that economic forces are primary does not deny the importance of these other forces; on the contrary, they sometimes work to facilitate the requirements of the globalization process⁹ or, as is more probable, struggle to resist the homogenization process.¹⁰

This definition implies that what characterizes the globalization process is more than the increase in commercial relations between different economic spaces or nations; rather globalization involves two main dimensions. The first is the increasing speed of the movement of capital and commodities. The second is the multi-spatial coordination of economic activities which is substantially different from the simple consideration of the

signals provided by demand and supply trends in international markets.

By accepting this concept of globalization, we are necessarily faced with many issues needing further discussion and theoretical consideration. Three of these are particularly important. First, the firm and technological progress¹¹ as the primary agent of the globalization process must be considered. Second, the state and international development agencies should be examined. And third, the debate about structure/agency opposition as it is related to cultural, ideological, and religious factors is important. However, it is my belief that the changing trends of the internationalization of capital that give rise to globalization can be explained essentially by TFC and the dialectical relationships between TFC and nation-states. In other words, the determinants of globalization must be sought in the internal logic of TFC in general and in TNCs' actions in particular, influenced by the dialectical relationships between TFC and nation-states. However, this process must be examined on a case by case basis, considering other dimensions which are not explored in this paper.

It is generally agreed that the dynamic of the capitalist system, among other conditions, implies the constant search for opportunities to expand capital accumulation, and requires the continuous realization of profits. But it would be too easy, as well as unsatisfactory, to explain the role of TFC in the globalization process as resulting simply from an incessant quest for profits and growth of accumulation. Therefore, we must pay more attention to TFC to better understand the significance of the process.

The framework for the analysis proposed in this paper is that TFC strategies and the dialectical relations between TFC and nation-states must take into account variations in socio-economic contexts arising since the emergence of the globalization process. After a

brief overview of theoretical considerations about globalization, attention will be given to the character of TFC and then to the relations between TFC and nation-states.

Theoretical Explanations Of Globalization: A Brief Review

While there may be a consensus about the importance of the globalization process, the theoretical explanations for it are the subject of raging controversy. Dunning (1990:10-11) points out some of these issues,

Theories abound. Currently there are at least half a dozen contenders for *the* theory or the *leading* theory of international business activity most of which leave businessmen unimpressed since they consider each act of investment a unique phenomenon, so that no particular theory can explain everything.

Dunning sets out six reasons for the shortcomings of major theories. First, the "large number of theories reflects the learning process which any new discipline has to go through in its search for dominant paradigm." Second, the world has changed to the extent that early explanations are no longer valid, which fits well with our argument for the necessity of taking different historic contexts to fully understand globalization into account.¹² Third, earlier theories did not seek answers to the same questions because some were more interested in the 'where' and others in the 'why' or 'how' of foreign production. Fourth, scholars have addressed different issues. For instance, variables which best explain the initial act of foreign direct investment may or may not be relevant in explaining increases in the degree of multinational activity. Fifth, varied approaches to explaining globalization exist. For example, some look at the dynamic of direct foreign investment and others search for the

patterns and composition of foreign owned production at a particular point of time. Finally, because of the disciplines they practice, researchers may take different perspectives on international production.

Dunning concludes "there is no such thing as a one for all explanation of international business. Firms change; so do the production and marketing conditions within which they operate." However, despite the futility of a quest for an ultimate theory, it is worthwhile to look at some of the explanations of reasons that lead corporations to develop activities outside their original home base.

Dunning, in earlier research, attempts to synthesize mainstream theories and less orthodox approaches in what he calls the "Eclectic Paradigm."¹³ However, this paradigm, as well as most other mainstream approaches, focuses on the micro-economic level (Pitelis, 1989). Even if they provide deep insights and good explanatory power, economic approaches are unsatisfactory when questions are raised from a macro-economic perspective, as Dunning himself recognizes. Other criticism of these mainstream approaches is connected with the fact that they do not deal with what economists designate as extra-economic variables.

In contrast to the approaches outlined above, critical approaches tend to be placed at a macro level, providing good explanations of broader trends and global movements but not giving much attention to the concrete ways that firms globalize, processes which cannot be detected with macro approaches. Thus, there is nothing unusual about more influential critical approaches seeking determinants of globalization in several different areas. Some seek these determinants in large global movements and historical perspectives, much like the world system approach (see So, 1990; Ross and Trachte, 1990; more critical approaches are Howard and King, 1992; and Worsley 1980). Others look to the search for monopo-

listic profits and rents due to the disproportionate market power of large TNCs (see Hymer, 1976a, b; Barnett and Muller, 1974; Biersteker, 1978; and Newfarmer, 1985; for a critical review see Jenkins, 1991). A third approach sees the determinants as deriving from a New International Division of Labor provoked by the search for global sources of cheap labor by TNCs (see Fröbel et al, 1980; Jenkins, 1984). Still others argue that globalization results from the internationalization of capital driven by the competitive nature of the capitalist mode of production (see Jenkins, 1991). Finally, some emphasize the importance of the centralization¹⁴ of capital as a process of re-ordering world capitalism, the outcome of the crisis.¹⁵

These varied ways of looking at the same phenomenon have a clear ideological basis. Critical approaches, though more or less explicitly oriented toward political purposes and ideological principles, place the necessity of identifying the winners and losers of economic changes of globalization at the center of their problematic. Mainstream approaches, on the contrary, consider the market (in its broader sense) as the most efficient allocator of resources and, even when they acknowledge the creation of winners and losers, share a naive and optimistic view of the results of market forces. According to the latter viewpoint, general welfare will increase and winners eventually will compensate the losers. Unfortunately winners usually don't compensate losers, and all externalities are not taken into account in finally assessing any increases in general welfare (Thurow, 1992). Additionally, mainstream theorists, with very few exceptions, refuse to recognize that their optimistic and naive point of view is the result of ideological bias, turning any attempt at debate between critical and mainstream approaches into a dialogue of the deaf.

Let us now turn to the characteristics of TFC and the relationship between TFC and nation-states. The notion of transnational finance capital¹⁶ does not imply that banking and industrial capital lose their identity. On the contrary, the internationalization of TFC has been achieved through a rigorous competitive process involving both TNCs and TNBs. Thus, we can assume that TNCs and TNBs share relations ranging from simple collaboration to more complex forms of coordination as well as structures of strict control dictated through networks of intercorporate relations.

The Characteristics of TNCs

In 1971 Hymer, drawing on research by Chandler and Barnard, traced the evolution of modern organizational patterns of firms. First, the old giant mercantilist organizations in international trade, which had contributed to the concentration of capital, (e.g. mining companies and plantations) gave way to small workshops, the forerunners of modern corporations. Hymer (1976b:56) termed the former organizations "dinosaurs, large in bulk, but small in brain, feeding on the lush vegetation of the new worlds (the planters and miners in America were literally *Tyrannosaurus rex*)."

The second stage of the evolution of modern business organizations began with the transition of small workshops to Marshallian family firms. Next, "the family firm, tightly controlled by a few men in close touch with all its aspects, gave way to the administrative pyramid of the corporation" by the early twentieth century, a process accompanied by the rapid expansion of businesses continent-wide through mergers (Hymer, 1976 b:58). This expansion implied a structure with field offices supervised by a head office. National corporations were sub-divided into departments with vertical control supervising the horizontal di-

vision of labor provided by the departmental structure (finance, personnel, purchasing, sales, etc.).

However, capitalist development with its disproportionate growth of demand implied that

[i]f the corporation was to grow steadily at a rapid rate, it had continuously to introduce new products ... Thus, product development and marketing replaced production as a dominant problem of business enterprise. To meet the challenge of a constantly changing market, business enterprise evolved the multi-divisional structure ... originated by General Motors and Du Pont shortly after World War I.

Corporations were decentralized into several *divisions* each concerned with one product line and organized with its own head office. At a higher level, a *general office* was created to coordinate the division and to plan for the enterprise as a whole. (Hymer, 1976b:60 emphasis in the original)

This structure gave greater flexibility to corporations so they could either enter new markets by adding new divisions, or leave by closing down divisions. They could create competing product-lines in the same industry, thereby increasing market share and giving the illusion of competition. "Most important of all, because it [had] a cortex specializing in strategy, it [could] plan on a much wider scale than before and allocate capital with more precision." (Hymer, 1976 b:61)

This structure also facilitated internationalization by the simple addition of an international division. Most large corporations that internationalized had this multi-division structure. However, the expansion of production facilities to several countries posed additional problems of coordination and control. Thus, "largely through trial and error TNCs have groped their way towards more appropriate organizational structures." (Dicken, 1992:192) Even if there is no single pattern of structural

organization, several forms of organization are adopted according to such factors as geographical dispersion, age and experience of the enterprise, the nature of operations, etc. (Dicken, 1992: chapter 7).

But going global poses additional problems of coordination; recently "some of the largest TNCs have begun to adopt sophisticated *global grid* or *global matrix* structures which are moving to a globally integrated network structure." (Dicken, 1992:193) Dicken quotes Bartlett and Ghoshal who characterize this structure as

increasingly specialized units worldwide ... linked into an integrated network of operations that ... [enables] .. them to achieve their multi-dimensional strategic objectives of efficiency, responsiveness, and innovation ... the strength of this configuration springs from its fundamental characteristics: dispersion, specialization, and interdependence. [This shift is from a] top-down organizational structure in which there is a clear vertical division of control, to a flatter, more complex, networked structure. (Dicken, 1992:193)

Reich, concerned about high value enterprises goes further in this sense, arguing that the new high value firm will be a *web* enterprise that

has no need to control vast resources, discipline armies of production workers, or impose predictable routines. Thus it need not be organized like old pyramids ... high-value enterprises *cannot* be organized this way. The three groups that give the new enterprise most of its value – problem-solvers, problem-identifiers, and strategic brokers -- need to be in direct contact with one another to continuously discover new opportunities. (Reich, 1991:87, emphasis in the original).

This web enterprise can have several shapes, evolving continuously. Reich

(1991:91-94) gives some examples, such as *independent profit centers*, *spin-in and spin-off partnerships*, *licensing*, and *pure brokering*. Finally, Reich argues this movement toward the global web implies that "there is coming to be no such organization as an 'American' (or British or French or Japanese or West German) corporation, nor any finished good called an 'American' (or British, French, Japanese, or West German) product." (Reich, 1991:110)

The Increasing Importance of TNBs

In addition to the different models of organization in banking system -- which arose from different historical patterns of banking development in the home countries (see Scott, 1985:85-159), other financial structures are becoming increasingly important.¹⁷ Klemkosky (1989), tracing the evolution of the U.S. financial system, enumerates 54 new financial products included in a number of traditional market instruments such as bonds, mortgages, financial futures and options, equity, preferred stock and mutual funds. Referring to the most significant features of this evolution, he stresses the globalization of the financial system -- which gives corporations the choice of borrowing domestically or in Euromarkets -- as well as the increasing role of financial institutions in purchasing equities.¹⁸

While not always implemented worldwide, recent U.S. trends illustrate some of the movements that other financial systems will most likely follow. In general terms it can be said that

one of the major trends of the eighties has been the increasing integration of the international capital markets, caused in part by the recent liberalization of some domestic capital markets.... The globalization of product, factor, and

financial markets promises to continue into the nineties" due mainly to trends with Japanese and European economies. (Resnick, 1989:35)¹⁹

Another recent trend that deserves mention is the integration of secondary equity markets during the 1980s. This integration occurred primarily because of "... new developments in global communications technology, deregulatory changes in national markets and a greater awareness by investors of the benefits of international portfolio diversification." (Resnick, 1989:37)

The magnitude of the changes in international financial systems is tremendous. A brief look at the foreign exchange market provides evidence. One estimate put average daily trading volume at \$425 billion in 1987, up from \$300 billion in 1986 and \$150 billion in 1984; current estimates range up to \$1 trillion per day in 1989. By comparison, the largest single day's volume on the New York Stock Exchange was \$21 billion on October 19, 1987, the day of the crash. It must be remembered that the foreign exchange market is not a specific physical place; rather it is the network of international banks that trade currencies with one another and the foreign exchange brokers and dealers who facilitate this trade ... 24 hours a day." These movements are the source of large benefits for TNBs.²⁰

The tremendous growth of world-wide financial flows results from an excess of liquidity, a major characteristic of the crisis of the 1970s which saw the end of the Bretton Woods system (Armstrong et al, 1991). The collapse of Bretton Woods was exacerbated by the 1973 oil crisis, when enormous amounts of petrodollars (Eurodollars which were originated by the crisis) could not easily find places to be used (Aglietta, 1982). Thus, TNBs have been managing this excess liquidity in a global financial system that has lost much of its capacity for regulation. This is one of the most important

features of TNBs affecting globalization. Clearly, there was nothing strange about capital flows increasingly fueling the explosion of speculative movements in stock markets and in exchange rate fluctuations, especially since these mainly occurred after the deregulation measures of the eighties (see Aglietta, 1992).

It must also be stressed that TNBs have gained enormous additional power vis-à-vis nation-states. In fact, we can say, along with Susan Stange, as quoted by Wachtel (1986), that Eurodollars "may prove to have been the most important single development of the century undermining national monetary sovereignty." In other words, the creation of money is no more the unique prerogative of the nation-state since TNCs have access to stateless money.²¹

On the other hand, since TNBs control this enormous flow of capital, they are able to influence, almost without restriction, the exchange rates of different currencies. Therefore, the autonomy of nation-states in imposing economic policies is severely limited and, in some cases, completely abolished. The case of Third World debtors which suffered the IMF imposition of structural adjustments plans demonstrates this case.

Towards a Framework for the Analysis of TFC and State Relations

Maizels (1984), drawing on the work of Labys (1980), proposed a conceptual framework for the analysis of primary commodity markets. This framework will be useful in systematizing the factors that must be considered in the analysis of TFC and nation-state relations. Maizels' conceptual framework is only a starting point since there are aspects of these relations with which he does not deal.²²

The dialectical relationships between TFC and nation-states will be analyzed based on the following considerations. First, it is necessary

to locate the analysis in a broad historical context, fully understanding the world economic situation at a particular moment as well as the socio-economic characteristics of any given country. Secondly, analysis of the nation-state only *begins* with the pragmatic features of governmental relations with TFC. Thorough analysis requires that other more general indicators of the host country be taken into consideration, including political, ideological, cultural, and religious aspects of the host country's history and situation at a particular moment, including the composition of internal capital, class struggle, ideological and religious features that influence nationalism, anti-capitalism, or further integration in the capitalist world. At any particular moment, these forces in the nation-state can take the role of TFC regulator or facilitator of TFC requirements. Third, what finally determines if a nation-state will act as a regulator or as a facilitator of TFC requirements is not based solely on internal considerations. The historical context and the dialectical relations with TFC will give final form to a nation-state's position. Finally, any analysis of the relationships between nation-states and TFC must recognize how unequal the forces are. That is, not only does TFC have different characteristics and diverse degrees of power but nation-states are also very unequal. With this general framework it is possible to examine more particular factors influencing the relationships between nation-states and TFC.

The Nation-State Versus TFC

It is possible to conceptualize a continuum country situations ranging from complete autarchy to complete openness to external influences of other nation-states and TFC. However, if absolute autarchy nowadays is an abstraction, the absolute absence of regulatory processes by nation-states is equally ab-

stracted. Therefore, all the countries in the world can be found somewhere between these two extreme positions. Consequently, it is useful to consider, abstractly, the factors which can affect the degrees of freedom of nation-states when dealing with TFC. First, the size of the country, i.e., its population and political and economic power impacts its ability to deal with TFC. For example, the Republic of China has incommensurably more power than Burkina Fasso vis-à-vis TFC. Second, a related factor is the size and growth potentiality of the internal market, especially when dealing with TFC desiring to produce goods or services for this internal market. Third, the nature and importance of the raw materials that TNCs seek or the products they wish to commercialize through marketing and distribution channels is crucial. The power of OPEC countries became painfully evident during the 1973 oil crisis. If, on the other hand, there are many alternative sources, or technical possibilities to substitute raw materials, the nation-state loses power. Fourth, another factor is the existence of alternative trade links. This factor depends on the world context, and is best illustrated by Cuba's problems when their privileged trade links vanished with the collapse of the Soviet Union. Fifth, the macroeconomic context and the prospects of the country, especially concerning financial resources and the balance of payments, affects the power of TFC vis-à-vis nation-states. TFC power increases when countries are international debtors and desperately need external loans.

Another factor is the experience and ability of nation-state representatives in dealing with foreign trade and the complex system of international legislation concerning contracts with TFC. In addition, the willingness of a nation-state -- as well as the possibility -- to join other nation-states to obtain more bargaining power is important as illustrated by OPEC. The world economic situation and prospects, as

well as tendencies toward recession or expansion also play a role. If recession prevails, nation-states might have additional power when opening up sectors to TFC. Finally, the degree of local corruption is an important factor affecting the power of nation-state. If corruption is rampant, regulation will only serve to obtain more bribes without considering the general interest of the population or the environment.

TFC Versus the Nation-State

Following our understanding of the dialectical relationships between the nation-state and TFC, all the factors mentioned above about a nation-state's degrees of freedom can also be considered from the point of view of TFC. However, there are other factors affecting nation-states that depend on TFC characteristics and types of operations. These degrees of freedom include any of the following. One variable characteristic is the amount TNBs speculate with currency exchange. As already mentioned, in an internationalized economy, nation-states are relatively helpless vis-à-vis speculative capital flows. These speculative flows can affect nation-states as the simple result of the internal logic of capital and the normal function of the markets. They can also be the result of the willingness of TNB representatives to put pressure on nation-states reluctant to accept the requirements of TFC. A clear example is TNB networks which forced large debtor countries to accept the IMF imposition of adjustment plans. Small and Third World countries are infinitely more susceptible to being forced to accept such adjustment plans than the U.S., despite the importance of the debt in absolute or relative terms.

Second, the role of transnational trading corporations and TNBs in using speculative strategies in futures and spot markets is also important. Third, the power of TNBs is not only visible when dealing with speculative

movements. Thus the Paribas bank in France succeeded in transferring most of its assets to other countries to avoid nationalization during the first socialist Mitterrand government in 1981; another example is the 1975/76 British attempt at "deficit financing ... blocked by the financial institutions in the money markets," according to Tomlinson as quoted by Radice (1984). A fourth characteristic is the nature of technologies that TNCs and TNBs provide to nation-states in direct investments and in licensing their use. The more sophisticated and complex the technology, the greater the power of TFC.

Fifth, the control of marketing and distribution channels, i.e. the oligopolistic characteristic of some world markets, also factors into the relative freedom of the nation-state vis-à-vis TNB. We have already mentioned the oligopolistic control of some TNCs over some primary products. Even after nationalization, the power of the nation-state vis-à-vis TFC may not increase because of this control. This also means that Vernon's (1971) concept of the "obsolescent bargain," according to which the power of the nation-state can increase once direct investment is made, can be subverted by oligopolistic control of marketing and distribution channels.

Sixth, the influence of the original home countries of transnational firms must be considered. Even though it is increasingly difficult to identify the origin of a product or the real nationality of a TNC as Reich (1991) points out, there is substantial evidence that country-specific characteristics influence TFC strategies and result, sometimes, in substantial benefits to the original home countries of the TNCs.²³ Finally, most of the new forms of internationalization described by Reich's designation of *global web*, increase the flexibility and the mobility of TFC. Since much of the business of these global webs is related to problem-solving, engineering, auditing, and so

on, and since the efficiency and quality of this kind of activity depends on the know-how of the global webs, it is likely that the power of the nation-state vis-à-vis this type of firm will be marginal.

The Globalization of Agricultural Related Activities

Even in its most advanced forms, industrial agriculture has many differences when compared to industry. These specificities are related to the biological character of agricultural production and the need to use a peculiar means of production, land. Furthermore, food commodities are subject to higher levels of regulation by nation-states. Until a GATT agreement is achieved which would interconnect the economic sphere with hygienic and sanitary regulations, the higher regulation of food will continue to be highly visible in international trade, since each nation-state does not want to lose control, causing indirect economic effects.²⁴

Another feature pertaining essentially to Third World countries is the level of intervention of international agencies with loans and grants, technical assistance, and imposing models of development emphasizing export production of agricultural commodities (Bergeron, 1992). This intervention sometimes may only have an agricultural dimension but, in other cases, will be part of a package carried out by the IMF or the World Bank as a structural adjustment plan.

An understanding of the globalization of agricultural related activities can only be fully comprehended when it is placed within the more general context of the development of capitalism. The laws of motion of capitalism, that is the necessity to continuously expand the accumulation and concentration of capital, and the growth of the world market (Magdoff, 1976) has wrought profound modifications in

the agri-food sector, initially in the advanced societies, and increasingly in Third World countries.

Continuous capitalist expansion faced obstacles in penetrating agriculture, mainly on account of the specificities already mentioned, but also because of the persistence of non-capitalist forms of production, particularly the family farm. However, it seems non-controversial today that capitalist development in agriculture does not require pervasive uniformity in agricultural production relations. Thus it is not necessary to eliminate the family farm to achieve the integration of agriculture into the capitalist sphere. Through the increasing expansion of capitalist relations of production either directly in agricultural activities, or by surrounding agricultural production with capitalist links, thereby diminishing the importance of the non-specific capitalist forms, capitalism has become the norm in the agricultural sector of advanced industrial societies. While the family farm can subsist and maintain its social and economic importance, it increasingly depends on industrial inputs as well as on capitalist forms of marketing and distribution of its products.

This increasing dependence on industrial inputs, which Goodman et al. (1987) designate "appropriationism,"²⁵ promotes higher levels of productivity pushing agricultural producers onto a "technological treadmill" (Cochrane, 1979) by forcing them to adopt new innovations. This movement was fueled by public and private research and development as well as by extension apparatuses in the industrialized countries. It eventually spread to the Third World, initially with the objective of increasing agriculture productivity to feed starving populations in the form of the Green Revolution. Despite the controversy about the unequal socioeconomic consequences, this movement was supported by international agencies and by U.S. policy.²⁶

On the other hand, industrial capital struggles to find substitutes for agricultural products either to avoid dependence on agricultural raw materials or to try to find new business opportunities in what is designated by Goodman et al. (1987) as "substitutionism."²⁷ Substitutionism creates new conditions for the expansion of global sourcing since industrial capital is most interested in the cheapest source of elementary components that can be used in food processing.²⁸ However, substitutionism also diminishes the portions of the commodity chains left to family farms.

Capitalist integration is also achieved through forms of production under contract, leaving to the family farm only the parts of the commodity chain that capitalists are less interested in exploiting.²⁹ Family farmers are left with these pieces for several reasons. These production areas tend to be more risky (e.g. climatic or sanitary), the rotation of capital is too long, and/or family labor can provide necessary skills as well as a form of labor less concerned about timetables. Family labor is better at adjusting to the rhythm of biological production as well as being lower cost than hired labor.

Clearly, appropriationism and substitutionism are useful concepts in understanding the dialectical relationships between TFC and the nation-state as well as the new competitive relations between firms. These concepts can best be seen in the damage that extreme substitutionist strategies create for millions of workers involved in the production of the substituted items as well as for firms producing these items.

The capitalist development of agriculture and agri-food industries has contributed to the spread of mass production of food as evidenced by a series of commodity chains that are increasingly being globalized. These chains constitute what Friedmann (1991) calls food complexes. This concept is important in

establishing the connection to the globalization process.

[S]ince agri-food complexes are centered on transnational, *industrial* capital, the splintering of production within national economies -- that is, intra-sectoral integration across national boundaries - is a phenomenon increasingly general to all commodity chains, and to all nations with sectors linked into them (Friedmann, 1991:84, emphasis in the original).

Simultaneously, from the demand side, distinctive patterns of food consumption have emerged which are related to income distribution and health concerns (Friedland, 1990). Therefore, the food regimes identified by Friedmann (1991) are changing.

Thus, it is obvious that industrial capital, through appropriationism and substitutionism, is the driving force of capitalist development in agriculture and in the globalization of agriculturally related activities. Clearly, these forces shape the characteristics of agri-food complexes and, to a lesser extent, the food regime.

While firms might be the driving force behind the processes identified above, this in no way diminishes the importance of other factors. On the contrary, it is impossible to overlook nation-state intervention concerning capitalist agricultural development or the specific influence of U.S. policy concerning the spread of agri-food complexes.³⁰ U.S. foreign trade policies included aid programs such as the Marshall plan after the second world war, aid programs directed at Third World countries (e.g. Public Law 480 which has been examined by Morgan, 1979; Tuhiana, 1989; Berlan, 1991; and Kenney et al, 1991), as well as the use of political instruments to support U.S.-based interests in agriculture production abroad, including political intervention in foreign countries (e.g. the case of the United Fruit Company and Guatemala).

TFC and Agriculture

As already mentioned TFC may either be involved in all phases of agricultural commodity chains, from production to the final consumer, or it may be present only in some phases. In most cases TFC is present upstream of production, providing inputs, such as chemical fertilizers, pesticides and herbicides, agriculture machinery, technical assistance, high yield hybrid seeds, animal food; and financing structural investments in irrigation and drainage projects, or plantations.³¹ However, TFC can also be found downstream from agriculture in processing facilities for food and beverages,³² as well as in controlling important marketing and distribution channels for primary commodities (see the figures provided by Clairmonte and Cavanagh, 1983: footnote 4).

Finally, TFC is also directly present in some agriculture production activities but to a much lesser degree. In contrast to the overwhelming presence of TFC in upstream and downstream phases of agricultural commodity chains, most effective agriculture production is in the hands of national private or public capital or non-capitalist forms of production. This applies not only to the commodities produced for internal markets but to those that have become globalized, including cereal grains, oil seeds, dairy production, beef, lamb, pork and poultry, fruits and vegetables, wine and forest production.

TFC is rarely directly interested in agriculture production. In fact, even the large TNCs tropical plantations have changed.³³ However, while TFC can still be found in rubber, palm and banana plantations, it is present to a lesser degree in coffee, cocoa, pineapple and tea plantations as well as wine, fruits and vegetables, oil seeds, cotton, livestock and forest production for lumber or cellulose. Thus it can be assumed that it is mainly through its presence in upstream and downstream phases of agri-

cultural production that TFC controls and influences the globalization process.

The evolution of global agricultural commodities has been uneven since World War II, because it has depended upon world demand. Due to the success of industrial inputs in starting the agricultural technological treadmill and improving agriculture productivity, since the 1970s production has been well above world demand. Here demand is used in the economic sense which refers not to the real needs of the world's population but only that which the world population can afford. Thus, it has not been unusual that, following the laws of capitalism, there is a tendency to extensify agricultural production, setting aside agricultural land in the U.S., EC, and other advanced societies.³⁴ In fact, chemical fertilizers, pesticides, and herbicides are increasingly under attack by environmentalists, and there is pressure for more extensive forms of production deriving from the conjunctural response to the world demand situation, as well as from those who now argue for a different technical model of agriculture production, sustainable agriculture.³⁵ Tractors and mechanical equipment are also affected by this tendency toward extensification and sustainable agriculture. Być (1989), for example, reports on the stagnation of tractors and mechanical equipment in Europe since the beginning of the 1970s. These developments have provided a push factor in which the largest TNCs in the chemical sector have begun to relocate themselves to other locations in the commodity chains, mainly through substitutionism, betting heavily on the development of biotechnology (Busch et al, 1991).

Two upstream sectors relating to agriculture have escaped the crisis. These include seed producers such as Pioneer Hi-Bred, DeKalb Agresearch, Lubrizol, Monsanto, and Du Pont (Rastoin, 1989, 1991) and animal food producers effectively controlled in large

part by TNCs like ConAgra, Cargill, Ferruzzi, Tyson, and BP Nutrition after its take-over of Ralston-Purina (see Friedmann, 1991; Heffernan and Constance, 1994; Rastoin, 1989). Downstream, TFC is especially important in trading grains and oil seeds, and in processing and trading beef, pork, and poultry products (Cargill, ConAgra, Tyson, Mitsubishi, C. Itoh, Mitsui, Ajinomoto, Nippon Meat Packers). TFC is also gaining importance by increasingly establishing contracts with producers (Heffernan and Constance, 1994).

In conjunction with production changes, there have been changes in the consumption patterns of the high income strata of advanced industrial societies, producing an increased demand for fresh fruits and vegetables in which TFC has played an important role (Friedland, 1990; 1991a). This involves coordinating production on a world-wide basis to guarantee a continuous flow of these products every day of the year, providing technical assistance to production which largely remains in national hands, supplying marketing and distribution channels, and, finally, increasing involvement at the retail level. (See Wrigley, 1991) Marsden et al (1994:137) argue that "after a decade of considerable growth in concentration and internal reorganization, the European food retailing sector is likely to face the need to reinforce its regulatory role over the rest of the food system.") The recent emergence and development of centralized purchasing by large retail chains connected with large hypermarkets, which are much larger than ordinary supermarkets, is giving new shape to this downstream sector of agriculture production.³⁶

It must be stressed that the power of large retailers not only affects the fruit and vegetable sector but all foods. The Grenoble team led by Byé, Mollard, and Mounier, found evidence during the 1970s of the increasing power of

large retail chains exhibited through price rebates and by requiring agri-industries to produce non-branded products to be sold by these retail chains under generic designations. More recently the power of these newcomers was demonstrated after Portugal became a member of the EC. These large chains not only used the strategies mentioned above but required some agri-industries wanting access to these hypermarkets to "donate" goods such as automobiles to be used for promotional activities.³⁷

Counor et al (1985:102) consider this phenomenon the "countervailing power of food distribution." Perez (1989) argues that the growing power of distribution has been a major motive for the agri-food industry's strategy based on the following features. First, firms have increased concentration, i.e., trying to increase their share of the market by increasing production and by merging or taking over other units. Secondly, firms are developing brand name policies which implies innovating marketing techniques.

In brief, the development of TFC is achieved through a highly competitive environment strongly determined by the international context of stagnant demand. These broad tendencies of TFC involved with agriculture provide an introductory background to extend and deepen the analysis of the globalization process. In fact, once established that the unit of analysis is TFC, composed of TNCs and TNBs, it becomes necessary to empirically analyze both how TFC works and its relationships with national labor and capital, and, especially, nation-states. Since most features of the globalization process are so recent, little empirical work of this nature exists.

Findings which concern older TNCs that may already have been the subject of study must be interpreted with the following in mind. The strategies of TFC are dynamic and thus can change in time and space. In addition, TNCs can change by abandoning certain

activities and engaging in others. They can be absorbed by other TNCs or can take over other operations.³⁸ In other words, since such situations are dynamically changing, any analysis must be updated to fully appreciate the dimension of change. This is a large, ambitious, and difficult research agenda since, unlike nation-based analysis, access to information is so difficult that it practically prevents any attempts at quantitative analysis.³⁹

The Nation-state and TFC in Agricultural Related Activities

One main feature of the recent tendencies best illustrated by the term "merger mania" is the increasing concentration of capital.⁴⁰ Although there is a large number of small firms involved in the globalization of agricultural or food products, relatively few, very large conglomerates control most business in sectors such as grains, animal feed, meat and dairy, and processed food. Furthermore, agriculture and food presently represent only a small part of the activity of these TNCs because of diversification strategies that were the main force behind merger mania,⁴¹ which were also fueled by deregulation policies (Heffernan and Constance, 1994).

The increasing concentration of capital in large conglomerates cannot be denied. They not only own a large number of operations in different subsectors of the agri-food industry, but also have connections (via joint ventures) with other firms located in many different countries.⁴² Heffernan and Constance (1994) argue that "the evidence supported the hypothesis that a global agro/food complex is being created by TNCs based on global sourcing of input sites and output markets." They also argue that TNCs have a more global vision of food system coordination than any given nation-state and are the active actors, whereas the nation-states are much more passive 'receivers' of commodities produced

through global production systems. It is the ability of the TNC to gather and utilize information that gives it primacy as the global actor. Information dictates where different kinds of production will occur and by whom.

Considering the conditions that shape TFC/nation-state relationships, it will be useful to establish a qualitative typology for further analysis. Because of the difficulties of gathering hard data and the existence of relatively few empirical studies of firms, this typology can only represent a first methodological attempt, which will require further refinement.

Let us conceptualize TFC/nation-state relations in a four-fold table or matrix (see Figure 1).⁴³ On the part of the TFC, the key elements are its ability to either *adapt to* the regulations of the nation-state (cells A and C) or *impose* its will on the nation-state (cells B and D). As for the nation-state, it can either *facilitate* the activity of TFC (cells A and B), or *regulate* and control the TNC (cells C and D).

This fourfold table must be understood as reflecting only one moment in a dynamic situation. That is, at a particular moment, the relations between a TNC and a host nation-state could be similar to situation C, but could evolve to conditions similar to A, B, or D.

The D case, which illustrates the case between a more regulating host nation-state and a more imposing TNC, is unstable and will probably continue for only relatively short periods of time. That is, the TNC will either accept the regulatory power of the host nation-state, tending to situation C, or prefer to leave the country or choose not to invest there. In addition, the host nation-state could opt to nationalize the TNC's operations. This does not consider the rare situation where nation-states simply do not want contact with TNCs, or, the more common case where TNCs do not want to risk installing operations in a particular country.

Using this typology of the relationships between nation-states and TNCs, future research could focus on finding empirical cases that can be fitted into this matrix. If it is possible to include a significant number of countries and TNCs in the table, the empirical evidence could be helpful to test theories of the state and theories about the impact of TNCs on host countries.

However, one important methodological question remains. What is the dividing line between a nation-state acting more like a regulator than as a facilitator of TFC requirements? And what can be classified as more adapting or more imposing behavior on the part of a

line. This minimum common denominator, however, can best be established empirically; only empirical observation can determine whether a TNC is imposing its requirements on a nation-state and resisting its legitimate (i.e. those in accord with the constitutional laws of the host-country) regulatory systems, or if a nation-state is acting more as a facilitator than as a regulator.⁴⁵

It is much easier to obtain information on nation-states than from TNCs; however, business magazines periodically establish lists of countries ranked by their attractiveness to TFC, thereby providing a qualitative indicator of capital's view of particular nation-states.

TNC⁴⁴

		+ Adapting	+ Imposing
		A	B
Nation - State	+ Facilitator	C	D
	+ Regulator		

Figure 1.

TNC? Furthermore, what are the implications of the same regulatory measures if installed by the U.S. or the government of Malta, when confronting a major TNC such as BP?

It is impossible to establish the dividing line with any precision. Neither nation-states nor TNCs have rigid positions but behave along a continuum, ranging from some degree of rigid regulatory positions to more facilitating ones for nation-states and from more imposing to more adapting behaviors for TNCs. In other words, TFC and nation-states establish dialectical and dynamic relationships. However, even without a precise dividing line there has to be a minimum common denominator that allows placement of nation-states or TNCs on one or the other side of this dividing

Such reports can help us understand the position of TNCs when dealing with particular states.

Let us now turn to illustrating how the typology depicted in Figure 1 might be used. We will use three empirical cases involving Portugal as the host country and three different TNCs, all of which are working in the agri-food sector there; one deals with dairy production, the second with cellulose, and the third with the production of fresh fruits and vegetables. We will also use case material from the literature.

Nestlé has been linked to dairy production in Portugal since the 1930s. During these six decades its relationship with the Portuguese state has had its ups and downs, deriving both

from different Nestlé strategies and from changes in the Portuguese nation-state (the most important of which was the fall of the dictatorship after the 1974 revolution).

Nestlé's presence in Portugal is a story of adaptation to changing state dairy policies.⁴⁶ During the 1940s, the dairy industry was a private industry but was granted monopsonic sourcing power in established areas of influence. In the 1950s, this power was taken away and, in certain areas, the corporative organization was given charge of collecting operations and subsequent distribution of raw milk to the private dairy industry or to publicly owned pasteurizing facilities which supplied the main population centers with milk. At the end of the 1960s, this "corporatization" of the first segment of the milk chain was extended to the most important dairy areas of the country through a package of legislative measures that separated the private dairy industry from contact with dairy producers. That is, the corporative organization was assigned monopsonic power for collecting raw milk. After the 1974 revolution the corporative organization was dismantled and the cooperative organizations captured this privilege; besides providing almost all of the supply of liquid milk, the cooperatives also competed with private industry for other dairy products, mainly butter and cheese. Finally, after Portugal joined the EC in 1986, this monopsony on collecting raw milk was legally abandoned.

Through this long period of change, Nestlé, even though a very powerful TNC, adapted to the regulatory processes of the Portuguese nation-state as long as the regulations did not affect the TNC's overall operations. Had Nestlé been considering investment in Portugal when some of these changes occurred, Nestlé might have behaved differently. What really matters is that, since Portuguese regulations did not endanger Nestlé, it did not object to changing regulations.⁴⁷ This example

illustrates a long relationship between the Portuguese state and Nestlé which can be placed in cell C of the matrix in Figure 1; here the nation-state acts as a regulator and the TNC adapts to the regulatory impositions of the nation-state even while trying to influence the outcomes.

The second example began in the 1960s when foreign capital (Scandinavian and British) joined Portuguese capital in choosing the country to produce cellulose. The two outside TNCs were taking advantage of an attempt by Portuguese authorities to open the economy to foreign capital, mainly from countries belonging to the European Free Trade Agreement (EFTA).⁴⁸ In addition, Portugal offered a very good climate for these TNCs to invest. It had an important forestry base due to reforestation policies initiated in the 1930s, and excellent climatic conditions to rapidly grow pine varieties and especially eucalyptus (in which a field is ready to cut after 8-9 years). There was also a cheap labor force available, with the dictatorship repressing any kind of labor struggles in the 1960s. Furthermore, the TNCs could have access to internal sources of capital.

Contrary to the Nestlé case, the cellulose TNCs did not have to adapt to a high level of regulatory constraint. The result was a very rapid expansion of planting, involving TNC owned and rented land, and private plantations being brought under contract to the TNCs. This movement was fueled by government policies making investments in forestry very attractive. This trend was so substantial that cellulose exports became one of the most important items in Portugal's balance of payments.

Only after environmental and other grass-root movements -- concerned with the environment (cellulose production is a major source of pollution) and the socio-economic impact of a monocultural forestry system --

began to question the explosion of planting were the first significant regulatory measures adopted. The pace of planting also slowed; however, this was due mostly to an international market crisis in the sector, in addition to the opposition movements.

The cellulose example shows the nation-state acting in the role of facilitator. Even when environmental and grass-roots movements began to grow, the government was always careful not to harm the cellulose industry.⁴⁹ And, even when regulatory measures were enforced, the lack of expertise and laboratory facilities necessary to evaluate environmental damage gave the TNCs a good basis for legal challenge. Recently, a court decision acquitted the Scandinavian TNC from paying a fine on the grounds that a sole analysis and the method used by the official laboratory was not appropriate (see *Expresso*, May 22, 1993). This example can be placed in cell B in the matrix in Figure 1, even if the TNCs have more recently been moving toward cell A while the nation-state has been initiating moves towards cell C.

The third example is more recent, taking place after the Portuguese economy was opened to the 12 EC member countries according to the requirements of Portugal's 1986 entry into the EC. A French firm decided to invest in southern Portugal to produce fruit and vegetables for export to northern European countries. Production would take advantage of the climatic conditions to obtain high prices for early season produce. The development took advantage of an irrigation system provided by the state as well as the abundant and underemployed labor force in the neighborhood willing to be employed at Portuguese agricultural wage levels, largely below the European average.

The French firm also took advantage of substantial loans and grants to help Portuguese agriculture modernize, managing to obtain

considerable financial incentives from EC sources with the agreement of the Portuguese authorities. This example fits cell B of our typology. Another example in the industrial area which follows this pattern is the joint project of Ford/Volkswagen to manufacture vans or minivans in Portugal, an undertaking which received about 750 million ECU mainly from EC incentives.⁵⁰

Examples that fit well in cell A can be found in the literature concerning Singapore or the Export Promotion Zones where "TNC affiliates in the protected offshore sites indeed enjoy a modern form of colonial trading privileges" (Gordon, 1988:57). This occurs when peripheral states, to attract foreign capital, voluntarily adopt a system of rules and agreements extremely favorable to TNCs. Thereby TNCs do not need to impose any particular measures, in a process that Schaeffer (1993) designates "indifferent imperialism."⁵¹

Conclusions

The overview of TNCs and TNBs and the consideration of the dynamic of the dialectical relations between TFC and the nation-state provides clear evidence that the world economy of the last three decades of the 20th century has seen a shift toward globalization. This global shift raises new theoretical questions about the nature of the state as well as about the prerogatives and imperatives of state action in an era of transnational capitalism.

More specifically, the growth of international trade and the rapid internationalization of increasingly higher volumes of financial flows has been accompanied by substantial changes in the internal structures of firms looking for new strategies based in higher levels of flexibility and mobility in a highly competitive context. All these developments have increased the ability of TFC to escape regulation by nation-states; indeed, it has been

noted that historical prerogatives of the nation-state like the creation of money (Eurodollars) has also been assumed by supranational entities like TNBs escaping the control of the U.S. Federal Reserve.⁵²

At the agri-food level, globalization means that global sourcing of raw materials has become increasingly important to agri-food industries as well as final products like exotic produce or fresh fruits and vegetables to sell out-of-season in rich markets. This phenomena implies an extremely sophisticated process of coordination, involving time and space, which constitutes one of the main features of the globalization process.

On the other hand, through a highly competitive process involving mergers, take-overs and simple acquisitions by TNCs, agri-food and agri-industrial capital is concentrating capital in a few corporations doing large volumes of business. Thus, TNCs are becoming increasingly important in promoting homogeneity not only of consumption patterns but also of technical procedures and input use at the levels of agricultural production and distribution.

The increasing power and flexibility of TNCs dealing with these products also indicates that nation-states are losing degrees of freedom in the establishment of national agri-food policies. Thus it is not strange that the increasing importance of TFC in shaping production and consumption patterns, besides the exigency of incredible efforts of coordination, demands the establishment of certain standardization of units of measure, standards, and controls. In the process, it is assuming nation-state prerogatives (other than the supranational creation of money like the retailer regulation described by Marsden in this volume) and suggesting the emergence of a transnational state (Friedland, 1991b).

Notes

1. This paper is a result of research conducted at the University of California, Santa Cruz which has been financed by the INVOTAN program of scholarships and by the Luso American Foundation for Development (FLAD). I wish to thank William Friedland for his comments and efforts to improve my English.

2. From 1950 to 1990 world exports have grown from 60,700 to 3,415,300 million US dollars. Using the volume index of exports (1980=100), between 1960 and 1990 the developed market economies grew from 24 to 153 while developing economies had a slower growth from 45 to 138. These figures do not show the uneven growth among developing countries (United Nations, 1991).

3. TNCs are something different from MNEs. The latter is used to describe an enterprise with multidomestic or nationally responsive strategies while the former concerns enterprises which develop globally integrated competitive strategies, seeking not only economies of scale in production but also economies of scope and coordination (Dicken, 1992:143-144; see also Bonanno, 1994).

4. For instance, in 1980, TNCs controlled between 80 and 90 percent of the marketing channels in wheat, coffee, corn, cocoa, pineapples, forest products, cotton, tobacco, jute, bauxite, copper and iron ore, and around 70-80 percent of tea, bananas, natural rubber, crude petroleum, and tin (Clairmonte and Cavanagh, 1983:456). Even more telling, six Japanese companies (the largest Sogo Shosha) accounted for 4 percent of world trade, according to Yoshino and Lipson quoted by Jussaume (1994).

5. "Daily foreign exchange flows amount to around one *trillion* dollars and far outweigh the sums employed for international purchase of goods and services or investments in overseas plants. Indeed, by the late 1980s more than 90 percent of this trading in the world's foreign exchange was unrelated to trade or capital investment" (Kennedy, 1993:51, emphasis in the original).

6. As Levitt (1991:187) put it, "[technology] has proletarianized communication, transport, and travel. It has made isolated places and impover-

ished peoples eager for modernity's allurements. Almost everyone everywhere wants all the things they have heard about, seen, or experienced via the new technologies."

7. Fonte (1991), concerned with symbolic aspects of food, refers to the need to overcome the differentiation between socioeconomic and socioanthropologic analysis.

8. One important feature of this development is the demographic explosion in the poorer parts of the world and the demographic stabilization or decline in the richest (Kennedy, 1993:21-46).

9. McMichael and Myhre (1991:99) stress that "... there is a growing tendency for the state to act more as a facilitator of the requirements of global capital...." Indeed, in a process known as "uneven bargaining power" (Reich, 1991: 295-298) TNCs pit nation-states or regions against one another in order to attract new plants to their territories.

A Mexican case study about the shift toward export-oriented production of melons and watermelons provides a good illustration of ideological, cultural and religious forces.

A dramatic transformation of the local view of nature occurred, bringing about a shift from behaviours that value rain, the soil, and clean water to a fetishism of these 'green' crop commodities. This process stimulated the 'manufacture' of local meanings such as the regional celebration of the melon and the yearly masses to worship watermelon. (Arce and Marsden, 1992)

10. Muslim fundamentalism is not the sole example. Even in such a bastion of TNCs as Japan, it is well known that ideological and cultural features of the Japanese people make difficult the acceptance of a large number of foreign commodities.

At another level, Whatmore (forthcoming) reminds us that one of the criticisms of the globalization literature "concerns the failure to adequately theorise the spatiality of globalization as a socially contested, rather than logical, process."

11. As Schumpeter (1952:110) put it,

Was not the observed performance [of capitalist achievement] due to that stream of inventions that revolutionized the technique of production

rather than to the businessman's hunt for profits? The answer is in the negative. The carrying effect of those technological novelties was of the essence of that hunt. And even the inventing itself, ...was a function of the capitalist process which is responsible for the mental habits that will produce invention. It is therefore quite wrong - and also un-Marxian - to say, as so many economists do, that capitalist enterprise was one, and technological progress a second, distinct factor in the observed development of output; they were essentially one and the same thing or, as we may also put it, the former was the propelling force of the latter.

12. An excellent example which illustrates this need is the analysis of Detroit automakers by Ross and Trachte (1990), who recognize the validity of the approach of Baran, Sweezy and O'Connor, based on the monopoly theory, through 1970.

But through the 1970s and 1980s the global auto industry and its Detroit center were restructured. One part of this process was broadly anticipated by all models of modern capitalism - the drastic substitution of machines for labor. But one of the central aspects of the global restructuring of the auto industry - the widespread practice of global sourcing and the employment of low cost, low - wage export platforms - was new. (Ross and Trachte, 1990:118)

13. According to this paradigm (Dunning 1988:26), a firm will engage in foreign value-added activities if and when the following conditions are satisfied:

[1] It possesses net ownership-specific (*O*) advantages vis-à-vis firms of other nationalities in serving particular markets.

[2] Assuming condition (1) is satisfied, it must be more beneficial to the enterprise possessing these advantages to use them (or their output) itself rather than to sell or lease them to foreign firms: this it does through an extension of its existing value added chains or the adding of new ones. These advantages are called internalization (*I*) advantages.

[3] Assuming conditions (1) and (2) are satisfied, it must be in the global interests of the enterprise to utilize these advantages in

conjunction with at least some factor inputs (including natural resources) outside its home country; otherwise foreign markets would be served entirely by exports and domestic markets by domestic production. These advantages are termed the locational (*L*) advantages of countries.

14. Centralization is, in Marx's terms, the "concentration of capitals already formed ... transformation of many small into few large capitals" (Andreff, 1984).

15. "Competition leads to the centralization of capital which in turn remakes competition on a larger scale: in capitalism today, this scale is worldwide from the very outset, in tune with transnational finance capital itself" (Andreff, 1984:77-78; see also Andreff, 1982).

16. Understood as

structuring of capital in manufacturing, commerce, and banking such that there are relatively few obstacles to its free movement from one sector to another. Finance capital involves the existence of an extensive intercorporate network of capital, commercial, and personal relations in which an inner circle of finance capitalists is the embodiment of this network of intercorporate relations (Scott 1985:260).

17. Klemkosky (1989) demonstrates the increasing importance of other financial institutions vis-à-vis commercial banks in the US. He lists 13 major institutions in 1988 in a decreasing order of importance: private pension funds, savings and loans, life insurance companies, mutual funds, finance companies, property liability companies, municipal bond funds, mutual saving banks, credit unions, money market funds, mortgage banks, and foundations and endowments. From 1980 to 1988 commercial banks and saving and loans saw a significant reduction in their share of the total financial system while the share of private pension funds, mutual funds, and municipal bonds increased.

18. Aglietta (1992:61) considers the increasing power of investment financial institutions (investisseurs institutionnels) as the most important financial change.

19. In preparation for the European single market "... some 400 banks and finance firms across Europe have merged, taken shares in one another, or cooked up joint marketing ventures to sell stocks, mutual funds, insurance, and other financial instruments." (Reimer et al, 1988, as cited in Resnick, 1989:35)

20. "... in 1987, Bankers Trust earned \$593 million from currency trading, Citicorp earned \$453 million, and Chase Manhattan showed \$232 million..." (Resnick, 1989:40).

21. Creation (or destruction) of money according to Nobel Prize winner Maurice Allais (1993) is one of the main reasons for instability in financial systems.

22. First, Maizels is concerned only with primary commodity markets; second, his approach is focused on relations between TNCs and Third World countries; third, the role of TNBs is not considered; fourth, his framework applies to very large TNCs investing heavily in production facilities and does not consider other, more flexible, TNCs of the web type; finally, Maizel's analysis focuses on the bargaining power of TNCs and governments.

23. Country-specific characteristics are also evident at the financial level. In fact, as Thurow (1992:43) stresses:

There also is a major mystery in the world's capital markets. Among major countries where there was no country risk, the predicted equalization of capital costs did not occur in the 1980's, despite the existence of what everyone took to be a world capital market. Contrary to what theory would have predicted, local savings rates and local investments were highly correlated -- high local savings led to high local investments.

Country-specific benefits include the concept of competitive advantage of nations (Porter, 1991) or the idea of entrepreneurial culture as a country specific advantage (Casson referenced in Dunning, 1990). "I believe that it is the dynamic interplay between the competitive advantages of countries and the activities of international firms which is likely to be the focus of much of the theoretical work on

foreign production over the next decade" (Dunning, 1990:28).

24. There are various examples of barriers to foreign competition being imposed through disguised technical sanitary regulations. For instance, some time after the British joined the EEC, Britain avoided importing French dairy products although this strategy was ultimately defeated by EEC authorities. Similarly Cruz et al. (1991) report on the enforcement of U.S. sanitary controls on Mexican fruits and vegetables during the seasons when these imports hurt U.S. producers.

25. Appropriationism expresses

the transformation of discrete activities into sectors of agri-industrial accumulation and their reincorporation into agriculture as produced inputs.... [That is,] within changing limits given by technical progress, industrial capitals have taken over *discrete* elements of the rural labor and production processes -- the horse by the tractor, manure by synthetic chemicals, indigenous plant varieties by commercial hybrids Historically, appropriationism explains the origins of the agri-industrial inputs sector or 'complex', represented by such capitals as International Harvester, BASF, Pioneer Hi-Bred, and ICI (Goodman, 1991:40, emphasis in the original).

26. More recently, U.S. Agricultural Secretary John Block argued that:

The push by some developing countries to become more self-sufficient in food may be reminiscent of a bygone era. These countries could save money by importing more food from the United States [T]he U.S. has used the World Bank to back up this policy, going so far as making the dismantling of farmer support programmes a condition for loans, as in the case of Morocco's support for their domestic cereal producers. (Ritchie, 1987:5 cited by Schaeffer, 1993).

27. Examples include synthetic fiber for natural fiber; chemical dyes replacing indigo production; industrial sweeteners from cereal processing or

chemical synthesis substituting for sugar; margarine substituting for butter, or

... the recent expansion of 'fabricated foods' based on new separation techniques of product fractioning ... [that] ... break field crops down into generic intermediate food ingredients (carbohydrates, proteins, fats) for use in downstream food manufacturing ... this recent tendency for substitutionism has had an important effect in undermining long-established agri-food chains. (Goodman, 1991: 38-39).

28. A good example is the use of cassava and citrus pulp (left over after citrus juice processing) as a substitute for grains in animal food. This argument, however, must be nuanced. In fact, the failure of Single Cell Proteins to penetrate the major food and feed markets is not due simple to non-competitive costs as Byé and Mounier (1984, quoted by Goodman et al, 1987:141) argue. Also at work is the "institutionalized drag" of existing food producers who have vested interest in maintaining existing food production processes.

29. As we have seen above, one of the characteristics of the new web firm is the primary place given to global sourcing and sub-contracting. In agriculture this movement corresponds to the increasing importance of production under contract (see Heffernan and Constance, 1994; and Cook, 1994).

30. State intervention in agriculture is a common characteristic shared by all nation-states. In particular, there is R&D, extension programs, and diverse policies providing incentives to capitalist development, as well as repression of workers movements or peasants struggling to end latifundist systems.

31. Examples abound in the well-known names of Bayer, BASF, BP, Hoescht, Du Pont, Monsanto, Pioneer Hi-Bred, Ciba-Geigy, Sandoz, ICI, Rhône-Poulenc, John Deere, International Harvester, Fiat, Renault, Caterpillar, etc. (Heffernan and Constance, 1994), as well as the financing of agricultural development projects by the World Bank or TNBs.

32. Nestlé, Philip Morris, Unilever, ConAgra, Kirin Brewery, RJR Nabisco, IBP, Anheuser-Busch, PepsiCo and Coca-Cola are the ten most important downstream processors, according to

Heffernan and Constance (1994); see also Rastoin and Allaya (1990), who based their analysis on other criteria, and provided a different ranking.

33. As Llambí says:

... [T]he transnational corporations developed a new strategy aimed to concentrate capital in the final links of the agri-industrial chain, and to increase vertical integration through various forms of contract arrangements with 'independent' growers and central processing and distribution units... The provision of credit to planters, the introduction of productive technical packages and an oligopolistic control of both the domestic and international markets provide these corporations with great leverage to control the productive and exchange conditions within exporting countries. (Llambi, 1994; see also Girvan, 1987).

34. Extensification pursues less output per acre of land and per hour with less use of chemicals inputs and with less use of tractors and mechanical equipment.

35. According to Rastoin (1989:82), in 1988 the world market in pesticides had, for the first time, a regression (-1.2%). He considers the tendencies will be to decrease the use of insecticides and increase the use of herbicides in addition to more recent products such as nematicides and plant growth regulators.

36. The standardization of varieties and quality patterns required by these centralized purchasers has important effects on traditional local production of fruit and vegetables, thus contributing to globalization through the increasing use of global sources (Moreira, 1991).

37. These practices were reported in the press and were also confirmed by a dairy industry source.

38. Hoffman refers to this "merger mania" as an "avalanche of mergers" that "no one knows where it will end, and no end is in sight." He adds,

As if merger mania in the domestic economy were not enough, there has been a virtual invasion of foreign investment in the U.S. food manufacturing industry, especially in the last decade ... such acquisitions exceed those made by foreign multinational corporations in most

other areas of U. S. manufacturing. Likewise, U.S. food companies have larger foreign holdings than are found in all manufacturing. These developments are internationalizing food manufacturing despite the relatively small volume of international trade in processed food products. (Hoffman, 1983: xvii)

39. Heffernan and Constance (1994) stress that "[f]irst, reliable information on market shares by country was scarce and /or unavailable. Second, reliable and systematic information about the activity of the agribusiness TNCs was scarce or unavailable." (See also Morgan, 1979). We can add that bank secrecy is so well established that TNBs influence is evermore difficult to evaluate.

40. Perez and Oncuoglu (1990) found in the two-year period from 1987-89 that 1576 structural adjustment operations (*operations structurelles*) took place in the 125 leading firms in the world included in the AGRODATA data base. Structural adjustment operations are any major factor that significantly changes the structure of a firm or group. This change can be juridical, financial, technological, commercial or organizational.

41. Hoffman (1983: xviii) distinguishes earlier merger movements in the food industry made for operating reasons:

... horizontal mergers to achieve economies of scale and national distribution; product-extension acquisitions to broaden product lines and at times market power; vertical mergers to reduce costs and gain greater functional depts. But operating efficiencies can hardly be claimed for most of the recently formed conglomerates in the food field.

42. Heffernan and Constance (1994) refer to joint ventures involving Russia, Eastern Europe, and the People's Republic of China, the U.S., EEC countries, Canada, Argentina, Australia, Mexico, Brazil, Thailand, Malaysia, South Korea, Taiwan, Philippines, and others.

43. I want to thank Bill Friedland for this suggestion.

44. In this typology we did not consider TNBs explicitly for two reasons: (1) if a TNB initiates operations in a country it should be considered a

special form of a TNC; (2) at the same time, TNB power can exist without any formal branch in host country. This is an invisible power, since it can be expressed either in speculative movements, or through exerting influence inside financial networks that can create a negative business image for a country which does not fulfill TFC requirements. Thomas Grennes (1990) provides a useful analysis of the links between financial markets and world agriculture, and Gary Green (1988) focuses especially on credit.

45. This implies not only knowing the regulatory laws of the host country concerning TNC activity but also determining if these laws are enforced or ignored.

46. For an overview of state intervention on Portuguese dairy sector see Moreira (1984, 1989).

47. When the 1960s legislative package was under discussion, Nestlé was the first important private industry to accept it, thereby breaking solidarity with other private industries, which strongly opposed the package. It is also interesting to note that one of the most influential people involved in the negotiations setting up the package was subsequently employed by Nestlé.

48. This was a period in which Portugal had begun its colonial wars but was politically isolated in international forums such as the U.N.

49. After 1974 the Portuguese capital firms were nationalized.

50. The magnitude of these subsidies resulted in an appeal by the French construction firm, Matra, that was rejected by the E.C. Court of Justice.

51. As Schaeffer (1993:29) points out:

They do so not because powerful states compel them by force, but because they will be excluded from global capitalist commodity chains if they do not. And today, failure to participate means economic marginalization and ruin, not just for the poor, who have always been treated in this fashion by capitalism, but for middle class and ruling strata as well, as is the case in much of Africa today.

52. See also in this volume Schaeffer's illustration of the devolution of power to supranational organizations.

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The Global Agri-food Sector and the Case of the Tuna Industry: Global Regulation and Perspectives for Development

Alessandro Bonanno and Douglas Constance

Employing the case of the global tuna fish industry the paper investigates the effect of globalization on political institutions and social agents. Three interrelated points are argued. First, it is maintained that while the process of globalization is pervasive, it is also flexible, i.e. the outcomes of globalization are contested and no particular agent has total control. Second, in the domestic arena the regulatory ability of the nation-state has to be redefined. Third, despite possibilities for some subordinate groups to advance, weak segments of the labor force, particularly in developing countries such as in Latin America, continue to be marginalized. A possible alternative strategy call for attempts to establish international solidarity. The latter, however, should be based on awareness of the limits of protectionist and/or domestic center strategies in the global era.

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Introduction

Through the use of the case of the tuna-dolphin dispute this study investigates the relationships among capital (tuna processors, tuna fleets, and related trade associations), labor (tuna boat workers and processing plant workers), the State (represented by the Mexican State, the Venezuelan State, and the US State), and US environmentalists. For the last thirty years these actors have interacted to define the regulation of tuna fishing. Environmentalists have fought and won legislation that mandated the elimination of dolphin kills associated with current techniques of tuna fishing. The tuna industry has disputed the implementation of the law from the beginning with injunctions and restraining orders. The US executive branch and associated departments worked to weaken pro-environmental legislation and stalled its implementation.

The first part of the paper provides our theoretical framework and illustrates relevant literature on globalization, the transition to Post-Fordism, and the role of the State. In this context, three hypotheses are formulated. First, the process of globalization is contested terrain. The concept of contested terrain refers to the fact while the process of globalization is pervasive, it is still flexible. Globalization opens opportunities to some classes or groups

and closes some to others. This is not to say that the competing agents have equal power, but to imply that domination is not absolute. Second, within the process of globalization, the regulatory abilities of a nation-state to manage its affairs are weakened as internationalized capital makes domestic accumulation and legitimation more problematic. Third, while some social movements, such as environmental movements, do have some opportunities to gain, weak social groups (e.g. labor, particularly in the third world labor) are increasingly marginalized as transnational capital sources the world for the lowest costs of production, docile labor, favorable regulation climates, and better access to important markets. The second part of the study presents the tuna-dolphin case through which the above-mentioned hypotheses are analyzed. The conclusions illustrate some developmental alternatives for Latin America and present some observations on the global patterns of regulation of actors in the agri-food sector.

Part One

Economic Growth and the Creation of Free Spaces

From its outset, capitalism has generated both intense fragmentation and extensive interdependence. Marx, for instance, made this point compellingly by stressing, on one hand, that capitalism instituted highly complex modes of social cooperation in the firm, inter-firm cooperation, the much enlarged regulatory State, and world market (Marx, 1977:439-454). Yet, Marx also argued that constant revolutionizing of the means of production generates an unrelenting destruction and regeneration of social organization, association, culture, and identity (Marx, 1981). Durkheim (1984) attacked reductionist, market-centered ideas of society even more directly, arguing that expansive and unregulated individual in-

terest and utility maximization results in social disintegration rather than spontaneous order. He held that the capitalist market itself depends on social interdependence in non-economic facets of culture, association, and social organization. In different ways, Simmel, Weber, Gramsci, and many other classical social theorists recognized that completely unrestricted markets would destroy their own socio-cultural foundations.

Even the early advocates of the "laissez-faire," from Adam Smith to Herbert Spencer, contended that market societies depend on "interdependence" and altruism, which ensure that the atomistic and individualistic aspects of capitalism have positive social outcomes. Following the classical sociological tradition, it can be argued that capitalism depends on a combination of flexibility and control. Capitalism requires a structure of accumulation that provides opportunities for economic dynamism without socially unbearable consequences. The State has been the primary mechanism for mediating the relationship of market and society (O'Connor, 1986; Offe, 1985).

The historical existence of control of the flexibility of accumulation of capital through the action of the State opens the possibility for the creation of "free spaces" in the political sphere. Corporations have historically counted on the support of the State to enhance accumulation of capital and legitimize this action to the rest of the population (Block, 1980; Offe, 1985). For instance, the State has been instrumental in the control of labor, in generating the legal and social instruments for the availability of labor and in constraining the actions of subordinate classes seeking the satisfaction of their needs. In the historical implementation of these actions, however, the State has been forced to extend concessions to subordinate classes. In this respect, the action of the State in favor of subordinate classes has

partially limited its ability to assist corporations in their pursuit of capital accumulation (Offe, 1985). More importantly, the State has allowed, in various degrees and according to historical and geographical contexts, the societal incorporation of norms which represent gains for members of subordinate classes. The establishment of social programs, consumer-oriented programs and programs in defense of the environment are all cases in point. In essence, the State has maintained "free spaces" accessible to subordinate classes which allow the participation of the public in decision-making processes and the establishment of democratic contexts which have been used historically by subordinated classes to exercise their participatory rights in public life.¹

In terms of the agricultural and food sector, the role of the State in favor of subordinate classes has been established both in the sphere of the supply of agricultural and food products and in that of demand. As far as the former is concerned, despite important historical and geographical differences, the State has established protectionist systems which have guaranteed minimum levels of income to farmers around the world as well as access to markets (Bonanno et al. 1990). Notwithstanding the fact that protectionist systems have often benefited large farms, overall they have guaranteed relatively long periods of price stability and have ensured income to portions of medium and small producers (De Benedictis et al., 1990). With respect to the demand for agricultural and food products, legislation imposed by the State has established rules for the protection of consumers, for the improvement of the quality of products, for the availability of food to needy segments of society and, more importantly, for the protection and enhancement of the quality of the environment.

The Post-Fordist Globalization of the Economy and Society and the Crisis of the State

A significant number of studies (e.g., Harvey, 1990; Lipietz, 1987; Friedmann and McMichael, 1989) have underscored the fundamental changes in the organization of production which took place in the early portion of the 1970s. In essence it is argued that the crisis of accumulation of the 1970s was addressed by replacing Fordist "rigidity" with "Post-Fordist" global flexibility (Harvey, 1990; Bonanno et al., 1994). Although the attempt to diminish rigidity and increase flexibility involves many multi-sided processes, operating in a relatively autonomous fashion in different spheres (i.e. spatial, cultural, ideological, organizational etc.), the most decisive dimension is the effort to eliminate all constraints to the free mobility of capital and to maximize its speed of movement. Above all, this is the central meaning of flexibility. This process is manifested in the enhanced capacity of capital to weaken or even eliminate local, regional, and national controls and blockages. Indeed, in the U.S. in the 1980's, the politics at each of these levels formulated "economic development" plans and measures that facilitated this movement. However, this core economic dimension of post-Fordism also became a central feature of global political economy and in the emergence of a new international division of labor.

Post-Fordist flexibility also significantly reduced the State's capacity to mediate and organize the relations between capital and society and establish social limits to the mechanisms of accumulation. During the later 1970s and 1980s, the State was not able to maintain growth and, at the same time, contain capitalist dynamism within socially acceptable limits. In particular, post-Fordism substantially reduced the (local, regional, and national) State's control over its economic and noneconomic

environments. This does not mean that all dimensions of the State have been necessarily weakened (e.g., police and military power and assistance to financial segments of society have often been increased [Pitelis, 1991]). However, post-Fordism destroys the spatial-temporal unity of the polity and economy, characterizing the earlier phases of capitalist development. The conception of democratic capitalism presumed this unity; the State's capacity to establish socio-cultural limits to capitalist development provided community and national institutions a relative autonomy and safety from the forces of economic rationalization.

Capitalism operates increasingly without spatial boundaries, while the State remains confined to finite jurisdictions. This gap restricts the State's regulatory role. The fact that it can not effectively mediate economic growth and social stability gives rise to important contradictions. Most notably, its ability to provide infrastructure and coordination for stable or longer-term profit seeking and corporate planning is limited in decisive ways. The State's capacity to defend social "rights" (e.g., of workers, minorities, alternative social movements) is also attenuated. Such public protections and provisions for needs are devalued by economic actors by-passing State regulations and legislation (e.g. Bonanno et al., 1994; Friedmann and McMichael 1989; Constance and Heffernan 1991; Harvey 1990). For instance, the tendency of TNCs to seek less expensive labor abroad jeopardizes the State's effort to maintain adequate wage levels within the national territory. The implications for labor interests are manifold. For domestic labor, the result is a net loss of employment and/or the existence of lower paying jobs; for foreign labor, one implication is the creation of low wage employment. For the entire international labor community there is the constant threat of job elimination through relocation

and the decreased possibility of labor mobilization for economic claims. In terms of regional development, there is a decreased possibility of long and sustained economic growth, as local demand and the emergence of external economies are hampered by a system of low wages.

Post-Fordist globalization involves limitations to the State in other areas, as well. Among these are State action in favor of the protection of the health and safety of workers, the protection of consumers and the preservation of the environment. State implemented measures in these areas can be significantly diminished and/or eliminated by the simple relocating of production to regions where they do not exist or are less stringent than in the original country of operation. The well documented relocation of agricultural related production processes to Mexico is a case in point (Barkin, 1990; Wright, 1986). In Mexico the pressure to attract foreign investments has given a very low priority to environmental protection, as well as to practices which enhance the quality and safety of agricultural products and the safety and health of workers. As reported by numerous studies (e.g. Restrepo and Franco, 1988; Wright, 1986) industrially polluted soil and water are used for the manufacture of agricultural products which are then exported world-wide through TNCs, including to the United States. Similarly, agricultural inputs banned in many advanced countries, such as DDT, are still permitted in agricultural production in Mexico. The international commercialization of products treated with these substances nullifies other countries' existing laws against their use. The case of tuna fish also illustrates capital's strategy to move around State regulations.

In essence it can be said that post-Fordist globalization has activated processes which jeopardize the availability of "free spaces" for public participation in the decision-making

processes. Capital's strategy of flexible accumulation or restructuring has forced nation-States with protectionist policies to deregulate or risk capital flight. Deregulation implies the closing of "free spaces." In the event that these spaces are closed, the possibility of participation on the part of subordinate classes is severely compromised. Consumer protection, product quality, and the protection of labor and the environment pertain to this issue as well. Indeed, they all represent instances in which the political forum, where the interests of subordinate classes have customarily been articulated, is greatly devalued of its function. The inability of public institutions to enforce measures which directly affect these sectors of socio-economic life represents, then, a shift of decision-making processes from the public domain to the private sphere. In the public domain the possibility of participation in the decision-making process is available, at least in principle, to all segments of society. In the private domain, however, this possibility does not exist. It follows that such a change jeopardizes the continuous existence of effective spaces in which the subordinate classes can exercise their right to participation in the management of society.

Part Two

The Case of the Global Tuna - Dolphin Controversy

The diminishing of free spaces associated with the consolidation of post-Fordist globalization can be viewed as a progression toward the permanent de-democratization of society. Indeed a number of scholars (e.g., Borrego, 1981; Ross and Trachte, 1990) have argued the totalizing dimension of global capitalism and the inability of subordinate classes to respond to the establishment of restrictive forms of democratic social arrangements. Neo-liberal views of globalization, conversely, have

stressed the beneficial effects of a minimal State and market-dominated "opportunity society" (e.g. Kindleberger, 1986; Bullock, 1991). In their analyses the unrestricted mobility of capital generates greater and renewed opportunities for accumulation which are then transferred, albeit in differing rates, to various segments of society.

These two opposing views stand in contrast with a third interpretation which underscores both the limits to democracy as well as the possibilities of resistance associated with the contradictions of post-Fordist global capitalism. In this third view, the domination of TNCs at the global level is limited by their inability to surrogate the action of the State apparatus, to legitimize international competition and to satisfy the demands for homogenization of production and international relations. Furthermore, this position stresses the power that subordinate classes have at the global level to counter the action of TNCs. For instance, subordinated classes have established a presence in some emerging transnational political institutions such as the European Community. Simultaneously, new movements have emerged worldwide with regard to issues such as the protection of the environment, food security and safety, and consumer rights along with the development of international labor solidarity (McNally, 1991:244-245). Albeit limited, this power constitutes a significant obstacle to total domination by TNCs.

The case of the global restructuring of the tuna-fish industry illustrates an example of this latter posture and of the contradictions embedded in the evolution of post-Fordist global capitalism. Over a thirty year period segments of the tuna industry, environmental groups, and fractions of the US State and other nation-states have struggled to advance their agendas regarding tuna fishing and dolphin safety.

For the purpose of this analysis we focus

on three themes. First, the outcomes of globalization are contested and no particular agent, i.e. industry, labor, the State, or other societal groups, has total control. Second, within the process of globalization, the traditional notion of the regulatory abilities of the nation-State to manage its domestic agenda are weakened as internationalized capital makes national accumulation and legitimation more problematic. Transnational corporations employ global sourcing to obtain the lowest costs of production, the use of docile labor, and favorable regulatory conditions. Accordingly, TNCs bypass higher labor costs and/or more stringent regulations mandated by particular nation-States. Third, within the process of globalization, more often than not, the weaker social groups (i.e., labor in developing regions) continue to be marginalized.

The Case

Since the 1960s environmental groups, segments of the tuna industry, and fractions of the US State have interacted to define the regulations of tuna fishing. Environmentalists fought and won legislation that mandated the elimination of dolphin kills associated with current techniques of tuna fishing resulting in the Marine Mammal Protection Act of 1972 (MMPA). The tuna industry responded by disputing the implementation of the law from the beginning with injunctions and restraining orders. At the same time, the US executive branch and associated departments worked to weaken MMPA and stalled its implementation, which forced environmentalists to obtain court orders to force implementation of the MMPA. After the tuna fleets reflagged under foreign ownership to avoid US regulations, the environmentalists organized a consumer boycott and found congressional support to force foreign fleets to honor MMPA. The tuna processors responded to the consumer boycott by vowing to huy only dolphin safe tuna, effec-

tively abandoning the US and Latin American fleets. The tuna industry also scaled back US and Latin American processing plants and moved to Asia. Environmentalists won lawsuits forcing embargoes on Mexico, Venezuela, and Vanuatu who still caught non-dolphin safe tuna. Fighting back, Mexico filed under GATT accusing the US of protectionism. Even though, GATT found in favor of Mexico, Mexico didn't press the GATT charges in order to keep the NAFTA talks going. Environmentalist lawsuits extended the boycott to "transshipping to third party countries," an action which affected over 20 countries. Several countries, including the EEC, filed under GATT. The US, Mexico, Venezuela and GATT all called for an international forum to resolve the tuna-dolphin dispute. A tuna accord was finally signed in late 1992 by Mexico, Venezuela, and the US establishing a five year moratorium on purse-seine fishing, thereby avoiding a GATT showdown.

The three themes identified above will be analyzed in regard to the events of the case. Their presentation will follow an analytical scheme rather than a chronological one. First, the contested terrain theme is examined, to be followed by the themes of the limits of the State and labor and global restructuring respectively.

The Contested Terrain

New Technologies, Increased Accumulation, and a Legitimation Crisis

Prior to the 1960s tuna fishing technology consisted of a pole and bait method that was relatively labor intensive. In the Easter Tropical Pacific (ETP), a triangle which stretches from San Francisco, to Hawaii, to Peru, large yellowfin tuna swim under dolphin. Fisherman use the dolphin to find the tuna. During the 1950s San Diego fishermen

developed purse-seine fishing which involves the use of a large net that encircles the tuna (and dolphins) and allows the capture of a large number of tuna in one setting of the net. The purse-seine method was developed in response to the high numbers of US tunaboat seizures by foreign nations over territorial fishing rights and to counter the low-cost dumping of tuna in the US by Japanese tuna fishermen (Tennesen, 1989; Kraul, 1990).

Territorial fishing rights and tuna markets were contested by competing nations and their tuna fleets resulting in new technologies utilizing large nets and dolphins. The new technologies based on "setting on dolphins" facilitated huge tuna catches (Tennesen, 1989; Brower, 1989). By 1976, the US tuna fleet had grown to 130 huge purse-seiners (Kraul, 1990). The new technology provided very high levels of accumulation - the problem was that it systematically killed hundreds of thousands of dolphins a year (Brower, 1989:37).

In 1972, public indignation over dolphin killing associated with tuna fishing brought passage of Marine Mammal Protection Act of 1972. The MMPA mandated that over a period of time "commercial operators' marine mammal kills be reduced to insignificant levels approaching zero" (Godges, 1988:24). The MMPA banned the killing of marine mammals but contained an exception for commercial tuna fishing. The American Tunaboat Association, a trade association of U.S. fishermen, was accorded a general permit to kill dolphins in the course of its commercial fishing operations (Trachtman, 1992). As part of MMPA the National Marine Fisheries Service (NMFS) under the US Department of Commerce organized an observer program which placed observers on one-third of US tunaboats to document the number of dolphin kills associated with tuna fishing (Holland, 1991). At the time of the 1972 MMPA, the US tuna fleet was responsible for 85% of dolphin

kills in the ETP (368,600 of 423,678) (Godges, 1988).

The intent of the law was to reduce dolphin kills to insignificant levels approaching zero which became the basis for the conflict among various collective actors, both domestically and internationally. In fact, as stated by an observer, "bowing to industry pressure, Congress granted the US tuna fleet a two-year grace period to develop new procedures to minimize dolphin mortality. No new techniques were forthcoming, but in those two years 500,000 more dolphins died in U.S. tuna nets" (Davis, 1988). Even though environmental groups had won a legislative battle, the war over who would get to define the regulations of tuna fishing was far from over. The tuna industry and fractions of the US executive branch contested the implementation of the law from its inception.

Environmental Lawsuits and Amendments to the MMPA

Responses to the perceived inadequacy of the implementation of the law prompted lawsuits from the environmental community during the late 1970s. Congress responded by adopting a quota system for reducing dolphin kills. To implement the law, the NMFS set yearly dolphin-mortality quotas that dropped rapidly from 78,000 in 1976 to 20,500 in 1981 (Godges, 1988). Under President Reagan, industry pressure ended the managed decline in dolphin quotas (Brower, 1989:38). In 1980, the NMFS issued a five-year permit which set an annual quota take of 20,500. In 1984, the MMPA was amended to extend this quota indefinitely (Holland, 1991). Instead of abolishing the intentional netting of dolphins, the MMPA's quota system institutionalized the practice (Davis, 1988:486). Under the Reagan Administration, the US tuna industry was able to more effectively contest the 1972 MMPA and thereby significantly weaken, and even al-

ter the intent and language of the MMPA: insignificant dolphin kill levels approaching zero were redefined by industry and fractions of the US State to be equal to 20,500 per year.

In an attempt to control the foreign tuna fleet, in 1984 the US Congress added two amendments to the 1972 MMPA. The amendments stated that tuna caught using purse-seine nets in the ETP may only be imported if the government of the foreign country of origin demonstrates that it (1) has implemented a dolphin protection program "comparable" to that of the U.S. fleet, and (2) has an average incidental dolphin kill rate "comparable" to that of the U.S. fleet (Trachtman, 1992). Under environmental group pressure, Congress ordered the NMFS to close the U.S. tuna market to nations failing to require dolphin protection measures comparable to those in the U.S. (Levin, 1989).

By 1988 the foreign tunaboats killed about four times as many dolphins as the did the U.S. fleet (Audobon, 1988). While Congress had ordered the NMFS in 1984 to ban tuna imports from countries that did not have comparable dolphin kill ratios, these rules were not published until 1988 and gave other nations until 1991 to achieve the comparable kill rate. In 1988 the NMFS came under strong congressional criticism for delaying sanctions against foreign fleets that failed to reduce their dolphin kill. In a lawsuit in federal court in San Francisco, conservation and environmental groups accused the agency (NMFS) of failing in its legal duty to protect the mammals. The NMFS responded that any quicker action would have forced the foreign fleets to sell to other markets (Davis, 1988). Early in 1988, at the request of the conservation groups, a federal judge ordered the fisheries service to place observers on all US tunaboats, instead of on only a certain percentage to better monitor the dolphin kill (Levin, 1988:35; New York Times, 1989a; 1989b).

"The federal government is supposed to ban the import of tuna from nations that ignore the quota, but has yet to do so" (Audobon, 1988:16). Earth Island Institute (EII) and the Marine Mammal Fund filed a lawsuit that sought to force the U.S. Department of Commerce to impose a ban on imports from foreign violators and to properly enforce the dolphin quota on US boats and also urged Heinz and Ralston Purina to voluntarily end tuna purchases from nations that violate the quota. The National Audobon Society joined the EII to amend MMPA to reduce quota to "0" (Audobon, 1988). The Cetacean Society, Earth Island Institute, Greenpeace, Sierra Club, the Whale Center and other groups pooled their resources as the Marine Mammal Protection Act Reauthorization Coalition to push of needed improvements in the law and at the same time ask for boycotts (Godges, 1988).

In 1988 EII sponsored Sam LaBudde's investigative work on a Panamanian tunaboat. An 11-minute edited version of the video "where dolphins squealed in pain as they succumbed - in some cases being ground up alive in the gears of the nets - was first aired in March of 1988, to horrified audiences" in the US (Kraul, 1990:d6). This video make the issue of dolphin killing terribly real to millions of Americans (Kraul, 1990). When Sam LaBudde showed his film before the Congressional hearing on MMPA in 1988, he stated that:

The U.S. industry has fought every regulation intended to reduce the dolphin kill. In 1980 an NMFS prohibition against 'sundown' sets - implemented because the kill rate is up to four times as high at night as it is in daytime - was dropped, under pressure by U.S. industry lobbyists, after being in effect for just eight days. In 1981 the American Tunaboat Association sued to scrap the NMFS observer program. The observer's data, they argued, should not be used for enforcement.

They won an injunction that kept all NMFS observers off U.S. tunaboats from 1981 to 1984, when the injunction was overturned on appeal. In the late 1970's, when forced to do so, the U.S. industry demonstrated considerable inventiveness in coming up with gear and techniques to minimize dolphin kills. That research has stalled, and the U.S. industry has done nothing favorable to dolphins lately (Brower, 1989:58).

Labudde's testimony illustrates that the MMPA regulations were contested at every juncture by the tuna industry. Environmentalists used the courts and sympathetic legislators to force compliance from the NMFS and Department of Commerce. At the MMPA reauthorization hearings in 1988 several US senators expressed displeasure with the NMFS and its parent, NOAA, for their failure to implement the regulations that would keep that can off the shelf.

Senator Kerry of Massachusetts pointed out that the MMPA was amended in 1984 to require foreign nations to meet comparable dolphin kills to US rates or face a ban on imports, "Why had the NMFS taken four years to formulate 'interim final regulations' to that end?" (Brower, 1989:58). According to Charles Fullerton of NMFS,

It's a very delicate operation to get those regulations. We developed some over a year ago which were not acceptable either to the tuna industry or to the foreign nations. So we went back to the drawing board and developed a whole new set, the ones that are now in interim phase. We'd like to give these a try" (Brower, 1989:58).

"How could a bureaucrat in a regulatory agency so lose track of his mission? The proposed NMFS regulations were not acceptable to the tuna industry or the foreign nations - the regulatees - so of course the regulators scrapped them" (Brower, 1989:58). The environmentalists continued their battle in the judicial and legislative branches to reduce dol-

phin kills to "0" while the US tuna industry used its influence in the NMFS and Commerce Department to block implementation of the MMPA.

The Consumer Boycott of the BIG 3 Tuna Processors

The limited effect that US legislation had on reducing dolphin mortality generated further responses from the environmental groups which supported the MMPA. Having failed to win legislation mandating a phase-out of purse-seine netting, environmental and animal-rights groups attacked the problem at the consumer level. In January of 1988, they launched a boycott of the three major tuna producers in the US (i.e. Chicken of the Sea owned by Ralston Purina, Star Kist owned by Heinz, and Bumble Bee, then owned by Pillsbury) which processed about 70% of the tuna consumed in the US (Newsweek, 1990; Sharecoff, 1990).

First Embargo and Calls for an International Forum

In early 1990 Federal Judge Thelton Henderson of San Francisco ordered the Bush Administration to impose an immediate embargo on imports of tuna caught by foreign fleets until they prove they were reducing the number of dolphins killed. This affected mostly Mexico, Venezuela, Panama, Ecuador, and Vanuatu (Morain, 1990). Judge Henderson said that the Bush Administration was taking too long in determining whether foreign fleets were complying with US law (New York Times, 1990). Again, environmentalists had to use the justice department to get the Commerce Department to obey the law. Judge Henderson charged the NMFS of the Commerce Department with not enforcing a 1988 MMPA provision ordering foreign fleets to prove that they are reducing their dolphin kills to comparable levels in the US. Judge

Henderson accused the foreign nations and the US government of "foot-dragging" (Morain, 1990:A3).

The Commerce Department appealed the judge's decision in district court. In August of 1990, the district court found in favor of the environmentalists and ordered the US Secretary of Treasury to impose embargoes on imports from Mexico, Venezuela, Vanuatu, and other countries which still relied on purse-seine nets fishing techniques. The next day the NMFS made positive findings for Mexico, Venezuela, and Vanuatu allowing the embargo to be lifted on them (Trachtman, 1992). EII then sought a restraining order on Mexico because the NMFS had not counted their dolphin kill rates correctly. In October of 1990 the district court granted the temporary restraining order, and converted it into a preliminary injunction reinstating the embargo on Mexico. The US Government appealed the injunction, arguing that it was the Government's discretion (the Commerce Department's) to interpret MMPA. The US Court of Appeals found in favor of the Commerce Department and removed the embargo on November 14, 1990. In February of 1991, the appellate court vacated the "stay" of the appeals court, and reinstated the embargo. In March the embargo was extended to include Venezuela and the tiny island nation of Vanuatu (formerly New Hebrides). The appellate court held on April 11, 1991 that the NMFS's interpretation conflicted with the statutory language and congressional purpose (Trachtman, 1992). The US Department of Commerce lost its appeal. This is another example of the fractional nature of the State which is the forum for the contest to define the interpretation and implementation of the law.

Judge Henderson stated that the failure of Commerce Secretary Robert Moshbacher to enforce the 1988 provision to the MMPA "assures the continued slaughter of dolphins"

(Morain, 1990:A19). "The statute was intended to use access to the US market as an incentive for foreign nations to reduce marine mammal deaths. The Secretary, contrary to Congressional intent, has not provided that incentive," wrote Judge Henderson (Morain, 1990:A19). "This is a stunning rebuke for the government's position," said David Phillips, Director of EII (Morain, 1990:A3). "Basically, the State Department has been categorically against enforcing these embargoes," Phillips continued. "They have put dolphin protection at the bottom of the priority list in dealing with these countries" (Morain, 1990:A19). The Commerce Department disagreed with Judge Henderson and argued that the 1988 amendments to MMPA only require the Commerce Department to collect information on foreign fleet dolphin kills and not initiate embargoes (New York Times, 1990). Here again is another example of the conflictual relationship between branches of the US State (i.e., the US Commerce Department and the Judiciary system) over the interpretation of MMPA and the resulting contest to control the definition of the law.

The embargo on Mexico prompted accusations of US protectionism. According to Mexico's Secretary of Foreign Relations, "In accordance with international law, no country has the right to impose their own criteria on others, much less apply sanctions" (Scott, 1991b:6). Several prominent Mexican politicians and business leaders saw the embargo as a ploy to protect the US market share by forcing a poor, developing nation to meet unreasonably high ecological standards. "This is a particularly severe warning for the free-trade agreement negotiators of the loop-holes to watch out for," said Hermengildo Anguianos, a congressman belonging to the Institutional Revolutionary Party or PRI (Scott, 1991:6).

A spokesman for President Salinas de Gortari stated the official Mexican position

was that the disagreement on the tuna issue should be handled outside the free-trade talks. Both Salinas and Bush administration officials agreed that standards for protecting dolphins should be set in international forums, as has been done with the whales (Scott, 1991a). Both countries called for an international mediator to settle the dispute, a form of an international State.

Environmentalists Call For An International Tuna Policy

In late 1990 EII reported that Bumble Bee had lied about accepting only dolphin-safe tuna and had accepted a shipment of non-dolphin safe tuna in Thailand. Bumble Bee first said that the buyers were not actually Unicord companies (Parrish, 1990a:d2), then later admitted that it did buy the tuna without checking papers (the observers' document) but that it was a mistake (Meier, 1990b). In a move to monitor the global tuna fishing industry and verify the dolphin-safety of tuna products such as in the Bumble Bee incident, Greenpeace and the Dolphin Coalition drafted a five-point corporate policy that they wanted the international tuna-packing industry to adopt an international code of ethics. A canner's claim to be selling only dolphin-safe tuna, "must be binding worldwide, including all subsidiaries, controlled bodies....enterprises which purchase, process or sell canned tuna or tuna products for export" (Parrish, 1990b:d4). The environmentalists call for an international body to regulate the industry globally is an embryonic attempt to surrogate failing nation-State actions at the world level.

Mexico, GATT, and NAFTA

Faced with further losses or potential sanctions for its \$450 million export fishing sector, Mexico began proceedings against the US at GATT (General Agreements on Trade and Tariffs) (Uhlig, 1991). In March of 1991,

Mexico was granted a panel before GATT (Trachtman, 1992). The GATT hearings occurred when Mexico and the US were trying to negotiate the NAFTA accord. The tuna issue threatened the Bush Administration with a volatile trade battle with Mexico at the very moment they were trying to defend Mexico as a major trading partner. Mexican critics of the free-trade accord seized upon the conflict as an example of American domination under any such pact. Latin American tunaboat competition with US tunaboats is highest in the ETP. But out in the Western Pacific where US fleets can go, Latin American boats do not have the same access to ports or fishing rights. In Mexico there was suspicion that the law was to protect US fishermen, not dolphins and raised the issue according to GATT of whether the US had the right to unilaterally enforce a limit on third countries (Economist, 1991).

American conservation groups cited the behavior of the Mexican tuna fleet to emphasize what they said was the need for tough environmental scrutiny of all aspects of a free-trade accord (Uhlig, 1991). According to environmentalists, even with sanctions and embargoes, foreign fleets in Mexico, Venezuela, and Vanuatu continue to use the "dolphin set on" method. "In terms of sheer numbers, Mexico kills the most dolphins of any country by far," said David Phillips of EII (Uhlig, 1991:D2).

In August of 1991 the GATT panel found in favor of Mexico and stated, "regulations governing the taking of dolphins incidental to the taking of tuna could not possibly affect tuna as a product" (Trachtman, 1992:146). In essence, this meant that countries could not embargo a product based on production practices. The three-man GATT committee ruled the US law is contrary to the GATT's equal-treatment provisions. Moreover, the committee drew conclusions that went beyond the dolphin case. In its confidential (but quickly leaked) report, the GATT panel concluded that "a con-

tracting party may not restrict imports of a product merely because it originates in a country with environmental policies different from its own" (Economist, 1991:31). The GATT ruling throws into doubt all kinds of environmental laws that impose restrictions or penalties on foreign countries.

The Secondary Embargo

In January of 1992 Judge Henderson ordered the US Commerce Department to ban \$266 million worth of imports (about 1/2 of US tuna imports) from about 20 countries who huy tuna from Mexico, Venezuela, and Vanuatu and then import it to the US (Bradsher, 1992). The new countries embargoed could remove themselves from the embargo by providing "certification and proof" that they had prohibited the import of tuna from the three target countries (Bradsher, 1992:d16). While US environmentalists applauded the secondary embargo, US fishermen opposed it because it would raise the cost of tuna (Facts on File, 1992). David G. Burney, executive director of the US Tuna Foundation, said the tuna industry would lobby for new legislation in Congress that would effectively overturn Judge Henderson's ruling. The Bush Administration tried to overturn the embargo, claiming the action went well beyond the intent of the environmental law upon which it was based (Wastler, 1992:3a).

In February of 1992 the NMFS began to enforce the secondary embargo. The embargo was targeted at Mexican and Venezuelan tuna processed in other countries and included the countries of Britain, Canada, Columbia, Costa Rica, Ecuador, France, Indonesia, Italy, Japan, Malaysia, Panama, the Marshall Islands, The Netherlands Antilles, Singapore, South Korea, Spain, Taiwan, Thailand, Trinidad, Tobago, and Venezuela (New York Times, 1992a).

EEC officials protested the US embargo of yellowfin tuna before GATT in February of

1992. The US ruling affected \$4 to \$5 million in tuna exported to the US from France, Italy, and Britain (Maggs, 1992). EEC officials maintained that the EEC had regularly protested the trade penalties under MMPA and would renew this effort before GATT. The EEC stated that they would press for the adoption of the Mexican GATT ruling even though the Mexicans seemed reluctant to push to ruling while negotiating NAFTA (Maggs, 1992).

According to Ell's Phillips,

The Bush Administration is taking intentional steps to create a kind of crisis situation they need to get the embargo overturned and protect their free-trade policy. The whole question involved here between trade and the environment is a potential deal-breaker in the Uruguay Round (of GATT)....

It represents a head-on collision between the Bush Administration's free-trade policy and environmental issues that have been ignored by the Bush administration," said Craig Merrilees, western director for the Fair Trade Campaign, a group promoting the environment and health laws in US trade agreements (Wastler, 1992:3a).

To recapitulate, the events illustrated above support the hypothesis that TNCs don't have absolute power in domestic and international arenas. First, pro-environmental legislation was created and partially implemented countering the interests of TNCs. Second, attempts by TNCs, supported by the US executive branch, to combat pro-environmental legislation fell short of their proposed objectives. More importantly TNCs were not able to create an international system in which they could continue to profit from fishing in the ETP using conventional technology. Simultaneously, however, subordinate groups have also encountered strong opposition regarding the implementation of pro-environmental legislation. These situations matured in

a context in which fractions of the US State opposed each other and the State apparatus as a whole was increasingly unable to fulfill its role as mediator between various social groups. Indeed, GATT calls into question the durability of MMPA and the ability of the US State to enforce MMPA. The limits that the State encounters in controlling and regulating TNCs' actions and in satisfying demands stemming from others social groups (i.e. environmentalists) are analyzed in the following section.

The Limits of the State

In the attempt to by-pass US State legislation, TNCs shifted their operations to foreign fleets while still using conventional technology based on purse-seine nets in the ETP. This action can be viewed as an example of the limited ability of individual States to control activities of economic actors which are increasingly global in scope. Simultaneously, as indicated above, the State embodies conflicting demands stemming from both TNCs and environmentalists which require some forms of organization and control of economic activities. TNCs are interested in maintaining a business climate conducive to further capital accumulation. Environmentalists, in this case, are interested in the enforcement of anti-dolphin killing legislation. The control and regulation of global economic activities, therefore, are pursued through efforts to establish new forms of transnational regulatory agencies.

Industry Moves and Tuna Boats Reflag

Between 1981 and 1987 at least 21 US tunaboats reflagged under other nations to avoid limits imposed by MMPA (Brower, 1989; Davis, 1988; Levine, 1989). These limits included, among other things, a low number of dolphin kills allowed and the presence of observers on one-third of U.S. tunaboats which translated into higher costs of production. The

NMFS reported that US dolphin kills went down from 368,600 in 1972 to less than 20,000 in 1987 - mostly due to the fact that the US fleet had shrunk dramatically from 93 boats in 1981 to 35 boats in 1988. Although the kill rate decreased on U.S. tunaboats, dolphin kill rates were still very high in the ETP because of increased use of the purse-seine method by foreign fleets there and the transfer of U.S. fleet tunaboats over to foreign flags (Levin, 1989). According to Joshua Floun, lawyer for EII, the foreign flagged vessels are responsible for most of the current dolphin kills (New York Times, 1989:a17)². "Many of the departed seiners have reflagged to avoid high U.S. operating costs and to escape the MMPA and other U.S. regulations" (Brower, 1989:57).

In addition to reflagging the tunaboats, the by-passing of US laws was carried out through a process of relocation of the tuna industry. In November of 1988 Ralston Purina sold its Van Kamp Chicken of the Sea division to Mantrust of Indonesia. In August of 1989 Pillsbury sold its Bumble Bee subsidiary to Unicord of Thailand. Pillsbury's decision to sell Bumble Bee was motivated by the increasing costs of operating facilities in the United State. Simultaneously, Unicord's purchase of Bumble Bee was made "to counter stiff US tariffs and quotas on imports of canned tuna and to protect Unicord's stake in the US market" (Handley, 1989:108). The tuna industry restructuring is a classic example of capital avoiding dependence on high cost labor, by-passing State regulations that restrict accumulation, and sourcing low cost production sites. In this case the tuna industry found it beneficial to have some production within the US for tariff and market access purposes, but also to have other lower cost production sites elsewhere.

Industry analysts stated the relocations reflected the food industry's increasing concerns

about costs. According to Naomi Chez, an analyst with Goldman, Sachs & CO. in New York, "The food business is consolidating on a worldwide basis and there is a lot of production in the Far East. It's a labor intensive business and labor costs are low there" (Kraul, 1989:2). Tuna caught by Asian fleets in the western Pacific Ocean and Indian Ocean do not associate with dolphin. Transnational tuna firms are by-passing the increased costs of fishing in the ETP by moving to the western Pacific where regulations are minimal and labor costs are low. One such firm is Unicord.

Unicord was established in 1978 and was Thailand's largest canned-tuna exporter by mid-1980s. "Bumble Bee was acquired at auction in the first step by Unicord to form a global tuna organization" (Handley, 1991a:48). Unicord's global strategy foresees a network of factories in five continents that will give the company easy access both to fish and to its main markets. At the core of the strategy is a new tuna-handling process which cuts transport costs and enables Unicord to avoid high import duties in the US and Europe. Unicord sells tuna to the US under its own brand labels and also sells under Bumble Bee. Bumble Bee has canneries in San Diego and Santa Fe Springs, Calif, Puerto Rico, and Ecuador. Despite their higher wage rates, the US canneries are at an advantage because they allow Unicord to avoid import duties on canned tuna and are also relatively close to fishing grounds in the Atlantic and ETP. The new technology removed the loins which were then cooked, frozen and shipped for canning within the US and saved large amounts of money on shipping costs. Unicord was also setting up a loin operation in Ghana to serve the Europe market (Handley, 1991b).

US State Action, Counteractions and Compromises

The US State's action to counteract TNCs by-passing of State powers consisted primarily of attempts to enforce MMPA beyond national boundaries, i.e. the first and second emhar-

goes. This action was resisted by foreign nations, which as indicated above, viewed it as limiting their sovereignty. GATT rulings support their positions.

In September of 1991 US officials (State, Commerce, and Trade Depts.) reached an understanding with Mexico over the embargo on Mexican tuna. To avoid undercutting NAFTA talks, Mexican President Salinas de Gortari backed off the complaint lodged with GATT over the tuna dispute. In late September, Salinas announced as "a show of good faith" that Mexico would "postpone" the final GATT decision and pursue a bilateral solution (Scott, 1991a). In exchange for the Bush Administration's pledge to try to change the MMPA, Mexico issued a 10 point plan to reduce dolphin kills. The promise to try to amend the law was "brokered" in Mexico by Secretary of State James Baker, Secretary of Commerce Robert Mosbacher and US Trade Representative Carla Hills (Maggs, 1991:3a).

According to some US officials, any attempt to change the law, short of major new commitments from Mexico to reduce dolphin kill rates in tuna fishing, would rile wildlife protection groups, that have already won a round in court against the Bush Administration (Senzek and Maggs, 1991). The Bush Administration promised not to change any environmental law as a result of NAFTA. "There is zero interest in making big changes to MMPA," said one congressional aide, and "anything that has the effect of removing the embargo would be very unpopular" (Senzek and Maggs, 1991:3a). Congressman Waxman lambasted the Bush Administration for thinking it could negotiate away the teeth of MMPA (Economist, 1991). Critics of NAFTA and GATT argued that free trade was an indirect way of forcing environmental backsliding that could not be achieved directly (Mathews, 1991).

Mark Ritchie, a Minneapolis trade analyst,

who has organized consumer and environmentalist groups against GATT, called the dolphin controversy a "symbol." Even if the US and Mexico worked out that dispute, he said, environmentalists would still oppose a new GATT agreement because they fear GATT could override some US laws barring imports that don't comply with US environmental standards. GATT officials "have the power to judge and condemn US law from a very limited and undemocratic view," said Ritchie (Davis, 1992:B10).

Environmentalists argued the GATT ruling in favor of Mexico could set a precedent that could undermine their efforts on a range of fronts. "If the GATT ruling goes through, international trade sanctions designed to halt trade of endangered species, trade in rare hardwoods, and shipments of toxic wastes could be declared illegal. It would be a very serious blow," said a spokesman with EII (Scott, 1991a:8).

"The administration is working behind the scenes to achieve some of the deregulation that it was not able to get in the open," charges Lori Wallach, a lawyer at Congress watch, a group founded by Ralph Nader (Magnusson et al, 1992:130). The US Congress, especially Representatives Waxman and Gephardt, was strongly opposed to amending MMPA to suit the US Government and the US tuna industry or to any Mexican deal that imperils US health, safety, labor or environmental laws (Magnusson et al, 1992). According to Chief William K. Reilly of the US Environmental Protection Agency, "If this becomes the basis of GATT policy, it would unravel all the strings" of US environmental policy (Magnusson et al, 1992:130). If the GATT decision prevails, US trade officials said it might also weaken enforcement of international environmental accords, e.g. sea turtles, ozone, rain forests, endangered species, whaling, ivory and elephants. According to GATT,

such problems concerning the "global commons" should be solved through "international environmental agreements" (Brooke, 1992a:7). Even GATT called for an international forum to resolve "global commons" issues such as MMPA.

GATT's call for an international forum to resolve "global commons" issues highlights the contradictory position nation-States confront. On one hand, GATT's statements acknowledge the inability of domestic bodies to face the demands stemming from this case. On the other hand, GATT becomes the forum where transnational regulatory functions are proposed. It is interesting to note that the political agenda established by GATT during the 1980s has been aimed at deregulation. Accordingly, GATT becomes a political terrain where regulating and deregulating forces and demands confront each other.

The Second Compromise and the IATTC Accord

In March of 1992 the US, Mexico and Venezuela reached a preliminary agreement to protect dolphins. GATT officials reported that the three countries had agreed to a five-year moratorium, beginning in 1994, on purse-seine nets (Davis, 1992:B10). According to Representative Scade of Mexico, "The main message that should sink in (for environmentalists) is international cooperation" and he hoped other nations would adopt the accord (Davis, 1992:B10). EII attacked the pact and congressional aides said the agreements would face a tough time winning approval. Phillips of EII, said the agreements represented a "bad approach" because it would lift trade pressures that had led to sharp declines in dolphin kills. "The current regulatory mechanism is resulting in significant conservation of dolphins" said Phillips (Davis, 1992:B10). The agreement failed to obtain US congressional backing and failed.

In April of 1992 an agreement negotiated by the Inter-American Tropical Tuna Commission (IATTC), the first major international accord to save dolphins, the 10 nations that fish for tuna in the ETP agreed to cut killing dolphins by 80% during the 1990s. "The resolution sets into motion a program to reduce dolphin mortality to insignificant levels, to levels approaching zero," according to Dr. James Joseph, director of the IATTC (Brooke, 1992b:C4).

EII argued that the accord was too little, too late. "The reduction is way too little, and the killing of dolphins will continue way too long. In the US, consumers, companies, and Congress are saying: eliminate the setting of nets on dolphins," says Phillips of EII. "We do not believe that you can chase down and encircle 1000 dolphins in a mile-long net and avoid killing them" (Brooke, 1992b:C4). According to Richard C. Atchison, Executive Director of the American Tunaboat Association, the accord is "reasonable, practical, and achievable" (Brooke, 1992:C4).

The Third Compromise

In June of 1992 the US, Mexico, and Venezuela agreed to stop the setting of nets around dolphins and tuna. The Stubbs Bill was introduced to US Congress on June 16 and was supported by EII (New York Times, 1992b). The unlikely alliance of the Bush Administration, Congress, environmentalists, and the governments of Mexico and Venezuela forged a tentative agreement to stop the killing of thousands of dolphins. After months of negotiations, the Bill had bipartisan support and had already been agreed to by the Mexican and Venezuelan governments. The agreement would end the embargo on Mexico and Venezuela and place a 5 year moratorium on purse-seine fishing in the ETP and possibly end purse-seine fishing in the ETP forever (Parrish, 1992a).

According to EII, it was only these "incredible constraints on the market" which brought Mexico and Venezuela, the last countries with big fishing fleets in the ETP, to the bargaining table. "The market for dolphin-unsafe tuna is collapsing. They can't find places to sell the tuna... the US won't buy it, England, France and Germany won't buy it, Thailand won't process it, and now very recently some of their last remaining markets in Spain and Italy are collapsing" (Parrish, 1992a:A20).

Mexico and Venezuela agreed to halt the killing of dolphins by their tuna fishers by March of 1994. The formal agreement with Mexico and Venezuela is expected to be signed after the bill - The International Dolphin Conservation Act - is ratified. In a key concession to environmentalists, Mexico and Venezuela agreed to face stiff penalties if they resume killing dolphins - a US embargo of all seafood products, except for shrimp (Maggs, 1992). In the last hours of the congressional session, the US Senate passed the International Dolphin Conservation Act of 1992 (IDCA), which President Bush signed in late October (Parrish, 1992b). Though President Bush signed the IDCA, "the IDCA will only go into effect if Mexico agrees to comply with its terms, a step which Mexico has so far refused to take" (Public Citizen, 1993:9).

From the illustration of the events mentioned above, it can be concluded that the action of the US State in response to demands from social groups is problematic when lodged in a transnational arena. The by-passing of State action through tunaboat re-flagging and industry relocation demonstrated that the ability of the State to perform its historical roles has been weakened. The State is increasingly unable to regulate TNCs' actions (i.e. enforce compliance of MMPA), to enhance TNCs interests (defeat pro-environment groups) and to respond to demands stemming from other so-

cial groups such as the environmentalists (implementation of MMPA). Also problematic are attempts to extend State regulation of economic activities at the international level. The various compromises reached by the US, Venezuelan, and Mexican States have been designed to respond to the global hyper-mobility of TNCs (i.e. the move to Asia which will be further discussed in the next section) and to foster legitimated and accumulative actions at the domestic level (respond to environmentalists' demands in the US and loss of employment and economic opportunities in the US, Venezuela and Mexico).

These territorially limited accords do not match the spatial sphere of action of economic actors. More specifically, TNCs did escape the pro-environmental regulations associated with them by moving to Asia where they continue to use the existing purse-seine method and therefore can avoid the costly adoption of new environmentally sound technology. The present situation indicates that TNCs' activities can be regulated when in the ETP. Yet they are, at least temporarily, out of reach when operating outside that area. Moreover, despite the existence of multinational accords, TNCs have no immediate interests in re-shifting their operations back to the American continent.

Labor and Global Restructuring

Effects of Restructuring on the US Tuna Industry

The transnational move of the tuna fish industry had important repercussions in terms of employment and overall economic well-being of fishing communities. First, the introduction of the purse-seine net technology in the ETP expanded employment and economic opportunities in the US. Later, the passage and contested implementation of MMPA fostered the shift of tuna industry operations to Latin

America with the consequential growth of employment in those regions and economic decline among tuna fishing communities in the US. Finally, the secondary embargoes on Latin American producers stimulated a shift of the industry to Asia curtailing employment and economic growth in Latin American fishing areas.

In response to the Big 3 tuna processors' decision to not accept dolphin unsafe tuna, boat owners in San Diego maintained that this decision was tragic and that they had been fighting it for twenty years along with boat seizures, the closing of US tuna canneries, and foreign fleets slashing prices to capture the US market. According to Peter Schmidt, President of Marco Seattle, whose Campbell Industries subsidiary in San Diego is one of the world's leading builders of the purse-seine boats, "This could be the last nail on the American tunaboats" (Kraul, 1990:d1). The last of six canneries once located in San Diego closed in 1984 and local tunaboat owners "must now unload their fish at cannery plants in American Samoa and Puerto Rico" (Kraul, 1990:d6).

As a result of the dolphin unsafe consumer boycott, the Big 3 US tuna canners turned to Asian suppliers such as the Philippines and Thailand to assure that the tuna they buy has not been caught with purse-seine nets that can kill dolphins. These actions decreased the volume of tuna caught by the US fleet (Thurston, 1990). In the year following the Big 3 boycott of ETP tuna, the number of US fishing boats in the ETP dropped from 30 to 9 (Wallace, 1991). By 1993, forty percent of the US owned canneries in Puerto Rico had shut down (Kroman, 1993). Since the environmentalist victories of the early 1990s, several boats in the US tuna fleet, once the world's largest, have gone broke and others have been sold to foreign interests. Tunaboat captains had to relocate to the Western Pacific and have

shouldered \$1 to \$2 million retrofits for larger nets, bigger hydraulics, and new engines (Kroman, 1993).

Prices paid to tuna fishermen dropped 22% to the lowest in 10 years. Within days of the US boycott, the bottom fell out of the tuna market. Yellowfin from the ETP, the best tuna in world, fell from \$1,075 a ton to \$835 a ton (Kroman, 1993). The shift of 16 US boats to the Western Pacific and abundant supplies of skipjack tuna and yellowfin increased yields and depressed prices. Dolphin-safe policies benefited newcomers on the tuna scene, notably Korea and Taiwan, who built boats and canneries as fast as they could. Those nations were already blessed with being close to waters that provide dolphin-safe tuna, not to mention low overhead and regulatory costs that US fishermen bear (Kroman, 1993). Economic opportunities and employment opened for Asian processors and closed for US and Latin American processors as the MMPA was increasingly enforced. The industry moved to Asia to source dolphin-safe tuna and low cost labor which marginalized labor, both tuna fishermen and tuna processing workers, in the US (especially Puerto Rico) and Latin America.

Although Heinz's Star Kist operates the world's largest tuna cannery in Mayaguez, Puerto Rico, US tuna marketers are increasingly importing canned tuna to take advantage of lower labor costs in developing countries. US and foreign tuna firms are increasingly using non-US labor for processing (Thurston, 1990). Except for Star Kist's Puerto Rican plant which employs 4,300, the local tuna industry is virtually controlled by Asians. Unicord of Thailand - Bumble Bee, Mantrust of Indonesian - Chicken of the Sea (Mantrust's National Packing Plant with 600 workers), and Japanese (Caribe Tuna of Mitsubishi Corp. of Japan and Neptune Packing of Mitsui and Co.) dominate the Puerto Rican tuna canning in-

dustry. For all of these firms tax benefits under Section 936 of the US Internal Revenue Code are crucial to their remaining in Puerto Rico (Luxner, 1990).

Bumble Bee in Puerto Rico employs 2,200 workers and processes between 200 and 300 tons of tuna a day and accounts for more than 50% of Bumble Bee sold in US mainland. "Bumble Bee started out in Astoria, Ore. We had plants in Hawaii, Maryland and San Diego, but currently operate tuna canneries only in Puerto Rico," according to Mr. Dan Sullivan, president of Bumble Bee (Luxner, 1990:4A).

When the ETP was profitable and legitimate, the TNCs set up operation in Puerto Rico and Latin America to process for the US market. When MMPA made the ETP illegitimate, Puerto Rican and Latin American processing facilities became less convenient and the industry moved operations to the western Pacific.

The Move to Asia

The move to Asia is a strategy designed to decrease the costs of production. However, the shift to Asia jeopardizes the access to affluent markets such as the US and Europe. Accordingly, this strategy is complemented by another one which attempts to secure footholds in these markets. Unicord for example is Southeast Asia's largest investor in the US. Before Unicord bought Bumble Bee, it was the world's largest supplier of tuna, but was at the mercy of industry middlemen who bought the fish for resale to major brands. "Now Unicord can be assured of a distribution network in the United States, while Bumble Bee is sure of its supply," said Unicord Chairman Kanchoorn Sathirakul. "Now we've become a truly integrated, global business" (Wallace, 1992:H3).

Unicord's strong point has been low wages at its Thailand factory, where it employs 7,000 people to process raw tuna. "Thai companies,

especially in the food-processing business, are aggressively seeking out US companies which control their markets in order to lock up a foothold in fortress Europe and fortress USA," said Graham Catterwell, an analyst at Crosby Securities in Bangkok (Wallace, 1992:H3). These are good examples of globally sourcing markets before protectionist policies may arise.

Impact on Latin America: Mexico and Venezuela

Mexican and Venezuelan tuna related economic activities were damaged by negative publicity and declining exports. Under the MMPA, Venezuelan and Mexican industries couldn't export tuna products to the US because in 1991 their boats had a dolphin kill rate higher than 1.25 percent of the US fleet average. Venezuela contends that the US set standards that are impossibly high for third world fleets in order to protect the American fleet at a time when tuna demand is flat (Brooke, 1992a:7). In response to the embargoes, both countries joined the IATTC and opened their tuna fleets to inspection by IATTC observers. Mexico pledged \$1 million and Venezuela \$500,000 for research on dolphin safe fishing (Brooke, 1992b).

Mr. Covian, a Mexican tuna fisherman, says that he has risked his life for dolphins, even leaped into shark-infested waters to free them from the nets. Now he has to look for a new job because of the Tuna Wars and industry wide setbacks worsened by a US embargo of Mexican tuna. The conflict threatens hundreds of Mexican fishing and canning jobs. According to US environmentalists, free trade must imply shared values, and that Mexico cannot keep pleading lack of resources as an alibi for wreaking the environment. Mexican partisans call the embargo a ploy, in the name of Flipper, to sabotage Mexico's tuna industry before it challenges US jobs and markets (Ellison, 1991).

Years of highly publicized campaigns and boycotts by environmental groups forced most of the US fleet out of the ETP, westward to near New Guinea where tuna and dolphin stay apart and where the US has fishing treaties with surrounding islands. Mexico and Venezuela lack such treaties to gain access to other fishing waters and the Latin American boat owners are not eager to pay the \$1 million deemed necessary to equip each boat for such long voyages. Mexico's tuna industry was extremely vulnerable due to the Tuna Wars and a tuna glut on foreign markets. The price per ton fell more than 30% in the first half of 1991 (Ellison, 1991). Claiming to be prisoners of geography, Venezuela says it is too far for them to fish in the western Pacific where they do not have fishing rights (Brooke, 1992).

As a result of the US tuna embargo, in Cumana, Venezuela, more and more tunaboats are at dock and more sailors and canners are out of work. Sealed off from the world's largest market since August of 1990, Venezuela's tuna fleet has shrunk from 118 boats in 1988 to 34 boats in 1992. As a result of the depressed economy, a crime wave is sweeping Cumana due to high unemployment from the embargo (Brooke, 1992a). According to Laura Rojas, Director General of Venezuela's Institute of Foreign Trade, "The US has passed domestic legislation that has jurisdiction outside the US. Environmental protection can't be had at the cost of another country" (Brooke, 1992a:7).

In February of 1992, Venezuela joined members of the EC and 23 other nations in urging the US to abide by a GATT ruling that the unilateral American ban on tuna imports from Mexico and Venezuela is illegal. According to David Phillips of EII, "They are kidding themselves if they think GATT can force the US to abandon laws to protect the global environment. In the 1990s free trade and efforts to protect the environment are on a collision course" (Brooke, 1992a:7). According

to Oliver Belisario, a Caracas based consultant for Venezuela's tuna industry, "Tuna is the debut for a great debate between environmentalists and traders" (Brooke, 1992a:7).

With Venezuelan and Mexican tuna shut out from the US, Australia and most of Europe, tuna landed in Venezuela sells at a steep discount from world prices, e.g. \$600/ton versus \$1000/ton if "dolphin-safe." Cans labeled "dolphin-safe" account for 95% of US sales and the US has half of the world's consumer tuna market. According to John M. Werner, president of the local subsidiary of the H.J. Heinz company in Venezuela, "We don't even can tuna in Venezuela for Venezuelan consumption any more. Heinz [now] has a worldwide "dolphin-safe" tuna policy" (Brooke, 1992a:7).

US and foreign tunaboat owners say the ban on purse-seine nets in the ETP would cripple their livelihood. "Our vessels and, I believe, the international fleet, would not be able to fish" in the ETP without purse-seine nets, says Richard Atchison, Executive Director of the San Diego Based American Tunaboat Assn.. "It's not technically feasible or economically feasible" (Parrish, 1992a:A20).

Conclusion

The tuna-dolphin case demonstrates the contested nature of the transnational arena as neither the TNCs nor the environmentalists and the various States' officialdoms were able to fully assert their agendas. It also shows the limits of the regulatory capacity of the nation-State along with the difficulties which exist in the development of larger-than-national forms of regulation. The accords among the US, Venezuelan, and Mexican governments, the various appeals to GATT, and domestic attempts to implement policy are all cases in point.

In this respect, it can be concluded that the regulatory situation at the transnational level is extremely unsettled and characterized by a combination of old forms of regulation paralleled by emerging new ones. The former refers to the various nation-States' attempts to continue their mediative and organizational roles both domestic and internationally. New forms of regulation are embodied in the increasingly important role performed by transnational organizations which in this particular case refer to GATT and the IATTC. The unsettled character of this situation is supported by the inability of these institutions to maintain levels of control which encompass the sphere of action of TNCs and which address the demands from other social actors.

The case further demonstrates that issues concerning the protection of the environment and labor cannot be addressed unless some forms of regulation are carried out. More specifically, this case points out the validity of the assumption held by some of the most prominent classic social thinkers, such as Marx, Durkheim, Weber, Spencer, Smith, and Gramsci, indicating that unrestricted development of capitalism creates unbearable consequences for society. Accordingly, this case study speaks directly against the neo-liberal assumption maintaining that unregulated capitalism can successfully address economic growth, employment, and protection of the environment. The constant attempts by TNCs to avoid pro-environmental legislation, the waves of negative consequences for labor in the US and Latin America, and the use of global sourcing by TNCs to avoid the task of developing environmentally sound fishing technologies point out the limits of the neo-liberal proposal.

Unrestricted capitalist development and its current reliance on flexible accumulation also speaks against the maintenance of "free spaces." The Fordist accord provided "free

spaces" for labor which characterized the expansion of the living standards of the working and middle classes in the US and in many other advanced and developing nations in the world. During the post-Fordist restructuring, "free spaces" for labor contracted, while some new "free spaces" concerning the protection of the environment were established. The tuna industry abandoned US and Latin American processing plants which serviced their ETP operations. The case study illustrates, however, that even in the case of the environment, the availability of democratic control appears increasingly problematic, especially in light of future possible GATT rulings. It is evident that the enforcement of pro-environmental legislation pushed TNCs to reconsider their plans of action. At the same time, TNCs were not forced to alter their methods of production, although the TNCs were compelled to move their operations out of the ETP.

If the scenario is correct, then the task of regulating global capitalism assumes central importance. There are two general categories of alternatives which have been recently discussed. The first is protectionism. Protectionism has been advocated to limit the transnational mobility of capital and labor and to enhance the ability to control undesirable consequences of economic activities. In recent years, protectionist strategies have called for items such as the adoption of increased import tariffs, tougher controls for commodities and labor at the border, and various incentives to enhance domestic production and consumption of domestic products (i.e., buy American).

The limits of the protectionist strategy can be synthesized into two objections. The first is that protectionism counters global capital's post-Fordist strategy of flexible patterns of accumulation. Flexible patterns of accumulation are keys in overcoming the crisis of Fordism and expanding the avenues for the expansion of capital. Accordingly, protectionist strategies

would involve hampering the functioning of a system that is increasingly interrelated globally and which finds in its global character its ultimate strength.

The second objection refers to the decreasing capacity of the nation-State to enforce local legislation. In this case, as documented above, there is no reason to justify the conclusion that protectionism would enhance the State's capacity to enforce effectively its regulations in the international arena.

The other general alternative is to be found in international accords aimed at regulation. This alternative is based on the principal that the unity of the polity and the economy must be reconstructed. This reconstruction implies that the global sphere of action of the economy must be matched by equally globally sphere of action of politically regulatory forces. This alternative would involve the creation of transnational polity forms, such as the IATTC, which would act as surrogates for the functioning of the nation-State at the transnational level. In essence, this alternative would involve the creation of international alliances and/or organizations which would control capital flexibility. The modalities and forms with which these alternatives can be constructed are to be found in the historical conditions of the present era.

In order to do so, one of the major aspects that needs to be overcome is the fragmentation emerging in production and cultural spheres. As indicated in the case study, progressive movements such as the environmentalists and pro-labor organizations, as well as local communities, are pitted one against the other. Accordingly, the commonalities shared by these movements and communities, both at the economic and solidarity levels³, are weakened by the emphasis on locality and particularity of interest. This situation matures in a context in which the interests of transnational capital are not fully criticized.

The case of the tuna industry shows that while the US national controversy centered on the banning of established fishing techniques, it ignored domestic labor issues. Alternatively, the international controversy barely touched the issue of the industry restructuring around new technologies but instead focused on the localized impacts of labor dislocation. The international discourse centers on local advantages and gains of local groups without questioning the tuna industry's insistence on purse-seine technologies. Gains are framed in a taken-for-granted discourse which addresses immediate concerns but never embraces the more probing issue of long-term social arrangements. In other words, the objective of profit generation is ultimately maintained along with the "alternative" goals of constructing a sound environment and developing poor world regions.

In conclusion, these contradictory elements point to the historical difficulties of bridging environmental, labor, local and global interests around common goals. Therefore, the alternative of creating international attempts (i.e. organizations and/or accords) to control economic activities, while perhaps more desirable than protectionism, is certainly no less problematic. The 30 year struggle between the tuna industry and environmentalists richly captures the problematic character of national regulation within an international arena. Although the environmentalists appear to have won the latest battle, the onus of GATT casts significant doubts over the eventual outcome of the war.

Notes

1. To be sure, it would be erroneous to equate the establishment of "free spaces" with formal democracy. As illustrated by the voluminous literature in political sociology (e.g. Offe, 1985; Habermas, 1975; Marcuse, 1964), the availability

of democratic spaces within the sphere of the State is the outcome of confrontations among various social groups which establish the separation between the State's formal and substantive dimensions.

2. It also important to note that according to the environmental group, Earth Island Institute (EII), federal agencies are not enforcing the law to require foreign fleets to maintain comparable kills as the US fleet. Furthermore, the EII maintains that fines and penalties for violations of MMPA are so low that skippers of tunaboats accept the low fines in order to maintain higher levels of returns.

3. This should not be interpreted as a stand against diversity. On the contrary, it speaks to the shattering of common experience which constituted in the past the backbone of collective movements such as unions and political organizations of the working class.

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Globalization, the State and the Environment: Exploring the Limits and Options of State Activity

Terry Marsden

The paper explores the relationships between globalization and the state with reference to three interlinked aspects of environmental concern (agriculture-environmental relationships, environmental planning and policy and retailer regulation and food quality). New models of regulation emerge which suggest both a more variable and contingent conceptualization of the state is necessary. Social empowerment and the transposition of power with particular private economic sectors means that we must be more concerned with the substantial socio-political content of state power relations, rather than ascribing singular or coherent roles to the institutional matrix which traditionally defines "the state."

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Introduction

Over the past decade there has been considerable change in the roles and functions of the state. The changes highlight some of the inadequacies of our earlier interpretations of the state (see Bonanno, 1992). In particular, the tendency to see "the state" as a separated and functional entity capable of acting coherently has increasingly been brought into question. Moreover, the functions and morphology of the state has been given precedence over the state as a set of social and institutional practices which are variable over time and space. This paper aims to begin to re-conceptualize the position of state activity in the context of the new period of globalization, as it is associated with the agro-food complex. In doing this the following questions will be addressed:

- what are the limits the state encounters in its actions with respect to the substantive area of the rural environment and food quality?
- what are the new spheres of action entered into by the state in the global era in these substantive areas?
- can we say that the state still performs the role of mediator between opposing classes in society and acts in support of accumulation and legitimation? If so, is its ability to perform these actions enhanced or hampered by globalization?

- can one say that the state is still a class state? To what extent has globalization altered the class dimension of the state?
- should the state be conceptualized in national terms?
- what alternative conceptualization can be proposed, given the analysis of the substantive area of environment and food quality?

In attempting to begin answering these questions, reference will be made to three different bodies of research recently conducted in the European context. These are associated with agriculture-environment relationships, environmental planning and policy, and food quality and retailer regulation.

These related spheres of state activity will be discussed in turn, showing how state policy has changed, and identifying some new conceptualization of state-society interactions in a new period of globalization. In the second part of the paper the broader implications of these results will be addressed. This will start to build a new interpretation of the state as a *sociological* phenomena.

Re-regulation and the Consumer Interest in the New Global Era

For over a decade now the process of "de-regulation" of state structures as part of a neo-conservative project has been a dominant political process in both advanced and third world countries. De-regulation of Keynesian welfare structures in the North (particularly in Britain and the US) has been matched with "structural adjustment" programs in the South, creating new rounds of international competition between regions, nation-states and, increasingly, trading blocs. This dominant political discourse, ideology and strategy has undoubtedly been assisting multi-national capitals in their attempts to re-organize pro-

duction and exchange, incorporate new technologies and accumulate profits from new spatial locations based on least-cost principles. Whether the neo-conservative project can ever deliver a sustainable mode of social regulation equivalent to the Keynesian-Fordist hegemony of the post-war period is highly questionable. Nevertheless, the move towards--however unevenly--a "Schumpeterian workfare state" (Jessop, 1992) is providing new institutional structures enabling new rounds of exploitation and uneven development to take hold.

Several observations and qualifications need to be made concerning these developments at this stage. First, it is clear that while such changes have become dominant in many nation-states, the reorientation of state policy is based on contestation rather than a new consensus. In this sense, it would seem, that the application of sets of neo-conservative rules often produce the very opposite effects, particularly at local levels concerning economic development or environmental protection. *Policy dissonance* comes to characterize much of the impact of new deregulatory reforms. Second, it has become clear that while neo-conservative ideology may wish to portray and project a reforming process of state-breaking "deregulation" -- as captured in such phrases as "Lifting the Burden" (DOE, 1984) or "the government that governs least governs the best"-- these ideologies are usually based upon retrospective denial of one type of regulatory system and its replacement by another. An unanticipated and partly unintended consequence of "deregulation" of one level of the state, is its proclivity to emerge elsewhere *and* in different forms. We are thus now seeing the emergence of revised forms of regulation of productive and market sectors (Cerny, 1991). While neo-conservative policies which have been adopted in most advanced societies may well have been initially successful in breaking

down traditional Keynesian orthodoxes, concerning support for the public sector and collective forms of consumption, they have progressively confronted the social limits of individualization and the "bazaar of the market." This has been particularly noticeable when we begin to consider environmental and food quality concerns. In particular, in these spheres the very emphasis upon globalization as a transcending force in modern society has tended, by the early 1990s at least, to have a rather opposite social and political effect. For instance, whereas recourse to arguments about the inevitable transnationalization of economies, and particularly its consequences for labor productivity and technological advances, has been a major legitimatory argument in nationally based political ideology -- bringing forth (and partly legitimizing) high levels of unemployment, national and regional competition and general economic volatility -- when considering issues concerning environmental and food consumption the role of globalization as a legitimatory bulwark of the neo-conservative project breaks down. The recognition of global environmental risk tends to de-legitimize such neo-conservatism, at the same time that food consumers increasingly expect imported food commodities to be highly regulated around quality criteria. Thus, individualized, state-breaking ideology surrounding transnational production does not hold for a growing range of consumption concerns. Moreover, globalization as an "inevitable" process cannot be so successfully employed to legitimate the deregulation of production and market spheres. Increasingly then we must begin to perceive such types of regulation as competing, as they reflect power holders attempts to make and break hegemonic projects.

Third, this is raising the question of the sustainability -- socially and politically -- of the globalized neo-conservative model and, in particular, its power in overcoming new wel-

farist and reorganized local and socially regional concerns. These latter movements -- associated with environmental and food consumption, for instance -- are showing a growing ability to also capture globalization arguments for *their own* benefit. In this sense the arguments about globalization have to be located in the contested political discourses which are attached to production, consumption and regulatory change. In this perspective, the growing consumer orientation for "quality" goods and services represents a major influence upon challenging state policy and in reforming it around revised sets of principles. Hence, one of the issues becomes how the powerful and the powerless struggle to monopolize the reality and rhetoric of globalization. Growing consumer concern for quality goods can bear down heavily upon otherwise deregulatory governments, tempering the legitimization of globalization as an "inevitable" economic reality.

Fourth, these points place a renewed emphasis for nation-states as well as transnational and national capitals upon consideration of who controls and delivers consumers "rights." Which agencies and interests are given the responsibility to ensure public demands for quality? And how are new forms of commoditised consumption (rather than explicitly state-based, public-good consumption) to be sustained? These issues become more salient with the increased significance of consumption processes in the legitimization of the state and the corporate power it aims to represent. As Saunders and Harris (1990) admit, a key feature of the neo-conservative project throughout the 1980s involved unleashing new and revised *rights to consume*. These became, they argue, much more significant in sustaining the neo-conservative political project than the re-privatization of the means of production. Moreover, once rights (particularly market rights) to consumers were

unleashed (for instance, in the form of purchasing former public housing, private education and health; the purchase of new food products and the experience of different rural environments) to a widening group of consumers, they could rarely be retracted. In the corporate retail sector in the UK we see one manifestation of this. Once the doors of a new "out-of-town" center are opened consumers are presented with an array of new possibilities. Patterns of food consumption are modified, national trade gaps in food and drink widen and public expectations change. Hence we can begin to see the development of the new political significance of widening commoditised consumption, where costs and choices are explicit, variable and often class positional. These features become important legitimacy features of the neo-conservative state. But the interesting sociological question becomes how are they sustained and by whom? An important mechanism deserving more consideration here is the way in which markets are now geographically and temporally regulated and constructed by the state, not necessarily directly, but through the uneven rights conferred on different sets of economic and political sectors. State power is a transnational phenomena rather than a binary absolute. Christopherson (1993:276) argues, for instance, concerning the re-regulation of financial and retailing markets:

while it is relatively easy to accept the abstract principle that markets are politically constructed, the question of political construction is complex because of the way it is framed in different national contexts... Although conceptions of regulation influence how regulations develop and what forms it takes, an interpretation of regulation as encompassing public and private activities offers richer analytical possibilities. An understanding of regulation as an activity carried out only by the state lends itself to a binary, 'on-off' conception of regulation as a form of intervention that can be

eliminated, leaving a self-regulating market. This is impossible in the second, broad conception where continuous regulation, by private as well as public sectors, is assumed. Regulatory change does not mean the end of regulations, but affects the relative political power of regulatory sectors and organizations. If regulation is conceived of in this broader way, encompassing both private and public sectors, the US does not appear as a ruleless, deregulated system but as one in which the rules (and 'rulers' governing market institutions) are changing.

Thus, one important focus within a more neo-conservative policy context, where legitimation is achieved through the shop as much as it is through the workplace, seems to lie in reconstituting former state-corporate sector relations. The attention now being given to corporate "governance" needs to be developed with regard to how markets are constructed, regulated and sustained. New relationships and models need exploring in the state-private sector matrix. The rest of the paper will explore these issues in relation to the agro-food sector and environmental quality. In particular, the foregoing discussion will focus on *how to conceptualize state relations* given changing sets of production-consumption links within a neo-conservative context.

Agriculture/ Environmental Relationships

Three major distinguishing features of rural environmental-state relationships are:

- the importance of land;
- the importance of the natural environment;
- the importance of often vulnerable societies and cultures associated with (historic) land use patterns and other exploitative practices.

Land represents a particularly complex amalgam of socio-economic characteristics. In economic terms it is, simultaneously, a productive, a consumptive and a capital asset. Its use and value depend on the markets for the goods and services produced and the inputs and physical capital required in the production process; income, leisure time and personal tastes, and the psychic "income" associated with land ownership; and the macro-economic variables important to financial investments, especially interest and inflation rates. Few, if any, other economic goods or assets are subject to such a range of influences.

It holds the additional properties of being uniquely heterogeneous (in the sense that no one parcel is identical to another, if for no other reason than its precise location), and largely non-renewable or reproducible, though subject to either degradation or "improvement." It is thus subject to monopolization. It is often "lumpy" as a capital input to production processes and subject to irreversibilities following development or improvement; in addition, production and consumption activities associated with land usually exhibit "externalities." Some land-based products also display "public good" characteristics. One, the product is non-rival in consumption -- my consumption (of an attractive landscape, for example) does not deny your consumption of that same good. Two, the product is non-excludable -- the owner/producer of the landscape cannot prevent or exclude people from its use or enjoyment, and thus cannot charge for its production.¹ Land is also often a "positional good."² An individual's valuation and action may depend on restricting the ability of others to consume. Certain types of specialist recreation, exclusive forms of housing and industrial developments fall into these categories. This catalogue of economic and socio-political characteristics provides a classic recipe for

"market failure" where the competitive performance of markets is prevented from achieving a socially optimal allocation of resources to production and of goods and services to consumption or investment. Finally, the important question of distribution (of consumption and ultimately of economic resources) among the population is, historically, tied to the private ownership of land, in spite of some of its non-rival and non-excludable characteristics. Since private property rights are unevenly distributed (affecting the operation of markets as well as social judgments about the desirability of market outcomes) this feature, too, is likely to be critical. From a political economy perspective, therefore, land-based activities and their associated market behaviors are likely to be continually and systematically regulated by the state, representing non-market valuations and norms and socio/political judgments about the institutions of private property and the effectiveness of market mechanisms.

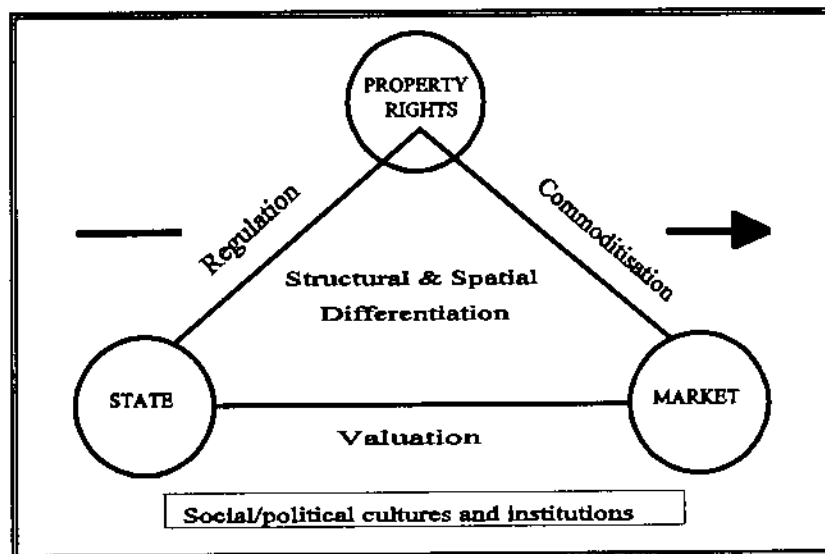
From this perspective, rural land (and its ownership and use) continues to influence the structure of local power. As a source of wealth, as a means of access to income generation and development opportunities, and as an important cultural symbol of heritage, tradition and continuity in a changing world, private property rights contribute significantly to the uneven sectoral and spatial pattern of rural economic and social development. Moreover, many rural policies are still directed towards the use of the land base (e.g. the CAP) and only through that, indirectly to rural businesses, families and individual citizens.

The combination of these features leads to distinct patterns in the relationships between the *state*, as the collection of publicly determined procedures and decisions from local planning to international policy, and the *market*, as the summation of individual, household and commercial decisions and interactions. A

principal fulcrum for these relationships is rights over property, especially those vested in land, and in the increasingly sophisticated and variegated knowledge required to take full advantage of these rights. Moreover, competition and political conflict over these rights intensifies as consumption demands for rural space increase.

example, it is clear that the characters of the State and Market are different from those of Property Rights. While the State and Market are often portrayed as alternative processes through which social choices are made, property rights are a principal medium through which these processes have their socio-political and economic effects. The proper functioning of any market, though, is dependent on the existence of the state to define and enforce property rights. As Marquand (1988:101) argues:

Figure 1: State-market interactions in rural environmental change.



...governments precede, and could reasonably be thought of as more 'natural,' than markets. The truth is that it is as misleading to talk of the state 'distorting' the market as it would be to talk of the market 'distorting' the state. Without the state there would be no market: at the door of the auction room stands the policeman.

Rural change can thus be pictured as the outcome, in part, of interactions between two composite spheres of activity -- the state and the market -- through the cog of property rights (Figure 1). The interaction of these spheres against a background of the physical and natural characteristics of the land itself (which is more all-encompassing than can be represented in Figure 1) and conditioned by the changing socio-political terrain, leads to the structural and locational patterns of economic development and land use. These outcomes, in turn, alter the terrain. As with any abstraction, the picture is over-simplified. For

In the Marquand sense, the policeman plays a crucial, if usually passive, role in governing the valuations decided in the auction room, either through direct regulation and enforcement of property rights, or through conditioning the form of the auction.

Two examples from different aspects of British environmental policy serve to illustrate some of these ideas.

Landscape Policy

It has long been recognized that market forces alone cannot ensure the conditions for the conservation and amenity use of particular

landscapes, but the response has changed significantly from the designation of National Parks in the late 1940s and 1950s to the introduction of Environmentally Sensitive Areas (ESAs) in the late 1980s. National Parks rely upon the direct intervention of the state, through the establishment of National Park Authorities. They are empowered to regulate the use of certain property rights within the Park boundaries in accordance with public or social requirements for conservation and recreation. These limitations embody new public rights which can be thought of as representing non-market goods created by the state acting in the public interest. The valuations of specific property rights are left implicit, while the extent to which rights can become commoditised, and thus subject to trade, is also restricted.

The more recent ESA policy, while pursuing broadly similar objectives regarding landscape conservation, seeks to modify the market system through payments for the provision of specified environmental "goods." This approach augments market signals. It provides an explicit public valuation of these goods, and at least a partial commoditization of them, though trade in them is restricted by their character. In this way regulation is achieved not through augmenting the statutory planning system but through an extension to existing property rights.

The approaches adopted in each case represent different forms and levels of regulation. The essential distinction between them is that planning procedures in National Parks serve to prevent the creation of negative externalities through appropriate financial incentives. The former is coercive, in that it constrains the permissible set of development options, while the latter is voluntaristic in seeking to modify behavior by altering the rewards associated with alternative courses of action. The policy choice, between a state sponsored market so-

lution or the assertion of certain collective rights, has no doubt been colored by ideological considerations, but information, institutional, transaction and decision costs are also important factors.

The possibility of an intermediate position -- of a blending of administrative intervention and financial incentives -- arises with the designation of parts of two National Parks as ESAs. This has helped raise the issue more generally, of whether there is a need for local administration of conservation payments to farmers. On the one hand, there are those who argue that such an intervening level would represent an unwelcome layer of bureaucracy, increasing the policy's transaction costs, and that the beauty of the British landscape lies in its great diversity, the product of farmers' individual actions. They prefer a menu approach to conservation payments, whereby farmers could sign up individually for particular elements in a scheme that suited them and their farm, and would receive payments accordingly. On the other hand, there are those who argue that local administration has a crucial role to play. Payments should be targeted, and the responses of farmers need to be orchestrated locally as part of a clear vision of a regional landscape to be achieved. Farmers also need advice and guidance if they are to make the transition towards becoming more effective managers of the rural environment.

Agricultural Policy

Until the 1980s, agricultural policy in the EC had been largely driven by a productivist ethic, encouraging production and related investment in land through a state of subsidies. One result was the increased market value of land as an agricultural asset. In addition, planning regulations presumed the priority of preserving prime agricultural land from urban development. During the last decade or so, the socio-political terrain has altered. Reduction

in product price subsidies (most recently through the MacSharry reforms of the CAP) has been coupled with the introduction of subsidies for environmental conservation and regulation of production practices (set-aside and stocking rate restrictions). Meanwhile, the international GATT negotiations have focused attention on the question of the appropriate value (price) of agricultural products, and indirectly upon the societal value of particular forms of agricultural production (e.g. small family farms) over others. Should prices be determined on a level playing field of free-trade or should they be subject to national intervention? And what role, if any, should be allowed for regulation of production (i.e. land use) through supply control measures? These international considerations and developments are affecting the use and value of land for agricultural purposes, within and between nation-states, as well as potentially influencing the structure of the farm systems in terms of the numbers and types of farms, their ownership and operating arrangements, and their relations with input suppliers and the providers of physical capital (plant, equipment, buildings and works).

In both illustrations, the interactions between the state and the market, through property rights in land, have adjusted or been adjusted in response to the changing terrain of socio-political culture and institutions. The development of the "market philosophy" of the Conservative administrations of the 1980s dominant political culture, clearly conditioning the shift towards a "market choice" approach to rural development and away from a more planned, regulated-public interest system. But the question now becomes how to re-regulate (through the multiplicity of options available) the more deregulated macro economy unleashed during this period, given growing concerns for environmental protec-

tion over and above agricultural production for its own sake.

New Patterns of Food Regulation: Public Interest Regulation Versus Private Interest Government

More broadly in most advanced countries new rules, regulations and a changing political context have led to revised patterns of intermediation between the farming community and government, and between the government and food processors and retailers. While the nature of contemporary economic changes are now relatively well understood, the same is not true of the emergent forms and processes of political regulation. More generally, as Cerny suggests (1991:192):

The analysis of deregulation and re-regulation is of a state mediating between powerful opposing interests, deregulation here, and reregulating there, normally trying to change as little as possible while adapting to limitations imposed by wider markets of institutional/technological conditions, but occasionally having to impose more extensive changes in the balance of interests which are given priority or special attention.

The question is how can we conceptually and empirically progress these issues so as to weld together a more meaningful analysis of the state/food sector nexus?

At the conceptual level it is possible to distinguish at least two emergent regulatory frameworks: **public interest regulation** which from the 1980s has essentially involved local forms of re-regulation (see Marsden et al. 1993); and **private interest regulation**, whereby one actor or set of actors, usually economic, regulates the activities of another set of actors. There will be an inevitable tension between these two pure forms as they attempt to serve different productive and con-

sumption interests. Consequently they are unlikely to be found in pure form, but regulatory frameworks will show a tendency to collide with one another. Within the UK both systems are long-standing, but they have been given new direction by the neo-conservative agenda dominant since the mid-1970s.

A system of **public interest regulation** is one where the state has some direct involvement and which is nominally claimed to operate in the public interest, or which is at least open to some public participation and scrutiny. It is a form that is intimately associated with the Keynesian and welfarist politics of much of the post-war period. Most often it involves the regulation of productive interests with the state acting in a benevolent manner to represent marginal interests; such as administering wages councils to protect low paid workers, or as an actor capable of protecting and promoting the common public good. With its attempts to curtail the rights of private interests and attendant bureaucracy, most forms of public interest regulation have, at a minimum, been subject to unprecedented scrutiny, and more likely to reform, as the government attempts to role back the "frontiers of the state."

Probably one of the clearest examples of public interest regulation is the British planning system (Marsden et al, 1993). During the 1980s, attempts were made to liberalize its operation through reforms at the national level. This created unanticipated opportunities for interest groups and professionals to develop local forms of regulation (e.g. local plans) to control private sector land development. Here the practice of regulation is locally variable, depending crucially upon the nature of the locality and its political culture. More specifically, because of the nature of the professionalized planning system, and the opportunities for public participation and impacts on public goods, the service classes are likely to play a prominent role in shaping these forms of local

regulation. Particular selected social groups are empowered in many Northern European countries; even where neo-conservative national policies have been well-advanced, public interest models of regulation are emerging. With the gradual decline in productivist priorities of agriculture, local forms of planning regulation have lost a major regulatory principle; i.e. to presume that land for agricultural purposes should be given precedence *as of right* over and above other developments of rural land. The removal of this principle has occurred simultaneously with the increase in the numerical and political power of the service classes. This conjunction has provided new opportunities for local planning to adopt service class inspired preservationist policies. Central Government responses to these sets of circumstances is not necessarily antipathetic. In the UK the 1991 *Planning and Compensation Act* and various other circulars encouraged a more plan-led system whereby "development control decisions shall be made in accordance with the plan unless material conditions indicate otherwise." These changing state relations suggest the move towards a more regionally variable regulatory system which allows degrees of local discretion in environmental management. The demise of the highly centralized and corporatist agricultural productivist policies of the post-war era are giving way to a more consumer oriented preservationist public interest model. Local middle class groups have been bestowed more power to create space in their own image. Nevertheless, such a change does reflect a different model of regulation; one where the nation-state, mindful of its broad middle-class constituency, bestows local discretion for environmental management on local regulatory systems. More specifically, new forms of plan-making at the strategic and local levels pays increasing attention to environmental

protection in the context of a more diversified agricultural base.

The best examples of **private interest regulation** can be found within the food system. Moreover, the changes within the regulatory system clearly illustrate the impact of the restructuring of economic and political relations. During the post-war years EC agricultural policy has been highly regulated and centralized. The links that developed between the National Farmers Unions and the Ministry have been regarded as the classic case of corporatism in the UK (Cox et al, 1987). This enshrined the importance of private producer interests, indeed for the state to confer them legitimacy, at the expense of other bodies who would have wished to be involved in the making and price setting of agricultural policy. Public policy was not open to public participation or scrutiny. For food manufacturers and retailers these arrangements were acceptable so long as it could ensure plentiful supplies of good quality *cheap food and food inputs* to the down-stream parts of the food chain. Agriculture's exceptional political power was not a problem as the policy suited the other sub-sectors in the food system. For example, farm income support through support prices maintained a vibrant market for agricultural inputs up until the mid-1980s. A lobby that was united around the principles of an increasingly capital intensive and productive agriculture was a boon for those interests both upstream and downstream of farmers.

However, the relationship between the state and farmers was to be undermined both politically and economically. Entry to the EC destroyed Britain's traditional patterns of food production and supply, and helped stimulate new forms of processing and sourcing. Britain had to cope with new forms of internationalization and this began to test the national forms of productivist corporatism. Movement to the European stage of policy mediation weakened

the relationships between MAFF and the NFU just at the time when the magnitude of agricultural support was to be more seriously questioned. Moreover, faced with fiscal crises, successive Conservative governments recognized the need to attack corporatist type relationships. They were seen as privileging the wrong sectional interests in policy making and impeding the free working of markets. Moreover, the maintenance of such relations in Europe were seen as impediments to the illusory "level playing field." The maintenance of a separate government department to deal with agricultural and food issues may have delayed the process of regulatory change but it has not been able to curtail it.

What has emerged is that the traditional form of agricultural producer corporatism has been progressively superseded by new forms of private interest micro-corporatism. The state has sought to disengage as much as possible from direct involvement in food regulation, passing the responsibility onto the retailers and to a lesser extent the other non-farm parts of the food sector. It is the multiple-chain retailers who become the key actors in post-productivist food system, and who now have political legitimacy for regulatory control. Consequently, although consumption interests may appear to be to the fore, certainly if one accepts the rhetoric of the retailers, they are in fact continually constructed and expressed through private interests. In other words it is left to the retailers themselves, who are involved in socially molding and creating demands, to represent their consumers interests.

Wrigley (1991) has described the period since the mid-1980s as "the golden age of British grocery retailing," an era characterized by a "benign regulatory environment" (Wrigley, 1992:779). It is perhaps more accurate to speak of the retailers operating in a regulatory environment in which they play a leading and directive role. They have *partly*

created and then reproduced the benign environment. Statutory legitimation of this came with the Food Act 1990. This can be seen as equivalent in symbolic importance of the links between the state and sectional interests as that of the 1947 Agriculture Act for farmers. The 1990 Act was a response to EC pressures and domestic concern surrounding food hygiene, following a number of health scares in the late 1980s. The passage and the establishment of the Act tended to veer towards the interests of the food industry. The stated aim was the management of consumer protection in the context of protecting "the needs of an innovative and competitive food industry by avoiding unnecessary burdens and controls" (HMSO, 1990). The Act permitted the selective irradiation of food products, a move favored by the processors and some of the retailers as it prolonged shelf life while reducing the risks of contamination. Government needed to "keep pace" with technologies rather than control them, and it was the job of government policy to "protect the consumer" in the context of a technologically progressive and internationally competitive industry. The nation-state observed the logic of globalization and technological sophistication conveyed to them by the retailers.

While irradiation was the most controversial aspect of the Act amongst food campaigners, more significant in policy terms was the shift in responsibility for food quality control away from the public environmental health inspectorate and towards the private retailers. Local government faced severe financial constraints throughout the 1980s, and with a growing number of food hygiene issues environmental health officers were spread too thinly. Moreover, they were not regarded by central government as a key professional group and rarely seem to have been consulted in the preparation of new legislation.

It is now the responsibility of food outlets to demonstrate that they have taken "all reasonable precautions" and shown "due diligence" in the manufacture, transportation, storage and preparation of foodstuffs. As one managing director of a large retailing firm has commented, even a small manufacturer can:

gain access to very large markets because all he has to do is produce the product. Now in doing this he gets immense support from his customer. He gets technical advice in producing the product, in maintaining quality standards, in adhering to the Food Safety Act, and we (the retailers) have an obligation to exercise due diligence....(Agriculture Committee, 1992, p111).

In exercising "due diligence" retailers are likely to take a different approach to that of the environmental health officers. The latter have tended to focus on point-of-sale inspection rather than monitoring the food manufacturing process (see Painter, 1981). By way of contrast, we can begin to see a new phase international food procurement, whereby retailers rather than food manufacturers -- let alone EHOs -- are privately "looking into the mixing bowl." They may have to transgress national forms of food hygiene and environmental regulation in sourcing countries by their privately defined quality assurance criteria. In addition, they begin to create new products built around such criteria.

As part and parcel of the legitimation of its regulatory responsibilities the retail sector has had to reconcile itself at the political level to deal with government. Having created lucrative markets during the 1970s and 1980s, and having developed internationalized systems of product sourcing, the key now is how politically to sustain these. This requires constant political activity within state agencies. Of central importance here is the development of the diverse activities of, inter-alia, the Retail Consortium (see figures 2-5). Constituted from

Figure 2: Stylized Structure of British Retail Consortium Links

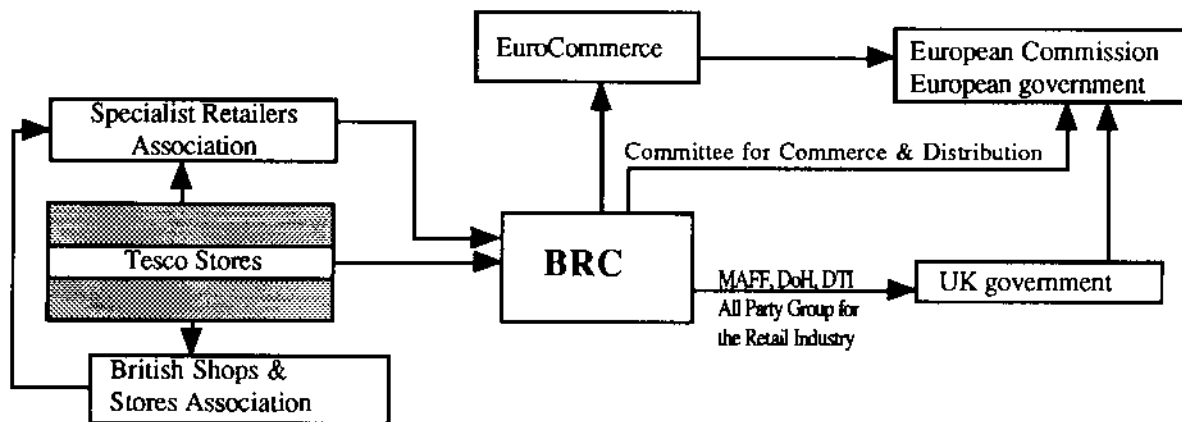


Figure 3: Stylized Structure of Food Industry Organizations

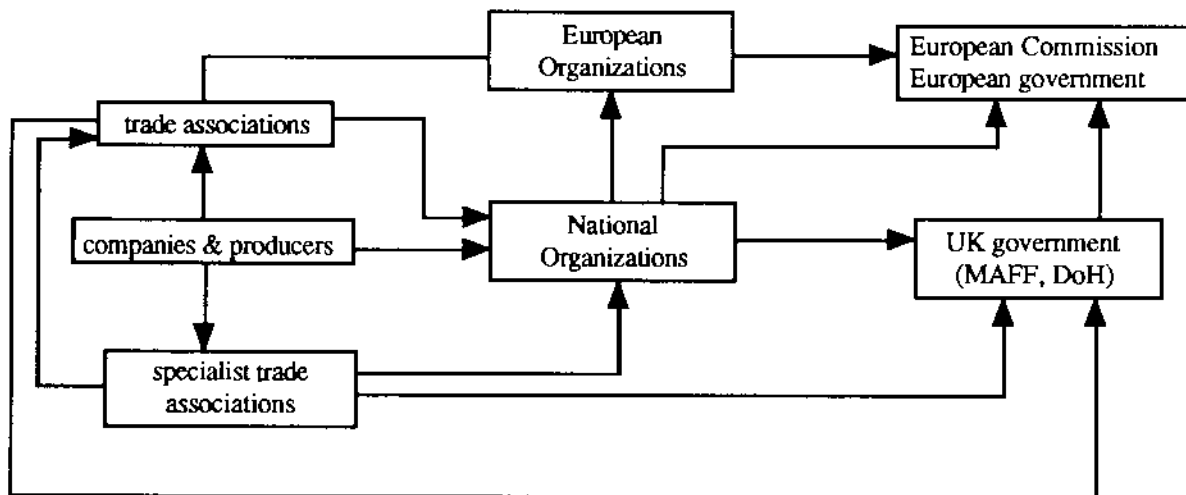


Figure 4: Stylized Structure of Food & Drink Federation Links

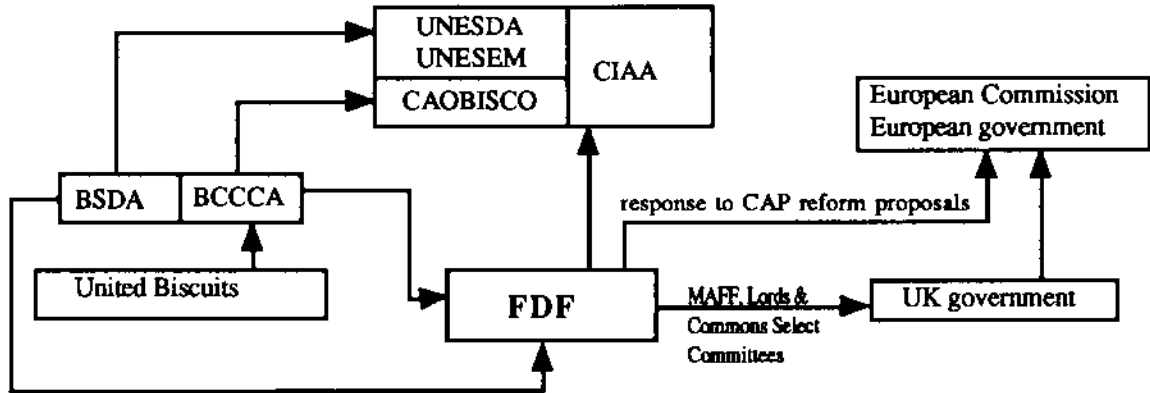
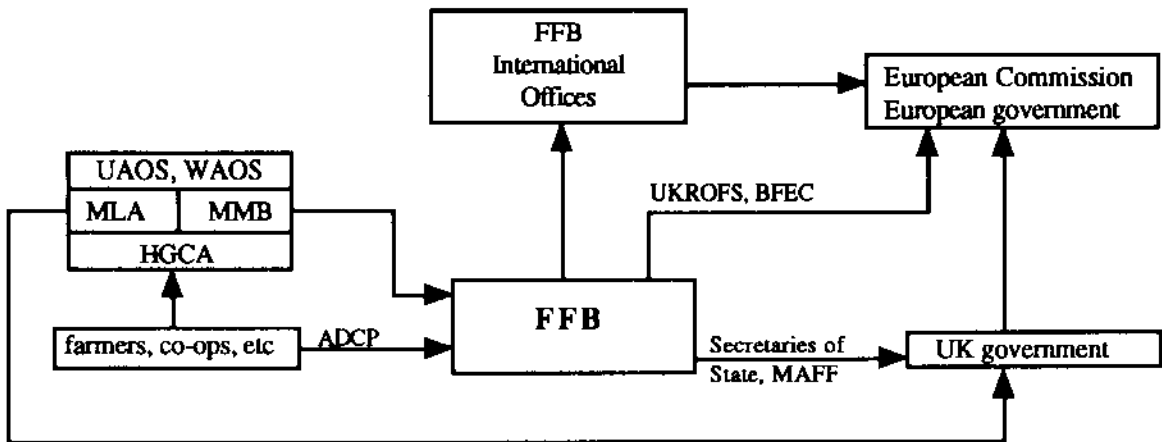


Figure 5: Stylized Structure of Food From Britain Links



the representatives of all the major retail companies, it merged with the British Retailers Association in 1992. Both were long-standing organizations with established reputations for representing the retail industry. The merging of both company and trade association interests has been made so as to enhance the representational power of the retail sector to government, both at the national and international level. Retailers have to increasingly keep one eye on the competitive food chain and another on the Europeanization of markets and food regulation. As the chairman argues:

Legislation and regulation emanating from the EC are rapidly overtaking that from Westminster in their direct and indirect impact on our industry. The past year (1991) has seen numerous proposals in the Social Action programme; protectionism on food issues masquerading as consumer protection; major proposals on eco-labelling and packaging waste; the continuing debate over VAT and excise duties; and many more. (RTA, 1991:4).

As the responsibilities conferred on the retail sector have increased in the UK over the course of the last decade, they have been forced to diversify their representational interests to a whole range of concerns associated with trading, planning and the environment, credit supply and social order issues. With other groups the Consortium seeks to press its views on government through briefing meetings with MPs on relevant legislation passing through Parliament; arranging lunch meetings for key policy makers; contributing to an all party group of MPs and peers on the retail industry; and participating and lobbying at the European level in groups such as the European Multiples Federation (GEDIS) and the European Confederation for Retailing (CECD).

These diverse sets of political relations are suggestive of a powerful regulatory role both

within the specific food sector and beyond. They begin to formally represent and construct the "consumer interest." They are currently influencing directly the development of European wide standards for food quality, arguing against specific and separate food commodity measures and for more generalized guidelines. Three-cornered negotiations occur on a range of food quality issues involving MAFF, the retailers and EC directorates. The consortium has pressed the government to dismantle the monopoly powers of the Milk and Potato Marketing Boards and to remove the imperial privileges conferred on Caribbean banana exporters. It has supported the deletion of the requirement from the EC that produce be labeled to show pesticide treatments (i.e. P number labelling), and it successfully defended "members rights" to continue to use the term "free range" on a variety of poultry products.

In these ways we begin to see how retailers are managing the process of competitive and regulatory internationalization both in the supply and delivery of food and in its regulation. They are operating both within national government as well as beyond it. While these retail interests are still largely nationally based, they need to influence off-shore markets and regulations from a position of national strength. These processes are not necessarily producing retailers as, in Grant's term "stateless firms" (Grant, 1992); rather, they have to negotiate and attempt to manipulate sets of nationally derived *and* internationally mediated public and private concerns. They attempt to maintain competitive market space by means of influencing and directing emerging legislation from the EC *and* the UK. Much of this is undertaken privately under micro-corporatist conditions. Moreover, it is occurring during a period when the nation-state becomes increasingly dependent upon retailers

to deliver consumer rights as part of a revised legitimation process.

New forms of internationalization and the increasing power of the consumer end of the food chain are combining to create new forms of national regulation as distinct parts of international, power "corridors." These are hastening the demise of producer based corporatism, so much a feature of the post-war national farm policies of most advanced nations. New forms of private interest regulation, whereby the *state empowers particular private interests to act on its behalf* are reinforcing the differences between types of public interest regulation (as concerning the rural planning system) where public participation, local responsiveness and scrutiny play an important part in the steering and spatial organization of economic change. Internationalization is likely to play an increasingly important role in developing these systems of regulation and it remains to be seen whether the different models initially developed in this discussion will compete both *within and over* national boundaries, particularly as the pressure for more common European policies develops (for example, harmonization and or mutual recognition mechanisms). National agricultures begin to play a less significant role in the food procurement policies of food manufacturers and retailers (either in terms of the proportion of value added or in terms of the volume of products required of individual farms). Moreover, corporatist agricultural policy starts to give way to more localistic service class demands for environmental and amenity goods. These tendencies operating within and between nation-states begin to promote new models of state mediation based on the delivery of new consumer demands rather than the provision of publicly inspired cheap food. The re-regulation of quality supply becomes paramount at the same time as national-states

paradoxically attempt to economically "deregulate" production and markets.

Disenfranchisement, Empowerment and the Construction of Global Markets: From Models of the State to Regulation Processes

The focus on the *food system as a dynamic and competitive matrix* begins to tell us a lot about the regulatory state in the post-cold war and post agricultural world. The ability of the state to retain a certain amount of adaptability, creativity and capacity for action reinforces its spatial variability and contingent nature. As a result, our focus here on retailers suggests the inadequacy of most of the generalized models of "the State." The competitive and contingent state, after the radical changes brought forth over the past two decades, is neither simply "elitist" nor "autonomous."

Regulating production, labor and now increasingly new and more variable forms of consumption, become high risk areas for the nation state. The allocation of consumer rights through the delegation of power to the retailers produces a new custodialism not only within the food system, but also in terms of the protection and promotion of consumer rights. It remains to be seen whether the regulatory state and the retailers can sustain their new found -- privately implementable -- public responsibilities.

What do these case analyses, associated with environmental and food quality, tell us more broadly about the limits and sphere of state action? How do we conceptualize state action?

Undoubtedly, the imposition of neo-conservative principles on macro-economic management has encouraged the internationally based food manufacturing and retail sectors to pursue and construct new value-added markets

under what Wrigley (1992:779) has modestly termed "a benign regulatory environment." The deregulatory nation-state -- in the UK at least -- has delivered cheap pools of unskilled and semi-skilled labor for retailers while simultaneously encouraging "service class" purchasing power of niche market and value-added food goods. However, these regulatory patterns are subject to considerable dissonance and contestation between as well as within the nations-states of Europe. The uneven adoption of the "social chapter" after Maastricht is in part an expression of the differences in neo-conservative nation-state policy. In the UK, maintaining a cheap labor force and positional buying power is seen as a priority in encouraging the flow of inward capital investment and low paid employment. In other European countries the promotion of highly skilled and state guaranteed labor is seen as higher priority, for the encouragement of output. Hence, the extent to which the nation-state forfeits welfarist principles in favor of projecting its global competitive status is highly variable. A key feature of most advanced nation-states has been, however, the increasing *disenfranchisement* of a growing and often multi-ethnic underclass and simultaneously, the empowerment of the service class consumer. In this sense the state still reflects and, indeed, generates class relations, but it does this increasingly through the *sphere of consumption* as well as production. Consumption cleavages are redrawn.

Consumption relations, not least associated with environmental quality, become more significant in class reformation. In particular, the acquisition and occupancy of property in rural areas becomes a major axis around which class relations are formed (see Savage et al. 1992). Moreover, food purchasing and consumption also reflects the growing social distance between the underclass and the service classes. Increasingly, the state is not operating

coherently in pursuing particular class interests. The state is not simply of a class. Rather the state and many of its models of regulation (for instance, the private interest government and public interest models outlined above) become active *agents in class formation* and fracturing. One feature of this becomes a growing spatial polarization and differentiation. Class; partly because it is more clearly defined by consumption and property, becomes more place specific. The state is then forced to protect these class spaces from "invasion." These class groupings once formed begin to construct new markets, attempting to further empower themselves with new consumer rights. Corporate capital, in the form of manufacturers and retailers cooperate in constructing and then regulating these markets. Environmental and consumer concerns however widespread and publicly recognized only *empower certain groups* in the neo-conservative state. They are far from "mass movements" in the traditional sense. Rather, they are partly defined by their *boundaries* with others. In particular service classes and corporate retailers have been two such empowered groups over the past decade. However internationalized corporate capital or state structures become, the protection of such empowered markets and constituencies is an overriding priority. Both the private sector and the more "deregulated" state have to constantly legitimate their actions to these nationally based and value-seeking groups of consumers. At the same time, however, they have to act transnationally in order to maintain and regulate their markets. This places more analytical emphasis not so much upon state structures per se, as it does on the practices and actions which run through them. The socio-political *practices* involved in regulation become a prime focus for research.

As some of the recent literature on regulation suggests (Clark, 1992; Jessop, 1990), the

changing characteristics of regulation at different institutional, sectoral and spatial scales, provide an active context for accumulation, social legitimation and reproduction of labor and consumption. Increasingly -- in the advanced world at least -- it would seem that these long-standing regulatory dimensions are now more embedded in consumption processes. The differential rights to consume become an important axis upon which accumulation occurs and is socially and politically sustained. The question becomes, how sustainable are the accumulation strategies of retailers and food manufacturers in the 1990s and how is the regulatory state to react to the dual pressures of underwriting private accumulation and maintaining a divergent public interest? So far it would seem that different regulatory models are operating at different points in the state-food matrix. For instance, private interest government expects the retail sector, as with other sectors such as the privatized utilities, to embody individualized and public goals and goods and to continuously legitimate these in its relations with the consumer. This is far from a smooth or functional process, however, and it presents the regulatory state with a new set of contradictions. In part it cannot control or "ring-fence" food supply or food quality as it once did under the largely nationally based agricultural corporatist model. A major concern for the state apparatus now becomes how to delegate state power to the private sector while also keeping some responsibility for the public interest.

In addition to these inherent contradictions in *transposing state power onto private sector interests through micro-corporatist relations and practices*, the tendency for the growing transnationalization of policy and corporate activity tends to progressively confront these nationally based arrangements. In the area of food standards and competition policy, EC directives can confront prior agreements made

between the retailers and the British state. Given the persistence of producer-corporatism in mainland Europe, in addition to concerns about guaranteeing workers rights and welfare, private-interest government models of regulation generated in Britain may not be a sufficient basis for the international expansion of the British retail sector. There may indeed be nationally specific forms of micro-corporatism developing across Europe at the same time as retail firms become more internationally connected. It is, therefore, important to recognize that the processes of transnationalization may unsettle nation-state generated regulatory models, but that this will *not necessarily discourage new regulatory development emanating from nation-states*. Public environmental concerns and consumption practices remain largely national concerns. *Corporate capital needs nationally generated regulation* as much as it needs to exploit transnational markets. The need is to study the contested and contingent cross-links and matrices between international and national regulatory relations; and particularly how these define the competitive space for corporate capital, on the one hand, and sustain and legitimate consumption practices on the other.

The ability of state practices to retain a certain amount of adaptability, creativity and capacity for action reinforces its variable and contingent nature. The study of state regulation in the period of "new" globalization needs to jettison the generalizable "models" of the functions of "THE STATE." It is more than simply a study of institutional morphology. As some of the regulationist and policy community and network literature begins to suggest corporate reorganization and consumer empowerment requires a continuous redefinition of the boundaries of competition and accumulation. Both require *contingent state practices* to help to continually construct and legitimate

these social conditions at the national and international levels.

Notes

1. While landscape is an obvious example of a land-based public good, others include the conservation or preservation of wildlife and habitats, the provision of public access and amenity features, and even the concept of a secure (i.e. domestically produced) food supply.

2. See, as the prime discussant of the characteristics of positional goods, Hirsch (1976).

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Biotechnology and Agriculture in Developing Countries

Nelson Prato Barbosa

This multinational project intends to identify the current and potential uses of biotechnology in the agricultural and food sector of developing regions of Central Africa, India and Venezuela. Particular attention is paid to the study of biotechnological research, its applications, and social consequences in the above mentioned regions. Selected agricultural commodities will be grouped in three categories: 1) export oriented commodities; 2) commodities for domestic consumption; and 3) commodities produced for both domestic and international markets. The study will be divided in two phases. The first involves the identification of three commodities to be included in the above mentioned groups. Commodities will be selected for each of the regions studied. The second analytical phase is aimed at understanding the current and future uses of biotechnology in the production of the selected commodities. The principal objective is to understand the social consequences that the application of biotechnology generates for various social actors in the agricultures and societies of these regions of the developing world.

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Introduction

Current conditions in developing countries demand new strategies for the socio-economic development of agriculture both domestically and in terms of these countries' presence in international markets. This situation mandates the introduction of more sophisticated forms of management which, it is hoped, will lead to improvements in the quality of agricultural products and increased productivity. It is in this context that new biotechnologies have been introduced in agriculture.

In developing countries there is an increasingly evident optimism in regard to the utilization of biotechnology. This optimism has been translated into a growing infrastructural and financial support from national governments (Brenner, 1991; Byé and Frey, 1988; Costagne and Gutier, 1982; Jaffe and Zaldivar, 1992; Kumar, 1988; Agricultural and Human Values, 1988). Similarly, there is an awareness of the important role that biotechnology is playing in the new global economy which now shapes the perspectives of producers and the scientific community (see International Journal of Sociology of Agriculture and Food, Vol. 1, 1991).

These new elements have drawn the attention of members of the Research Committee on Sociology of Agriculture and Food of the International Sociological Association (ISA), which along with other individuals and groups has initiated various investigative activities in this area. For example, discussing the social dimension of scientific investigation, Busch

and Lacy (1983) indicate how the latter is related to dominant social values (other examples are Lewin, 1972; Cheney, 1974; Patterson, 1976). Others have emphasized the relationship between technical change and social transformations (Vessuri, 1981). In this context, particular attention has been paid to the effects that the adoption of new technologies have on producers and consumers (Cochrane, 1979). Similarly, important contributions have been generated in regard to the role of scientific innovations in society and their relationships with the public and private sectors. In the case of agricultural research, the role of the public sector has been identified as dominant, as private investments have generated inadequate levels of profitability for the private sector in R&D (Busch et al, 1989).

Though there are numerous ways in which biotechnology can be defined, according to the Office of Technology Assessment (1986:9; cited in Bonanno, 1991:141) this biotechnology refers to "techniques which imply the use of living organisms or portions of organisms to create and/or alter products, change the genetic make-up of plants or animals, and develop micro-organisms for specific uses. It refers to two basic genetic-molecular techniques: recombinant DNA and cellular fusion."

The biotechnological revolution is a product of genetic research. Busch et al., (1989:84) indicate that the traditional ways in which genetic research has been carried out in the past have been radically modified with the introduction of biotechnology. In this context, the authors point out that these new techniques have at least three distinct advantages over traditional techniques. First, it is possible to cultivate a significant number of different cells—each of them a potentially new plant—in a small area. Second, sexual reproduction can be replaced allowing the introduction of foreign material in the genetic make-up of spe-

cies. Third, it is possible to create new and genetically improved products in a much more accelerated manner than in the past.

Numerous analyses have underscored the uncertainties associated with the use of biotechnology. Not only are the short term consequences of its application unclear, but it is almost impossible to predict the kind of long term consequences that the introduction of modified species can have on social and natural environments. Despite numerous notes of caution, biotechnology gained instant popularity and support, creating the expectation of immediate improvement in all areas of agricultural and food production (Carrizalez, 1981; Texera, 1984).

This climate generated a rush of investments in R&D. The significant intervention of private capital was later replaced by a much greater proportion of research being carried out by the public sector. Though results to date have not been as significant as predicted by some, in many cases the alteration of established patterns of agricultural and food production have been notable (Jaffe, 1991; Jaffe and Zaldivar, 1992). The creation of sugar substitutes (Van den Doel and Junne, 1986), of eatable oils (James, 1984) and of fabricated foods (Stanley, 1986) are a few cases in point. Biotechnological research also involves the use of raw materials. For instance, products which are bio-chemically similar to natural products have been generated in laboratories, severely challenging the concept of artificiality (Busch et al., 1989).

While some authors (e.g. Byc and Mounier, 1984) indicate the difficulties that transnational corporations encounter in furthering their presence in biotechnology, the impact on developing countries has already been significant, as they have the vast majority of genetic material available in the world and are economies based, to a significant extent, on agricultural production. Moreover, it has

been feared that the increased use of new biotechnology can continue to create unemployment in agriculture, the elimination of products from local markets, changes in the relationship between rural and urban areas, and increasing conflicts over property rights.

The separation between the "social" and "natural" sciences is perhaps one of the most important sources of the relative lack of discussion regarding the social consequences of biotechnology. Paradoxically, the introduction of biotechnology in agricultural production has forcefully demonstrated the social construction of nature. In fact, the possibility of "designing" new natural products clearly introduces the question of what type of nature is desirable and should be pursued through scientific investigation (Busch, 1991).

One of the new aspects proposed by this line of investigation is analyzing the social objectives implicit in the development of new biotechnologies. More importantly, the goal is to illustrate possible undesirable consequences associated with the impact of new technologies in the socio-ecological sphere. In this respect, it is important to reach an equilibrium between the fostering of democratically determined social objectives and the adoption of advanced forms of technology (Biotechnology and Development Review, 1991:6). Consequently, it is important to create a democratic consciousness which allows a greater participation of communities in the definition of the role of scientific investigation (Busch, et al., 1989).

Objectives of the Proposal

The following are the four objectives of this proposal:

- 1) The project will carry out historical analyses of research practices and of the introduction of biotechnological techniques in developing countries.

- 2) The research is aimed at the identification of the current and potential uses of biotechnology in the production of selected agricultural commodities.
- 3) The third objective involves investigation on the current social consequences of biotechnological research and on its applications in the production and forms of commercialization of selected agricultural commodities.
- 4) The final objective of the project is to forecast possible future social consequences of the use of biotechnology in the agriculture of developing countries.

Research Design

The project focuses on the use of biotechnological techniques in three countries of the developing world: Republic of Central Africa, India, and Venezuela. These countries have been selected as they are parts of three developing continents: Africa, Asia and Latin America. Furthermore, three agricultural commodities will be selected in each of the above mentioned countries. These commodities will be identified in regard to their historical and current importance for the socio-economic development of these regions.

Unit of Analysis

The unit of analysis is defined in terms of two sub-units. The first is agricultural commodities. These are identified as three commodities, one of which is produced for export, the second of which is produced for domestic consumption and the third of which is produced for both domestic consumption and export. The second sub-unit of analysis refers to the countries of Venezuela, India and the Republic of Central Africa. It is within these countries that the empirical portion of the in-

vestigation will be located.

Procedures

The procedures of the research involve the following steps.

- a) The first step is to provide an exploratory analysis to identify commodities to be included in the study. As indicated above, three commodities will be selected for each of the three countries included in the project. These commodities will be analyzed using the methodology of "case study."
- b) Once the three agricultural commodities for each of the countries investigated have been selected, an analysis of the past and current use of biotechnological techniques and products will be carried out. The analysis will cover all the various phases of production from the very origin of the product (genetic) to its final destination (consumption). This portion of the study will be carried out using a historical analysis methodology and the commodity analysis technique (Friedland, et al. 1981). This portion also includes the use of surveys for the elaboration of a "map" of research centers and research involving biotechnology. It will be followed by in depth interviews with researchers who carry out biotechnological investigation.
- c) The third and final set of steps involves analysis of the current and future social impacts of biotechnology. Historical analysis and commodity analysis will again be employed for this portion of the study. Qualitative and quantitative data will be employed.

Some of the variables selected for the analysis are listed below.

Research

1. Research Units
2. Number of Researchers
3. Budget of the Project
4. Type of Institutional Support
5. Technical Results of the Investigation (i.e. creation of improved varieties, creation of new species, increased productivity, increased nutritional value of products, etc.)

Production

1. Centers of Production
2. Socio-economic Characteristics of Products
3. Origin of Technological Application
4. Assistance in the Diffusion of Innovations
5. Control of and Increases in Productivity
6. Technical Assistance
7. Availability of Inputs, i.e. Labor Force, Land, Credit, Equipment, etc.

Market

1. Units of Commercialization
2. Characteristics of Trading Agents
3. Prices of Products
4. Level of Competitiveness of Markets
5. Demand, i.e. Levels of Internal and External Markets, Etc.

It is important to emphasize that this research is exploratory in its first phase and an inferential research in its second. In this context, the social impact evaluation will be based on the analysis of current research projects with the objective of determining their future perspectives and trends. To this purpose (a) the intensity with which investments and implementation of projects are carried out will be considered along with (b) the socio-spatial and temporal distance between research and its direct applications in production. Finally, (c) the

quantity of investments and of the application of related results in production will be considered. Additionally, the points of view of the participating actors, i.e. researchers, producers, traders, consumers and various private and public agencies, will also be determined.

Time Table

Objectives one and two of the project will be completed two years from the beginning of the study. Objectives three and four will be accomplished in the third and final year of the project.

Criteria for the Evaluation of the Results of the Project

The results of the project will be presented through annual reports. Annual reports will be prepared for each product and for each country selected in the study. The final report will contain a revised version of the annual reports and will provide an overall analysis of the project results. Efforts will be made to publish portions of the final and/or partial results in scientific journals.

Institutional Links with Other Members of the Research Group

Participants in the project include the following researchers and institutions.

Alessandro Bonanno, Department of Rural Sociology, University of Missouri-Columbia, USA. Prof. Bonanno has studied social values and ideology associated with biotechnological investigations.

Prof. Maria Fonte, Department of Agricultural Economics and Agricultural Policies of the University of Naples, Italy. Prof. Fonte has carried out studies on the application of biotechnology in agriculture in Italy and Europe. Her department has a long standing tradition in the study of regional and developmental issues.

Prof. Pascal Byé, INRA (National Institute of Agricultural Investigation) and Department of Rural Sociology and Agricultural Economics at Montpellier, France, has been working on issues related to biotechnological research for years. His well-known works on technological change in agriculture have been influential in shaping current debates on the topic. Prof. Bye's department is a leading institution in the field of international agricultural investigation.

Drs. Rachana Bharti and Nagesh Kumar of the Research Group on Technology and Development in New Delhi, India have worked in the past decade on the potential use of biotechnology in the agriculture of developing countries. In particular they have studied research related to state policies in India.

Members of the Department of Economics of the University of Benghazi in the Republic of Central Africa have been involved in studies on biotechnologically induced change in agriculture. In particular, they have focused their attention on the study of products such as coffee, cotton and manioc. These projects have been coordinated by Professor **Jean Pierre Frey** and his associates.

The overall project is coordinated by the author of this proposal, **Prof. Nelson Prato Barbosa** of the Center for the Study of Development (CENDES) of the Central University of Venezuela, Caracas. Prof. Prato is responsible for the scientific and administrative direction of the entire project and is responsible for the Latin American component of the research.

The research tasks have been distributed among the participating members as follows.

1) Prof. Nelson Prato is the general coordinator of the project. His duties involve the general supervision of the project including the overall scientific and administrative direction of the research.

2) Other members of the research team will form a Research Council. Their primary task is to provide assistance in the supervision of the project. They will follow the development of the research from their countries of origin and will assist in the evaluation of both the implementation of the various phases of the project and the results obtained. This group is composed of Professors: Bye, Fonte and Bonanno.

3) Three research groups will be created. Each of these will be in charge of researching one of the selected regions. Their primary task is to complete the investigation in loci. Local scientific investigation will be autonomous yet subject to the directives and recommendations of the Research Council. Prof. Nelson Prato is the director and coordinator for the Latin American portion of the Project. Nagesh Kumar is the director and coordinator for the Indian segment of the study, while Jean-Pierre Frey is responsible for Central Africa.

In this division of labor the cooperative dimension of the study is fundamental as the project is based on the exchange of information among the various research group members. Accordingly, periodic meetings are scheduled for the organization of the various phases of the research and for the discussion of results.

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RESUMEN

El Proyecto Multinacional de Investigación sobre Biotecnología y Agricultura en Países en Desarrollo tiene como objetivo fundamental identificar el uso actual y potencial de la investigación, la aplicación y consecuencias sociales de la biotecnología en una selección de productos agrícolas en los siguientes países en desarrollo: Centoafrica, India y Venezuela.

Los productos agrícolas seleccionados se consideran tomando en cuenta si: a) los productos son destinados a la exportación; b) son destinados al consumo interno; y c) si los productos son destinados a ambos mercados.

El estudio esta dividido en dos fases. Una exploratoria dirigida a establecer cuáles son los tres productos que se seleccionaran para los estudios de caso y a partir del cual identificar el mapa de los usos actuales de la biotecnología en cada país; y otra fase analítica, dirigida a conocer el desarrollo futuro y características de las unidades de investigación, la transferencia de la investigación a la producción y sus usos comerciales.

Se trata de evaluar las consecuencias sociales de la biotecnología para diferentes actores sociales de la agricultura en particular y de la sociedad en general, de los países en desarrollo que se han seleccionado para el estudio.

El coordinado es **Nelson Prato Barbosa** profesor investigador (CENDES), Venezuela. Investigadores Coopereantes: **Jean-Pierre Frey**, Centre D'etudes Economiques, Centoafrica, **Rachana Bharti**, Technology & Development Group, India **Alessandro Bonanno**, University of Missouri, US, **María Fonte**, Università di Napoli, Italia, y **Pascal Byé**, INRA, Francia.

Biotecnología y Agricultura en Países en Desarrollo

Nelson Prato Barbosa

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Propósitos de la Investigación

Las condiciones socioeconómicas actuales de los países en desarrollo obligan a la búsqueda de nuevas soluciones para la producción de alimentos que permitan hacer más productiva y rentable la actividad agrícola, así como para mejorar las posibilidades de inserción de la agricultura de estos países en el mercado alimentario mundial. Al mismo tiempo, esas exigencias suponen un cambio en las actitudes de los productores para mejorar sus hábitos productivos y establecer condiciones de gestión modernas para las empresas que organizan y dirigen el proceso. A la larga, se espera que ello redunde en una mejora de la calidad de los productos agrícolas que van al mercado interno y/o externo y un aumento de la eficiencia de la producción.

En ese sentido, en los países en desarrollo se vienen utilizando prácticas de investigación y aplicación de la biotecnología en ciertas áreas de la agricultura con la esperanza de mejorar los niveles de productividad y rentabilidad de la actividad productiva, así como de la calidad de la producción agrícola.

Existe optimismo sobre las posibilidades de utilización de la biotecnología en los países en desarrollo y estas se hacen cada vez más evidentes y están comenzando a ser asumidas como políticas de Estado (Cfr.: Brenner, 1991; Byé y Frey, 1988; Costagne y Gutier, 1982; Jaffe y Zaldivar, 1992; Mumar, 1988). Esta situación se ve favorecida en la medida que

existe una infraestructura de investigación y desarrollo ya instalada vinculada a las anteriores prácticas biotecnológicas en la utilización de microorganismos para acelerar y obtener productos alimenticios (Vqr. *Agriculture and human Values*, Vol V, 1988) De igual modo, la comunidad científica existente y los productores agrícolas están cada vez mas involucrados en el proceso de globalización creciente que tiene la economía a nivel mundial (Vgr.: *International Journal of Sociology of Agriculture and Food*, Vol I, 1991) en donde la biotecnología está jugando un papel importante.

Los estudios sociales sobre el impacto de las nuevas tecnologías, particularmente de sus efectos sobre la agricultura, son bastante nuevos. De hecho, el grupo de investigaciones sobre sociología de la agricultura (RC-40) de la Asociación Internacional de Sociología (ISA) ha venido impulsando reflexiones en ese sentido (From Editor: *International Journal of Sociology of Agriculture and Food*, Vol 1, 1991).

En efecto, uno de los más recientes estudios sobre la dimensión social de la investigación científica (Busch y Lacy, 1983) plantea cómo la investigación científica está directamente vinculada con las necesidades sociales sentidas. En el campo de la investigación agrícola la existencia de estos valores y orientaciones de la investigación, la difusión y aplicación de innovaciones científicas han estado relacionadas a la resolución de problemas de los productores rurales y a la producción agrícola y alimenticia (v.gr.: Lewin, 1972; Cheney, 1974; Patterson, 1976; Busch y Lacy, 1983).

Otro aspecto vinculado a la investigación social sobre el impacto de las tecnologías es el estudio del cambio técnico y su incidencia sobre las transformaciones sociales (Vessuri, 1981). Uno de los más estudiados es el vinculado con los efectos de demostración

(Cochrane, 1979) que obliga a los productores a ir adoptando las nuevas tecnologías y prácticas técnicas que se introducen en la agricultura, que a la larga benefician a los consumidores en términos de la calidad y precios de los productos. De idéntica forma se ha discutido el papel que tiene la investigación científica en el desarrollo de innovaciones técnicas y el apoyo que recibe del sector público o privado. En el caso de la investigación agrícola, el papel del sector público parece dominante en la medida que las posibilidades de inversión privada en I+D son poco rentables (Busch, Bonanno, y Lacy, 1989) como consecuencia de que la mayor parte de las demandas de los productores agrícolas están canalizadas a través del Estado hacia los órganos públicos de investigación que, a la larga, también terminan por beneficiar a los consumidores. Del mismo modo, los estudios sociales han destacado que la actitud positiva hacia la innovación tecnológica está estrechamente vinculada con los valores y actitudes culturales de los productores y de su capacidad económica.

En el caso de los países en desarrollo la posibilidad de intervención social sobre los procesos científicos y tecnológicos una vez conocidos los posibles efectos sociales negativos, permiten valorizar de manera importante los estudios sobre la producción agroalimentaria cuya problemática es más crucial en estos países.

Aún cuando existen varias propuestas para conceptualizar la biotecnología, según la OTA (1986:9) citada por Bonanno (1991:141), ésta refiere aquellas "técnicas que emplean organismos o procesos vivos para hacer o alterar productos, mejorar las plantas y los animales o desarrollar microorganismos para usos concretos. Se centra en dos eficaces técnicas genético-moleculares: el ácido dioxirribonucleico recombinante (ADNr) y las tecnologías de fusión celular".

La revolución tecnológica de la biotecnología esta asociada a la investigación genética. Busch, Bonanno y Lacy (1989:84) han indicado que la tradicional manera de hacer investigación biotecnológica, la cual "... tiene cinco etapas básicas: 1) descubrir o crear una variedad genéticamente estable para los rasgos deseados; 2) seleccionar a los individuos que mejor expresan esos rasgos; 3) incorporar los rasgos en un soporte agronómico deseable; 4) ensayar en una amplia gama de habitat y en varias estaciones del año; y 5) lanzar una nueva variedad" va a ser modificada radicalmente con la introducción de nuevas prácticas de investigación biotecnológicas. En ese sentido, estos autores indican la existencia de al menos dos nuevas técnicas aplicadas de biotecnología: la de cultivo y la de transferencia genética. La primera, "... comprende la regeneración de plantas a partir de protoplastos (células vegetales sin pared celular), células simples o partes de plantas. Las ventajas de estas técnicas de cultivo sobre los métodos convencionales son: 1) Se puede cultivar un gran número de células diferentes, cada una de ellas una planta potencial, en una pequeña área. 2) El proceso de reproducción sexual puede evitarse más fácilmente, permitiendo el acceso a material genético inaccesible a través de la propagación de gametos y eliminando el plazo necesario para el cambio multigeneracional. 3) Es posible conseguir en muy poco tiempo la selección en masa del material de la planta". Esta técnica sin embargo posee ciertas limitaciones importantes, que en gran parte son superadas por la técnica de transferencia genética que "... implica la fusión de los protoplastos o la transferencias de corpúsculos específicos...", la cual depende a su vez de las tecnologías de ADN recombinante que permite la transferencia de información genética.

La biotecnología, a pesar de que aún

persisten dudas sobre sus verdaderos alcances (Chaleff, 1983) y de que todavía no son ampliamente conocidas todas las posibilidades de aplicación, ha logrado despertar suficientes expectativas para mejorar el control de las cosechas, la calidad de los productos, etc., convirtiéndola en una "industria en expansión". De hecho los estudios de la importancia de la biotecnologías para estos países datan de principios de los años ochenta (Carrizales, 1981; Texera, 1984).

Esta situación ha conducido en el caso de la biotecnología aplicada a la agricultura a dar un vuelco, obligando al capital privado, especialmente las grandes firmas transnacionales, a comenzar a invertir en I+D. Si bien los resultados de las investigaciones no han arrojado grandes resultados, la tendencia al cambio es cada vez mayor (Jaffe, 1991; Jaffe y Zaldivia, 1992). Entre otros considérense los casos del azúcar (Van den Doel y Junne, 1986), la producción de aceites comestibles (James, 1984), la de los "alimentos fabricados" (Stanley, 1986), etc. Las investigaciones biotecnológicas también informan de avances en variados aspectos de la producción de alimentos, elaboración de materias primas, etc. (Vgr: Busch, Bonanno y Lacy, 1989). En lo que toca a materias primas para la industria, la investigación biotecnológica estaria avanzando en la creación de productos bioquímicamente similares a los originales, pero que "... no serian artificiales en el sentido que hoy en día se entiende, sino que serian verdaderos equivalentes" naturales (Busch, Bonanno y Lacy, 1989:89).

Sin embargo, algunos autores (vgr. Byé y Mounier, 1984) ya han señalado algunos obstáculos para que las grandes transnacionales asuman estos cambios de manera inmediata. El impacto que la sustitución biotecnológica tiene sobre los países en desarrollo es por demás evidente, toda vez que la mayor parte del comercio

internacional de estos está fundamentado en la comercialización de materias primas y alimentos primarios, particularmente en los países tropicales. Entre otros efectos perniciosos está el de la posibilidad de crecimiento del desempleo de los trabajadores agrícolas, desaparición de productos del mercado y la consecuente reestructuración de las ocupaciones, migración hacia la ciudad, las controversias sobre los aspectos legales de las patentes, etc.

Pocas veces se piensa en el lado social de la investigación científica "natural". La tradicional separación entre estas dos áreas de investigación así lo han inducido. Sin embargo, la emergencia de las nuevas tecnologías está cambiando esas tradicionales posturas. En el caso de la biotecnología esta situación se evidencia más claramente.

La biotecnología constituye, hoy por hoy, una de las formas más avanzadas de socialización de la naturaleza, en otras palabras, de construcción social de la naturaleza. La posibilidad de "crear" productos agrícolas especialmente dirigidos a la elaboración de determinados alimentos, ya sea, para optimizar los nutrientes de los mismos o para mejorar los componentes químicos deseados, permiten pensar en la posibilidad de obtener nuevos productos "naturales". En ese sentido, uno de los retos de la utilización de la biotecnología, es responder a la pregunta obligada de ¿Qué clase de naturaleza queremos? (Busch, 1991).

Una de las novedades de estos estudios sobre aplicación de la nueva biotecnología estriba en que los objetivos sociales de uso y aplicación de la misma tienen una alta probabilidad de ser controlados evitando problemas socioeconómicos que pudieran estar aparejados a la utilización de las mismas, o determinar posibles efectos contaminantes o de degradación del medio ambiente.

Al contemplarse la dimensión social del

cambio técnico que implica el uso y aplicación de la biotecnología en la agricultura se busca disminuir los efectos desiguales de distribución de los beneficios entre el conjunto de la población. Esta presencia de la dimensión política está vinculada, a su vez, con la capacidad de los actores sociales para introducir modificaciones en la dirección de los procesos de cambio tecnológico y en las políticas del sector público y el rol de la educación para la formación de profesionales en el campo y difusión de información, etc. (Biotechnology and Development Review, 1991:6).

En consecuencia es importante crear una conciencia democrática de equidad y justicia que permita una mayor participación de las comunidades en la redefinición del papel de la investigación científica en la que estén representados los intereses de los sectores sociales tradicionalmente excluidos (Busch, Bonanno y Lacy, 1989). Un esfuerzo en ese sentido es la lucha por hacer discusiones diáfnas y de cara al público que faciliten una evaluación de los resultados, usos y posibles aplicaciones de la investigación biotecnológica en la agricultura de los países en desarrollo.

Objetivos de la Propuesta

1. Realizar un análisis histórico de las prácticas investigativas y la introducción de la biotecnología en los países en desarrollo.
2. Identificar el uso actual y potencial de la biotecnología en el proceso de producción de una selección de productos agrícolas en países en desarrollo.
3. Establecer las consecuencias sociales actuales de la investigación biotecnológica, su aplicación en la

producción y formas de comercialización de una selección de productos agrícolas en países en desarrollo.

4. Conocer las políticas y programas gubernamentales, así como las experiencias privadas, en la producción de una selección de productos agrícolas en países en desarrollo identificando sus implicaciones sociales.
5. Establecer las posible consecuencias sociales del uso futuro de la biotecnología en una selección de productos agrícolas en países en desarrollo.

Descripción Detallada del Trabajo de Investigación

El proyecto está centrado en la investigación de las experiencias en curso sobre aplicación de la biotecnología en tres países en desarrollo correspondientes a cada uno de los continentes: en Africa en la República Centroafricana, en América Latina en Venezuela, y en Asia en la India. Igualmente, en una selección de cultivos considerados claves para el desarrollo actual y futuro de los sistemas agrícolas en cada uno de dichos países con miras a estudiar sus orígenes históricos y las consecuencias socioeconómicas que tales aplicaciones tienen o pueden tener sobre la agricultura, en particular, y la sociedad, en general.

Unidades de Análisis:

1) Tres productos agrícolas para la producción y consumo dirigidos a: 1) la exportación, 2) al consumo interno y 3) a la exportación y consumo interno.

2) Tres países en desarrollo en cada una de las siguientes regiones: 1) en América Latina,

Venezuela; 2) en Asia, la India; y 3) en Africa, la República Centroafricana.

Procedimientos de la Investigación:

- a) Realizar un prediagnóstico exploratorio para determinar cuáles serán los productos que se seleccionarían para hacer los estudios de caso de los tres productos agrícolas que están aplicando investigación biotecnológica en cada país.
- b) Una vez seleccionados cuáles serán los productos objeto de estudio, se procederá a establecer las principales procesos históricos de las experiencias de investigación y aplicación de biotecnología en la producción de estos productos y establecer las tendencias de uso de dichas tecnologías desde la fase de producción hasta la fase de mercado para imput de otros proceso o consumo directo de la población en los países seleccionados para el estudio. Esta parte del trabajo se apoyará en la aplicación de la metodología del análisis histórico, la incorporación de estadísticas e información bibliográfica. Igualmente se aplicarán las metodologías de trabajo ya probadas en el estudio de caso de otros productos agrícolas a nivel internacional (vgr.: Friedland, Barton y Thomas, 1981). Esta parte se apoyará igualmente en la realización de encuestas para la elaboración del "mapa" de centros e investigaciones biotecnológicas y de trabajo de campo para la realización de entrevistas focalizadas, previamente seleccionados, a investigadores que realizan experiencias directas de aplicación de biotecnologías y a productores que aplican en la producción de los productos seleccionados dicha innovación, así

como a los comercializadores de innovación tecnológica.

- c) A partir de estos análisis será posible obtener un mapa de investigaciones y usos actuales de biotecnología en la producción. Igualmente, evaluar cuáles son los impactos sociales más importantes de aplicación de biotecnología en los productos seleccionados en la cadena de producción de acuerdo con la metodología ad hoc especialmente diseñada por el grupo.

Para el estudio se han considerado incorporar información sobre las siguientes variables:

Del lado de la investigación:

1. Unidades de Investigación
2. Número de Investigadores
3. Monto de la subvención
4. Instituciones apoyo de la investigación
5. Resultados agronómicos de laboratorio: resistencia a herbicidas, nuevos productos y especies, regulación de crecimiento, control de enfermedades, mejoramiento de nutrición, insecticidas, digestibilidad de alimentos, eficiencia metabólica, bioprocesamiento, eficiencia en reproducción.

Del lado de la producción:

1. Unidades de Producción
2. Características socioeconómicas de los productores
3. Origen de la aplicación tecnológica
4. Asesoramiento de la transferencia de la tecnología
5. Control y aumento de la productividad
6. Seguimiento de aplicación y servicios técnicos
7. Oferta de insumos: Mano de obra, tierra, crédito, maquinaria, fertilizantes, etc.

Del lado del mercado:

1. Unidades de comercialización
2. Características de los agentes comerciales
3. Precios de los productos
4. Nivel de competitividad en el mercado
5. Oferta comercial: mercado interno, mercado externo, empaques, etc.

Es importante aclarar que la investigación en su conjunto, es al mismo tiempo una investigación exploratoria en su fase 1, y una investigación de diagnóstico en su fase 2. En ese sentido, la evaluación del impacto social se hará sobre los proyectos de investigación y aplicación en curso, con el objeto de determinar sus perspectivas y tendencias hacia el futuro. Para ello se consideran: a) la intensidad con el cual se están realizando las investigaciones y aplicaciones, b) la dimensión socioespacial y la diferencia de tiempo entre la investigación y su aplicación productiva y comercial y c) la magnitud con la cual se están haciendo inversiones y aplicaciones.

Finalmente, es necesario establecer cuáles son las posiciones y puntos de vistas de los diferentes actores que participan y que están vinculados a la temática de la investigación: investigadores, productores, agentes comerciales, consumidores y entes privados y estatales, con el objeto de establecer la importancia socioeconómica y la jerarquización de los efectos sociales sobre los mismos.

Plan de Trabajo:

El proyecto ha sido diseñado de manera que los objetivos 1 y 2 sean alcanzados en un período de dos (2) años y los objetivos 3 y 4 en un año (1) adicional.

Criterios Para la Evaluación de los Logros del Proyecto:

Los resultados del proyecto serán presentados en informes de avance, al concluir cada año de la investigación. Los informes parciales se presentarán para cada producto, y para cada país y región. El informe final consistirá en una síntesis de los resultados que se obtengan en los tres países seleccionados y el análisis de la experiencia alcanzada en los tres productos elegidos para el estudio en cada uno de ellos. Resultados parciales se irán publicando en revistas especializadas sobre el tema.

Relacion Institucional con los Otros Miembros del Grupo de Investigación

En el Proyecto participan los siguientes profesores e instituciones: el **Prof. Alessandro Bonanno**, del Departamento de Sociología Rural de la Universidad de Missouri-Columbia, quien ha desarrollado proyectos de investigación sobre los valores sociales en la investigación biotecnológica en la agricultura del sector público de los Estados Unidos y otros estudios vinculados con el tema. Bonanno conjuntamente con otro grupo de investigadores norteamericanos vienen haciendo reflexiones sobre ésta temática (Busch, Bonanno y Lacy, 1989).

La **Prof. Maria Fonte** de la Universidad de Nápoles del Departamento de Economía y Política Agraria viene trabajando en el campo de la biotecnología aplicada a la agricultura, el cual se ha convertido en un tema importante de discusión pública en Italia. El Departamento tiene una larga tradición en los estudios sobre problemas regionales del desarrollo. El Proyecto se inserta dentro de las líneas de investigación del mismo para estudiar los consecuencias sociales y

económicas del progreso técnico y la innovación tecnológica.

El **Prof. Pascal Byé** investigador francés de reconocido prestigio en el campo de la agricultura, viene trabajando en la temática la investigación biotecnológica desde hace algún tiempo y sus estudios y publicaciones están teniendo una influencia fundamental en las nuevas generaciones de investigadores y científicos en el campo de los estudios del cambio tecnológico en la agricultura. Pascal Byé es investigador del Instituto Nacional de Investigaciones Agronómicas (INRA) en el Departamento de Economía y Sociología Rural (Montpellier, Francia) la cual es una institución francesa con una también larga tradición de investigación en el campo agrícola y en su cooperación internacional.

Igualmente, en Asia, el Grupo de Tecnología y Desarrollo de la India coordinado por los doctores **Rachana Bharti** y **Nagesh Kumar**, han venido ocupándose de estudiar las potencialidades de la biotecnología en la agricultura de los países en desarrollo, particularmente de las políticas estatales relacionadas con este proceso en la India.

En Africa, el Centro de Investigaciones del Departamento de Economía de la Universidad de Benghi en Centroatfrica está llevando a cabo estudios sobre los cambios tecnológicos en el área de la biotecnología en la agricultura en productos como café, algodón y mandioca bajo la coordinación del **Prof. Jean-Pierre Frey** quien es otro de los investigadores cooperantes del Proyecto.

El Proyecto es coordinado por **Nelson Prato Barbosa** profesor investigador del Centro de Estudios del Desarrollo (CENDES) de la Universidad Central de Venezuela, quien es el responsable de la gerencia y dirección general del proyecto y del Proyecto a nivel de América Latina con particular énfasis en Venezuela.

Las tareas entre los diferentes equipos y

grupos de trabajo se han distribuido de la siguiente manera:

1) Un Coordinador General del Proyecto, quien se ocupa de llevar la dirección general y la gerencia científica y administrativa del Proyecto y coordinar las actividades de los diferentes equipos, así como supervisar la producción científica de la investigación. La coordinación general está bajo la responsabilidad del Prof. Nelson Prato Barbosa del CENDES, Venezuela.

2) Un Consejo de Investigación constituido por el Coordinador General y los Investigadores Cooperantes quienes figen como asesores del Proyecto y participan desde sus países de origen en la producción científica del proyecto. Estos mantendrán un seguimiento continuo de los proyectos en cada uno de los países seleccionados para el estudio con la finalidad de conocer y evaluar la calidad de la producción científica de los distintos proyectos y de los equipos de investigación en cada país. Los investigadores cooperantes son los siguientes: Pascal Bye, por Francia, María Fonte, por Italia y Alessandro Bonanno, por Estados Unidos.

3) Tres equipos o grupos de investigación por región y país seleccionados para el estudio, coordinados por un Jefe de Proyecto. En cada país, de ser necesario, se conformarán equipos o grupos de investigación con el objetivo de recabar la información necesaria para hacer el estudio comparativo. Cada uno de ellos se ocupará de llevar a delante la investigación in situ. La gestión de cada proyecto es autónoma pero estará sujeto a las directrices y recomendaciones del Consejo de Investigación General. Los Coordinadores Jefes de Proyectos por país son: Nelson Prato Barbosa por América Latina y Venezuela, Nagesh Kumar por Asia y la India, y Jean-Pierre Frey por Africa y la República Centroatricana.

Como puede desprenderse del esquema, la ascoria de los investigadores cooperantes

constituye una actividad básica en la medida que además podrán suministrar información de primera mano sobre el tema y de constituir los principales interlocutores para la elaboración de los soportes teórico-metodológicos del proyecto. Igualmente la colaboración de cada uno de los investigadores contraparte del Proyecto bajo cuya responsabilidad descansa la aplicación de los criterios teórico-metodológicos comunes como de los resultados susceptibles de ser comparados entre sí.

En ese sentido, se tiene previsto la realización de reuniones periódicas de coordinación del trabajo para el intercambio de experiencias y la discusión de resultados de trabajo de cada equipo de investigación en cada país, entre los Jefes de Proyecto, el Consejo de Investigación de investigadores cooperantes y el Coordinador General del proyecto.

El siguiente constituye un esquema del tipo de relaciones entre los diferentes niveles de participación.

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ABSTRACT

This multinational project intends to identify the current and potential uses of biotechnology in the agricultural and food sector of developing regions of Central Africa, India and Venezuela. Particular attention is paid to the study of biotechnological research, its applications, and social consequences in the above mentioned regions. Selected agricultural commodities will be grouped in three categories: 1) export oriented commodities; 2) commodities for domestic consumption; and 3) commodities produced for both domestic and international markets. The study will be divided in two phases. The first involves the identification of three commodities to be included in the above mentioned groups. Commodities will be selected for each of the regions studied. The second analytical phase is aimed at understanding the current and future uses of biotechnology in the production of the selected commodities. The principal objective is to understand the social consequences that the application of biotechnology generates for various social actors in the agricultures and societies of these regions of the developing world.

Nelson Prato Barbosa, CENDES, Venezuela is the project coordinator. Cooperating investigators are **Jean-Pierre Frey**, Centre D'Etudes Economiques, Central Africa; **Rachana Bharti**, Technology and Development Group, India; **Alessandro Bonanno**, University of Missouri, USA; **Maria Fonte**, Università di Napoli, Italy; **Pascal Byé**, INRA, France.