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The Political Economy of Food: a Global Crisis

International conflict over agricultural regulation continues after more than six years to threaten to destroy the whole Uruguay Round of the General Agreement on Tariffs and Trade (GATT), and with it an agreement that greatly extends corporate power relative to national (and public) power. Paradoxically, the deadlock has been caused by a type of national regulation of agriculture whose days are numbered. Even more paradoxically, Europe, cast as defender of the old ways, has committed itself to more basic domestic reform than the United States. Major changes have been initiated in the European Common Agricultural Policy which go further than anyone imagined possible at the outset of the Uruguay Round.[1] The choice is not between 'regulation' or 'free trade', therefore, but between new forms of implicit or explicit regulation.*

In and around the tangled web of national politics, European and North American integration, and international economic competition, new protagonists are taking shape. The contest over new rules and relations for food and agriculture also depends on transnational corporations and popular movements not formally present at the negotiations. Agricultural support programmes were put in place roughly half a century ago in response to farm politics. Since then, farms have become suppliers of raw materials within a transnational agrofood sector dominated by some of the largest, most technically dynamic corporations in the world. At the same time, urbanization and the rise of social movements expressing the concerns of consumers, environmentalists, and others, have shifted the focus from farm incomes to other interests.

In the long view, it is clear that the agricultural trade conflicts inside and outside the GATT are the culmination of longterm structural and inter-state changes. The rules implicitly governing agrofood relations were established in the years immediately after World War II and worked stably enough for nearly twenty five years to justify calling them a 'food regime'. However, new relations were forged during that time, which by the early 1970s began to undermine the postwar system of food regulation.

In this article I analyse the rise of a food regime and the emergence of contradictory and conflictual relations within it. First, I define the food regime and its main features. In the second section, I describe the character of the food regime, including its internal tensions, between 1947 and 1973. In the third section I describe the emergence of new relations and new rules after the food crisis of 1972–73. To simplify the story of the regime and its crisis, in these sections I treat states, particularly the US, as integral actors.[2] In the final part of this essay, I explore the residual and emergent relations which make possible either a new regime, or the descent into deeper disorder.

The Food Regime: Principles and Contradictions

The impasse in international economic relations is centred on agriculture because in the agro-food sector there exists the largest gap between national regulation and transnational economic organization. This gap is the legacy of the post-World War II *food regime*, the rule-governed structure of production and consumption of food on a

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* Earlier versions of this essay were presented at Wolfson College, Oxford, the Agrarian Studies Program, Yale University, and the Department of Political Science, University of Toronto, and benefited from discussion with participants. I would like to thank Henry Bernstein, Barbara Harriss-White, Geoffrey Kay, Jean Laux, Philip McMichael, and Mary Summers for critical advice and encouragement in revising earlier drafts, and Yildiz Atasoy for invaluable research assistance. It will be published in *Food*, edited by Barbara Harriss-White, to be published by Basil Blackwell, Oxford 1993.

[1] Tim Josling (Food Research Institute, Stanford University), 'Emerging Agricultural Trade Relations in the Post Uruguay Round World', paper presented at the Faculty of Political Science, University of Rome, June 1992.

[2] Nothing could be farther from the case. For instance, the whole edifice of the food regime would never have been constructed if the Brannan Plan—defeated in 1947 through intense redbaiting—had become the basis of US agricultural policy. See Reo M. Christenson, *The Brannan Plan: Farm Politics and Policy*, Ann Arbor, MI 1959.

world scale. The food regime was created in 1947 when alternative international regulation in the form of the proposal for a World Food Board was rejected.[3] At the GATT, the only clear positions are those which 'decouple' and 'deregulate' elements of a food regime that no longer works. The present alternatives for a new regime are not formally proposed. They must be teased out from analyses of the social forces involved in global agrofood restructuring.

The postwar food regime was governed by implicit rules, which nonetheless regulated property and power within and between nations. The food regime, therefore, was partly about international relations of food, and partly about the world food economy. Regulation of the food regime both underpinned and reflected changing balances of power among states, organized national lobbies, classes—farmers, workers, peasants—and capital. The implicit rules evolved through practical experiences and negotiations among states, ministries, corporations, farm lobbies, consumer lobbies and others, in response to immediate problems of production, distribution and trade. Out of this web of practices emerged a stable pattern of production and power that lasted for two and a half decades.

The rules defining the food regime gave priority to national regulation, and authorized both import controls and export subsidies necessary to manage national farm programmes. These national programmes, particularly at the outset US New Deal commodity programmes, generated chronic *surpluses*. As these played out, they structured a specific set of international relations in which power—to restructure international trade and production in one state's favour—was wielded in the unusual form of subsidized exports of surplus commodities. In this way agriculture, which was always central to the world economy, was an exceptional international sector.

Then, the 'food crisis' of the early 1970s, combined with, simultaneous money and oil crises, initiated a period of instability from which we have not yet recovered. The sense of crisis in the early seventies stemmed from the sudden, unexpected shift from surplus to scarcity, which sent grain prices soaring and threatened food shortages for poor people and most of all, for poor countries. In retrospect it is clear that since the shortages came from a one-time explosion of demand and a temporary drop in production, the basic cause of surpluses was bound to reassert itself. Since major states continued to support agricultural prices by purchasing commodities, within a few years farmers produced more surpluses, and states resumed mercantile trade practices to get rid of them.

With the reappearance of surpluses, most commentators abandoned the idea of crisis and focused on ever shorter time horizons. Old policies designed to deal with surpluses once again seemed appropriate, and problems with those policies were not connected to the long

[3] The proposal for a World Food Board was defeated at a meeting in Washington, D.C. in August 1947. See Martin Peterson, 'Paradigmatic Shift in Agriculture: Global Effects and the Swedish Response', in Terry Marsden, Philip Lowe, and Sarah Whatmore, eds., *Rural Restructuring*, London 1990.

trajectory of international food relations since 1947.[4] However, disappearance of the symptom simply masked survival of the disorder. Like a kaleidoscope turning, new relations which had emerged within the regime became significant enough to alter the pattern. Old practices, especially surplus disposal in foreign markets, could not reconstruct the original relations of power and property. Food aid or other forms of export subsidy, which once underpinned the food regime, came instead to express intense international conflicts.

I The Surplus Regime, 1947–72

Because the US protected its own domestic markets, other countries were constrained to adopt similar agricultural policies focused on the national market. US trade restrictions, designed to protect domestic farm programmes, encouraged other states to focus on their own national agro-food sectors. States replicated the US regulation of national sectors, but adapted policies to their locations in the food regime. For Continental Europe, this meant shifting the focus of protective agricultural policies away from tariffs, and redesigning trade protection around domestic support for farm prices. For other parts of the world, adaptation of the US model involved parallel shifts in the forms of state agricultural regulation. Thus, the postwar rules did not liberalize national agricultural policy, but created a new pattern of intensely national regulation.

At the same time, the free movement of investment capital tended to integrate the agro-food sectors of Europe and the US into an Atlantic agro-food economy. This tension framed the new roles of tropical export countries, including former European colonies, in the food regime. This integration, moreover, was uneven. It did not include the countries of the socialist bloc, and, despite high levels of aid and trade, the capitalist countries of Asia were not integrated into transnational agro-food complexes.

Thus the postwar food regime was built on a tension between the *replication* and the *integration* of national agro-food sectors. The tension between replication and integration reflected on an international scale the problem inherent in US farm programmes—chronic surpluses.

US at the Centre

Paradoxically, the main challenge to present rules comes from the source of those same rules in the early postwar years—the US state. New Deal farm programmes of the 1930s were retained after World War II despite widespread awareness of the problem of surpluses. Mercantile practices had to be used to dispose of the surpluses and to prevent a flood of imports into the US. As the dominant economic power after World War II, the US insisted on international rules consistent with its own national farm support programmes. These rules eventually allowed the US to create an overwhelming preponderance

[4] For an exception, see Marty Strange, *Family Farming, A New Economic Vision*, Omaha 1988, pp. 17–30.

in world agro-food production and trade, far beyond its historic share.[5]

Yet mercantilist agricultural policy was in conflict with the larger US policy to promote free movement of goods and money internationally.[6] Because of its weight in creating international institutions after World War II, US decisions transferred this tension to the food regime as a whole.

The food regime was created by a series of decisions between 1945 and 1949, which reflected US determination to protect the import controls and export subsidies which, as we shall see, were a necessary complement to its domestic farm policy. US commitment to mercantile agricultural trade practices led to the sacrifice of multilateral institutions which had wide support among postwar governments, not only for regulating food, but also for the pursuit of the larger US agenda for liberal trade. The World Food Board Proposal, which provided for global supply management and food aid through the FAO, was rejected by the US and Britain at an international conference in Washington, DC in 1947. The Havana Treaty creating an International Trade Organization, a 1946 initiative by the US Department of State, was never formally submitted to Congress because it contradicted mercantile clauses in US domestic farm laws. Even the GATT, which began as an *ad hoc* negotiating forum intended to be subsumed under the formal powers of the anticipated ITO, and continued as a feeble substitute in its absence, excluded agriculture from its ban on import controls and export subsidies, at US insistence.[7]

The need for trade controls stemmed from an odd feature of domestic farm programmes, where, instead of direct income support, New Deal price supports tried to raise farm incomes indirectly by setting a minimum price for commodities named in the legislation, and maintaining this price through state purchases. Government purchases to support prices encouraged farmers to produce as much as possible. Legislation to limit production by restricting acreage was never effective. In fact, insofar as they encouraged farmers to remove their worst land from production, acreage controls tended to increase productivity.

Surpluses mounted more persistently with the technological developments involved in the industrialization of agriculture. Industrialization subordinated farms to emerging agro-food corporations, both as

[5] While the US had been a major exporter in the earlier food regime of 1870–1939, it had shared dominance with Russia before the Revolution of 1917, and then with faster growing exports from elsewhere, particularly the British Empire. The collapse of US exports in the Great Depression was more severe than other exporters. Consequently its postwar dominance was by no means a continuation of a stable historical pattern. See H. Friedmann, 'World Market, State, and Family Farm: Social Bases of Household Production in the Era of Wage Labor', *Comparative Studies in Society and History*, 20: 4, 1978.
[6] Allen Rau, *Agricultural Policy and Trade Liberalization in the United States, 1934–56: A Study of Conflicting Policies*, Geneva 1957, pp. 93–121.
[7] Ibid.

buyers of machines, chemicals, and animal feeds, and as sellers of raw materials to food manufacturing industries or livestock operations. Profits in the agro-food sector depended on the larger restructuring of the postwar economy towards mass production and mass consumption,[8] especially increased consumption of animal products and high value-added manufactured foods, or what might be called 'durable foods'.[9]

Commodity price support programmes both protected family farms and encouraged their relations with agro-food corporations. By supporting prices, the legislation rewarded large family farms. Farms increased productivity and scale through technologies bought from key vehicle and chemical industries. As they became locked onto a technical treadmill, they also became increasingly specialized. The most important shift was the separation of intensive livestock from cereal production, and with it the growth of the two most important crops of the 'second agricultural revolution,' hybrid maize and soy. Capital-intensive manufacture of soy-maize animal feeds allowed corporations to place themselves between increasingly specialized intensive livestock operations, which were their customers, and maize and soy farms, which sold to them.[10] At the same time, mass production of durable foods required standard agricultural raw materials, which corporations obtained through contracts with increasingly specialized and standardized farms.[11] As durable foods came to be made from generic ingredients, such as sweeteners, fats, and starches, corporations were able to reduce their dependence on specific products and increase the possibilities for substitution.[12]

The key to the persistence of the world food regime was the innovative US policy of foreign aid, combined with import controls. Domestic agricultural price supports required import controls and export subsidies. Without controls, high domestic support prices would attract imports. Apart from its negative impact on hungry people abroad, especially war-torn Europe, this meant that without import controls, the Commodity Credit Corporation, a US government agency, would have to buy ever greater quantities of world supplies to maintain the

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[8] See Martin Kenney, Linda M. Lobao, James Curry, and W. Richard Goe, 'Agriculture in U.S. Fordism: The Integration of the Productive Consumer', in William H. Friedland Lawrence Busch, Frederick H. Buttel and Alan P. Rudy, eds., *Towards a New Political Economy of Agriculture*, Boulder 1991. In the same volume, see Jean-Pierre Berlan, 'The Historical Roots of the Present Agricultural Crisis', for analysis of the arable-livestock divide; and Frederick H. Buttell and Pierre La Ramee, 'The "Disappearing Middle": A Sociological Perspective', for differentiation of US farms by size.

[9] The use of these foods was bound up with the new social relations of consumption based on purchases of appliances, such as refrigerators and freezers, by both stores and households. Dolores Hayden, *Redesigning the American Dream*, New York 1984.

[10] Jean-Pierre Bertrand, Catherine Laurent, and Vincent LeClercq, *Le Monde du soja*, Paris 1983.

[11] See Michael Eden Gertler, 'The Institutionalization of Grower-Processor Relations in the Vegetable Industries of Ontario and New York', in Friedland et al., *op. cit.* See also William H. Friedland, Amy E. Barton, and Robert J. Thomas, *Manufacturing Green Gold: Capital, Labor, and Technology in the Lettuce Industry*, Cambridge 1981.

[12] David Goodman, Bernardo Sorj, and John Wilkinson, *From Farming to Biotechnology*, Oxford 1987.

incomes of US farmers. Moreover, the more it bought, the greater was the gap between support prices and residual 'market' prices. Government stocks put a downward pressure on prices by keeping supply (or potential supply) high. This created fiscal problems for the state budget, which had to pay support prices plus storage and disposal costs. Since the destruction of surplus agricultural products was politically unacceptable in a hungry nation (and world), commodity price support programmes required a way to dispose of surpluses without lowering prices, that is, outside 'markets'. These were found through domestic public distribution, such as food stamps and school lunches, and through subsidized exports to other countries in the form of 'aid'.

Aid allowed the US to turn the problem of surplus stocks into an opportunity to pursue strategic, welfare, and economic policies. Yet aid did not simply *integrate* donor and recipient. As a mercantile trade practice, aid encouraged recipients and competitors alike to adopt the national regulation of agriculture and trade. Thus *replication* was built into the international food economy at the same time.

In other words, what is frequently called the 'export of the US model' of both production and consumption,[13] was the outcome of specific practices in the postwar food regime. At the same time, these practices also reflected historical experiences, so that the effects were quite distinct in Europe, the emergent third world, and as we shall see later, in Japan. In Europe and third world, new links with the US revolved around trade in wheat, animal feeds, and raw materials for food manufacturing.

Europe and the Atlantic Pivot

Marshall aid to Europe simultaneously established the basis for Atlantic agro-food relations, and invented the specific mechanisms of foreign aid which were later adapted to the third world. For European agriculture, the tension between national regulation, with attendant surpluses, and liberal trade, was reflected first in Marshall aid and later in the Common Agricultural Policy. The US supported the European protection of wheat and dairy products, even at the very high level needed to keep out efficiently produced and subsidized US exports. In return, the European Community exempted maize and soy from the import controls of the Common Agricultural Policy.[14]

Under the Marshall administration, dumping was secondary to recovery. US legislation required the use of Marshall funds to buy US surplus commodities at specified rates as much as 50 per cent below the

[13] For instance, Alain Revel and Christophe Riboud, *America's Green Power*, Baltimore 1986; Laurence Tubiana, 'World Trade in Agricultural Products: From Global Regulation to Market Fragmentation', in David Goodman and Michael Redclift, *International Farm Crisis*, London 1989; Susan George, *Les Strateges de la faim*, Geneva 1981, esp. pp. 23–56; Frances Moore Lappe and Joseph Collins, *World Hunger, Twelve Myths*, San Francisco 1986, p. 107.
[14] Bertrand et al. *Le monde du soja*; Richard Gilmore, *A Poor Harvest: The Clash of Policies and Interests in the Grain Trade*, New York and London 1982.

domestic price; it balanced the contradictory interests of reconstruction and dumping by specifying maximum and minimum quantities to be disposed of in recipient countries. US Marshall administrators, however, minimized agricultural dumping, as they understood it to be.[15] The 40 per cent of Marshall aid that went to food and agriculture in Europe was concentrated upon imports of feedstuffs and fertilizers for agricultural reconstruction. The balance shifted after 1954, when surpluses were redirected to underdeveloped countries in the form of food aid.[16]

However, as soon as agricultural reconstruction showed some success, West European farmers sought US markets for their dairy products. Congress then imposed import quotas on dairy (and a whole range of other) products. This, despite the fact that even with high support prices, imports of dairy products accounted for less than one per cent of the US market. The ability of special interests to override US interests in trade relations with Europe can only be understood in the ideological context of the Cold War. The farm lobby got its import restrictions not through agricultural legislation but through an amendment in the Defense Production Act of 1950. In 1952, the Act was amended to enable the US Secretary of Agriculture to defend the country against any import which endangered national security, from Danish cheese to Turkish sultana raisins.[17]

Despite protection, the openness to direct investment by US transnational corporations helped to integrate European and US agro-food sectors via industrial inputs and processing. Both in promoting meat-intensive diets and in organizing intensive livestock production, agro-food capitals shaped agricultural reconstruction along lines similar to the US. Most important was investment in an intensive livestock sector relying on industrial feedstuffs composed from soy and maize. This linked apparently national agricultures to imported inputs. Beneath the protected surface, therefore, lay the corporate organization of a transnational agro-food complex centred on the Atlantic economy. It linked North America, especially the US, to Europe.[18]

The combination of the freedom of capital and the restriction of trade shaped agricultural reconstruction so that it created a new relationship between European and US agro-food sectors. A decade later, the Common Agricultural Policy of the European Economic Community introduced a similar form of agricultural support to that in the US. To achieve import substitution in the face of chronic US surpluses, however, the level of protection required was very much higher. In return for the US acceptance of EEC restrictions against wheat and dairy imports (the old products in international trade) the EEC did not restrict the new US exports, maize and soy. The latter soon came to

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[15] Rau, *Agricultural Policy*.
[16] Friedmann, 'Origins of Third World Food Dependence', in Henry Bernstein, Ben Crow, Maureen Mackintosh, and Charlotte Martin, eds., *The Food Question*, London 1990.
[17] Rau, *Agricultural Policy*.
[18] Bertrand, et al., *Le monde du soja*.

account for greater export revenues than those lost with wheat.[19] Both European corporations and subsidiaries of US corporations in Europe contributed to a massive growth of manufactured feedstuffs for intensive livestock production, and a shift from domestic and colonial raw materials, such as flax and cotton meal, to maize and soy imported from the US. Like other industrial sectors, the apparently national livestock industry rested on a chain of inputs which effectively integrated a transnational sector.[20]

Thus European *wheat* replicated the *national* US sector, while specialized European *livestock* farms imported inputs from the US, creating an integrated *Atlantic* agro-food sector. The price support mechanism for wheat and dairy products eventually replicated the surpluses, and with them the export subsidies to dispose of them. By 1975 the EC *had* switched from being a net importer to a net exporter of wheat, and by 1985, France's exports (including to other EC members) were larger than those of the US.[21] At the same time, agro-industrial integration allowed European livestock producers to substitute a wide range of feed ingredients for US imports and to diversify trade. Eventually, the CAP closed the circle by introducing support for domestic oilseed production, an import substitution/replication which eventually brought the US and EC to the brink of trade war in 1992.[22] Thus, trade restrictions and competitive dumping turned from the founding principle into the enduring friction of the food regime.

The Third World

The Atlantic agro-food economy was the hinge for the reconfiguration of the food relations of Asian, Latin American and African countries. As third world states sought to develop national economies, their agrarian strategies were shaped by the opportunities and limits of world food markets. These gave little reason to question the dominant ideologies—capitalist and socialist; modernization and dependency—which all encouraged states to downplay agriculture except as a contribution to industrial development. For most countries, both the food supply of urban populations and the export revenues for industrial investment were largely sought outside traditional agrarian sectors during the 1950s and 1960s.

For the commercial food supply, US wheat surpluses made imports an attractive alternative to the modernization of the domestic food sector. When the US lost European wheat markets, which had been virtually the only source of import demand until the 1950s, it sought other outlets for its surpluses. It found them in Japan, and above all in the emerging third world. Third world markets were cultivated,

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[19] Dan Morgan, *Merchants of Grain*, New York 1979.
[20] Dan Morgan, *Merchants of Grain* and Bertrand, et al., *Le monde du soja*.
[21] Dale E. Hathaway, *Agriculture and the GATT: Rewriting the Rules*, Washington, DC: Institute for International Economics, 1977, p. 45.
[22] It would be useful to investigate the role of European-based transnationals, such as Ferruzzi, in this policy change. It is interesting to recall that soybeans were included in US farm programmes at the behest of corporations wanting a stable supply of oil for margarine production.

despite lack of foreign exchange, through the use of food aid. The main US food aid instrument, Public Law 480, adapted the specific mechanisms invented for Marshall aid. However, while Marshall administrators in Europe had resisted the Congressional attempts to dump US wheat because it undermined the main goal of agricultural reconstruction,[23] there was no such counterbalance for PL480 aid in third world countries. Consistent imports made many third world countries dependent on cheap world wheat supplies.[24]

Wheat was both a change from most traditional dietary staples and an efficiently produced, often subsidized alternative to the marketed crops of domestic farmers. Despite the Green Revolution, which *replicated* in the third world the hybrid maize revolution of US agriculture,[25] and *integrated* national agriculture into world markets for equipment and chemical inputs, the third world as a whole became the main source of import demand on world wheat markets. Import policies created food dependence within two decades in countries which had been mostly self-sufficient in food at the end of the second world war.

On the export side, tropical crops faced the notorious problem of declining terms of trade, even when export states tried to manage world supplies.[26] Two of the most important tropical export crops, sugar and vegetable oils, were increasingly marginalized by industrial substitutes used as sweeteners and oils. Although changing US (and other advanced country) diets increased the per capita consumption of sugars and fats, these were increasingly consumed in a new form. Sugars and fats became intermediate ingredients in manufactured foods rather than articles used directly by consumers.

Once industrial processes allowed for technical substitutions, the relative costs of crops could determine which would be used as raw materials for durable foods. The main industrial substitute for cane sugar was High Fructose Corn Syrup, which became economically feasible to use because of US subsidies and surplus stocks of maize. The main substitute for tropical vegetable oils was soya oil, which was a byproduct of soymeal for animal feeds. Beyond that, soya oil was the second largest US food aid item after wheat, and was widely substituted for traditional oils for cooking and for industry, in recipients of US aid from Spain to India.[27] Thus the food regime fostered import substitution of tropical oils and sugars in the US and Europe, the Atlantic hinge of the international food regime.

By the early 1970s, then, the food regime had caught the third world in a scissors. One blade was food import dependency. The other blade was declining revenues from traditional exports of tropical crops. If subsidized wheat surpluses were to disappear, maintaining domestic

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[23] Rau, *Agricultural Policy*, pp. 93–121.
[24] Friedmann, 'Origins'.
[25] Jack Kloppenberg, Jr., 'The Social Impacts of Biogenetic Technology in Agriculture: Past and Future', in G. Berardi and C. Geisler, eds., *The Social Consequences and Challenges of New Agricultural Technologies*, Boulder, CO 1984.
[26] Friedmann, 'Origins'.
[27] Friedmann, 'Changes in the International Division of Labor'.

food supplies would depend on finding some other source of hard currency to finance imports.

The food crisis of 1973–74 did create a sudden scarcity. It sent prices soaring and dried up aid. Worst of all for dependent third world importers, the food crisis coincided with the oil crisis.[28] The effects included a complex differentiation of the third world based on the new importance of paying for expensive imports of food and energy. The solution was temporary, elegant, and dangerous. The oil revenues deposited in transnational banks by oil-rich states were lent out extravagantly to states desperately in need of financing food (and oil) imports.

II New Relations, New Rules, 1972–present

After two decades, the internal tensions within the food regime had begun to pose serious problems. The *replication* of surpluses, combined with the decline of the dollar as the international currency, led to competitive dumping and potential trade wars, particularly between the European Economic Community and the US. This eventually made it unbearably costly for small countries, such as Canada or Sweden, to subsidize surpluses or exports. On top of international conflict, transnational corporations outgrew the national regulatory frameworks in which they were born, and found them to be obstacles to further *integration* of a potentially global agro-food sector.

However, the crisis was precipitated externally by an event which permanently breached the boundary between the capitalist and socialist parts of the food regime. The geopolitical context for both Atlantic integration and the reorientation of third world agro-food relations was Cold War rivalry. The catalyst of crisis in the early 1970s, a crisis from which the regime has yet to recover, was the massive grain deals between the US and the USSR which accompanied Detente. The crisis unfolded through a series of US embargoes in response to feared shortages throughout the seventies, followed by fierce rivalry when surpluses returned in the eighties and nineties.

Detente and the Linking of Blocs

It will take a long time to interpret the effects of East-West relations on capitalism, but their role in the food regime was crucial. The food relations among the US, Europe, the third world (and as we shall see, the Asian capitalist countries) were only one part, though the dominant part, of the food regime. They were contained by the Cold War dam which, despite leaks, divided the capitalist and the state socialist economies. With Detente, major trade and financial links breached

[28] The oil and food crises were connected. While the Soviet intention to import feedgrains resulted from an internal political decision to increase domestic meat consumption, their ability to do so was based on the hard currency earnings from their oil exports. The volume of revenues was very much due to the oil price rises set by the OPEC cartel. See H. Friedmann, 'Warsaw Pact Socialism and NATO Capitalism: Disintegrating Blocs, 1973–89', paper presented at the conference 'Rethinking the Cold War', Madison, WI, October 1991.

the Cold War dam. It is important to underscore that nearly two decades before the collapse of the socialist bloc and of the Soviet Union, economic ties between blocs had forever altered international food relations.

The Soviet American grain deals of 1972 and 1973 permanently broke the dam separating capitalist and socialist blocs.[29] Despite leakages, this dam had been a wall containing the surpluses which were the pivot of the food regime. In the 1972–73 crop year, the Soviet Union bought 30 million metric tons of grain, which amounted to three quarters of all commercially traded grain in the world.[30] The scale of that transaction created a sudden, unprecedented shortage and sky-rocketing prices. Even though surpluses returned in a few years because the agricultural commodity programmes which generated them remained in place, the tensions did not disappear, but were intensified by farm debt and state debt, international competition, and the changing balance of power among states.

The sudden scarcity of grains and soybeans precipitated by the Soviet purchases provoked a counter-productive response by the US. First of all, despite forty years of experience, the US Department of Agriculture acted as if the chronic surplus problem engendered by commodity price supports had disappeared. With state encouragement, US farmers abandoned conservation and other practices which had reduced acreage erratically since the New Deal. They followed the advice of the Secretary of Agriculture to plant 'fence-row to fence-row' to supply foreign demand for wheat, maize, and soybeans. Although the US farm bill of 1973 finally introduced deficiency payments, target prices, and other measures rejected in 1948 as an alternative to simple commodity price supports, the government also raised subsidies.[31] Hastily treating surpluses as a bad memory, farmers borrowed to finance expansion. In the US, farm debt more than tripled in the 1970s, fueled by high prices and speculation in farmland.[32]

Second, the Nixon Administration, already beset by the Watergate scandals and nervous at the prospect of domestic feed shortages, introduced a series of embargoes between 1973 and 1975, which prevented internationally cooperative adjustments to the new conditions. The grain deal of 1972 was the economic centrepiece of its major foreign policy initiative, Detente with the Soviet Union. This focus led to the shift of agricultural trade policy from the Department of Agriculture (as an adjunct to the farm programme) to the State

[29] Most accounts of the 'food crisis' list the Soviet purchases along with a variety of other factors, which coincided in the early 1970s to change the relation between supply and demand. These included, for instance, the failure of the Peruvian anchovy harvest, an important protein supplement in animal feeds. However, in a regime governed by chronic over-supply and rapid technical change, the opening of world demand to include the socialist bloc was clearly more significant for the structural basis of the regime.

[30] Gilmore, *A Poor Harvest*, p. 227.

[31] Gilmore, *A Poor Harvest*, pp. 75–77. For the historical alternative, see Reo M. Christenson, *The Brannan Plan: Farm Politics and Policy*, Ann Arbor 1959.

[32] Strange, *Family Farming*, pp. 21–22.

Department, where it served US foreign policy as 'a lever that ... has brought back into the world economy some 1.1 billion people' of the Soviet Union and People's Republic of China.[33] The US government gave the Soviets 75 per cent of allocated CCC export credits, plus additional subsidies which reduced the export price below the domestic price. When the details became public, another scandal resulted in Congressional inquiries into the 'great Soviet grain robbery.'[34] When soybean prices began to climb the following year, consumers and livestock farmers mobilized, and the US embargoed all exports in July 1973. Then in 1974 and 1975, fearful of a repeat of the scandals of 1972, the US embargoed grain to the Soviet Union.[35]

The embargoes were complete failures. They revealed that the US government could not control trade even when, as for soybeans, the US had a virtual monopoly over supply. State trading agencies and transnational corporations and their subsidiaries were able to use complex transactions and transshipments to organize trade outside the knowledge, much less the control, of the US government or indeed of any state. Within two months of declaring the second embargo, the US negotiated the first of a series of five-year contracts with the Soviet Union.[36] This represented the largest single transaction in the world food economy.

This rapid US shift in 1975 implicitly acknowledged the frailty of US food surpluses as a weapon. The US reversed course by shifting the focus to economic policy intended to increase export earnings. By 1980 exports of grains and feeds had increased eight times over the 1970 level. The dependence of the US on agricultural exports was compounded by the fact that a quarter of its maize and about 15 per cent of its wheat was bought by the USSR.[37]

Nonetheless, the Carter administration imposed one last embargo in 1980 (despite its electoral pledge never to do so) in response to the Soviet invasion of Afghanistan. The Soviets bought almost the whole amount of the cancelled contracts on the world market, mostly from Argentina, Canada, and possibly even the US via transshipments from Eastern Europe. Moreover, the Soviet Union had hard currency from its oil exports with which to buy grain and oilseeds. Consequently, the US embargo gave windfall prices to producers in competing export countries, and windfall profits to the corporate traders which took advantage of the unusual price fluctuations.[38] The disastrous embargo was one of the woes leading to the defeat of the Carter administration in the next election. Thus, even though the Soviet Union and Eastern Europe together accounted for imports valued at only a third of those of the third world, the US became dependent on Soviet purchases.[39]

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[33] Earl Butz, quoted in Gilmore, *A Poor Harvest*, p. 157.
[34] Gilmore, *A Poor Harvest*, p. 75.
[35] Ibid., pp. 146–60.
[36] Ibid., pp. 159–60.
[37] Revel and Riboud, *America's Green Power*, p. 173.
[38] Gilmore, *A Poor Harvest*, pp. 165–69.
[39] OECD, *Agricultural Policies, Markets and Trade*, Paris 1991, p. 402.

Yet within less than a decade the Soviet market, having risen to second largest in the world, effectively collapsed. Over the course of the 1980s, Soviet imports began to be sustained by the same US mercantile trade practices which had been applied earlier to Europe, Japan, and the third world. A high level of guarantees and bonuses, that is, subsidies, maintained Soviet purchases from the US in 1990 and 1991. As late as December 12, 1991, President Bush offered the USSR $1 billion dollars in credit guarantees for feedstuffs. Between 1987 and 1991, the US gave over $708 million in bonuses for Soviet wheat purchases. By then, subsidized sales by the US to the Soviet Union were such a large proportion of world trade that each transaction further depressed prices. Indeed, the US even revived a credit guarantee programme via the Export-Import Bank which had been defunct for sixteen years in order to offer an additional $300 million in guarantees to the Soviet Union.[40] The former Soviet Union is on the list of twenty-eight countries to receive subsidized exports announced by President Bush in September 1992 in his campaign for re-election in farm states. Short of getting the EC to agree to loss of major foreign and domestic markets, US policy now depends on increasing subsidized exports to cash-strapped countries whose prospects of repayment are dim.

Wheat, corn and soybean stocks in the US rose again in the 1980s, although new policies and expectations kept them in private hands.[41] When the surpluses returned, they were harder to dispose of than before the boom. The US had expanded its production and world market share instead of reforming agricultural policy.[42] US farmers carried a debt load which could not be supported when falling prices reduced cash flow and deflated land values, and in the 1980s farm failures became as severe as in the 1930s. Farmers had meanwhile lost many of their urban allies and their unity across commodity groups, making room for agrofood corporations to exercise the most effective lobby.43 When the bubble burst in the 80s, US farmers had lost their monopoly over agricultural exports, and their political weight in US trade policy.

Japan and the Asian Tigers

Just at the time when the US was becoming dependent on grain and soybean exports, its economic weight was declining relative to the EC and Japan, which were the major markets protected against its products. While the US and Europe were sliding into a subsidy war, relations between Japan and major exporters began to evolve in distinct ways. With the manifest collapse of the socialist bloc market after 1991, those relations revived the older, prewar competition centred on import demand. These economic relations are deeply subversive of the defining principle of the food regime, namely power based on state supported exports of surplus commodities.

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[40] United States Department of Agriculture, Economic Research Service, *USSR Agriculture and Trade Report*, RS–91–1, May 1991, p. 30.
[41] See Strange, *Family Farming*, p. 23.
[42] Revel and Riboud, *America's Green Power*, passim.
[43] Gilmore, *A Poor Harvest*, p. 5.

Japan's national agrofood economy began with Marshall aid. The Allied Occupation carried out a land reform and created a large class of small farmers whose interests lay in maintaining high subsidies for rice. Japan's postwar agrofood reconstruction *replicated* the US model, adapted to the circumstances of rice production. Rice producers became politically important to successive governments, and the security afforded by domestic rice supplies became a tenet of national ideology. Subsequent US strategic aid to South Korea and Taiwan had similar effects.[44]

Yet replication was *not* balanced by *integration* as in Europe. Despite the similar goals and policies of Marshall aid, the economic and political conditions after the war, plus a lack of historical connections, led US corporations to shy away from significant direct investments in Japan of the sort they were undertaking in Europe.[45] Thus compared to Europe, US transnational firms did not create production chains integrating Japan's agrofood sector with that of the US.

In addition to postwar strategic conditions, the distinctively national character of the Japanese agrofood sector stemmed in part from its distinct diet. Although Japan early became a major importer of grains and soy, they played different roles in consumption and therefore in production. Wheat reflected a dietary change, encouraged by numerous trade missions and specific aid projects, such as provision of school meals. Japan became the largest of the new wheat importers after World War II, the rest being countries of the emerging third world. By incorporating wheat into their diets, Japanese consumers benefited from low world prices and helped clear US surpluses from the market. In this sense, Japan played the same role as third world countries in restructuring international wheat trade around the US as an export centre.

Japan's relation to international soy markets was also different to that of Europe. Since soy was initially used mainly for human diets, it did not enter the economic and technical chains of the feedstuffs industry. The manufacture of soybeans into tofu, miso, and other foods was a distinct, Japanese production. Most important, as human food, soy cannot be substituted in the way that animal feeds can be—and eventually were. By the time Japan began to import significant quantities of soy for animal feeds, the food regime was already changing.

Dependence on US imports was reliable during the stable period of the food regime, when US surpluses led to cheap world supplies. However, the US soy embargo of 1973 changed Japanese perceptions radically and permanently. Although the embargo lasted only two months and all contracts were eventually honoured, its effect on the confidence of import states was enduring.[46] In particular, the

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[44] Philip McMichael and Chul-Kyoo Kim, 'The Restructuring of East Asian Agricultural Systems in Comparative and Global Perspective', Department of Rural Sociology, Cornell University, MS.
[45] H.B. Schonberger, *Aftermath of War: Americans and the Remaking of Japan, 1945–1952* Kent, OH 1989.
[46] Revel and Riboud, *America's Green Power*, p. 145.

embargo fatefully impressed the government of Japan with the unreliability of the US as a source of virtually all its soy. By 1980, as we shall see, the US share of world soya markets plummeted from its virtual monopoly a decade earlier. US trade negotiations with Japan in the subsequent two decades have included repeated but fruitless apologies for that political blunder almost twenty years ago.[47] This may be the reason that US pressure on Japan to reduce agricultural trade barriers in the early 1980s concentrated on beef and citrus products, rather than rice.[48]

Japan's investment and trade became a major force in the transformation. Japanese agro-food investments abroad began after the food crisis. If we understand soy and grains to be resources necessary for the domestic economy, then they may fall under the larger resource strategy described for minerals by Bunker and O'Hearn. According to their account, Japan and the US have consistently adopted completely different foreign economic strategies, based on their distinct endowments of natural resources.[49] They argue that without significant domestic production, the Japanese interest is in diversity of supply, which keeps prices down and reduces strategic dependence on any supplier. Japan can best achieve this goal by using the minimum investment necessary to create as many export sectors as possible. Exporters then compete for the Japanese import market, and Japanese importers can pick and choose, and shift from one supplier to another. This contrasts sharply with the longstanding US (and European) pattern of direct foreign investment. Both domestic production by US corporations, and foreign production by their subsidiaries, are locked into production sites and technologies matched to those sites.[50]

Unlike the US, and even the European Community, Japan is destined to import soy. The component of soy imports used in human diets is not substitutable. With the crucial exception of rice, imports of many

[47] Stephen Bunker, University of Wisconsin, personal communication.
[48] Michael Reich and Yasuo Endo, 'Conflicting Demands in US-Japan Agricultural Negotiations', USJP Working Paper 83–01, Harvard University Center for International Affairs, May 1983.
[49] Stephen Bunker and Denis O'Hearn, 'Strategies of Economic Ascendants for Access to Raw Materials: A Comparison of the U.S. and Japan', forthcoming in Ravi Arvind Palat, ed., *Pacific Asia and the Future of the World System*, Greenwith, CT. Bunker and O'Hearn show how, in the minerals sector, US transnational investment strategy eventually became a competitive disadvantage relative to the Japanese strategy of indirect control through minimal investment in multiple sources of supply. While US transnationals were tied to specific places and technologies, Japanese trade and investment could be used to induce Third World states to invest public money in infrastructure and even direct production for export of aluminium and other minerals. Third World nationalist responses to US hegemony fit nicely with this strategy. By the time it became clear that the aggregate effects of national mineral projects were counterproductive, many Third World states were caught in the debt trap. Export oriented industrialization reinforced their commitment to projects undertaken to industrialize through import substitution. As technologies and profitable sites changed, Japan could shift sources of supply, while vertically integrated US firms were stuck with devalued land and capital.
[50] Ibid. Bunker and O'Hearn show how, in the minerals sector, US transnational investment strategy eventually became a competitive disadvantage relative to the Japanese strategy of indirect control through minimal investment in multiple sources of supply.

agricultural products, and especially soy, are as important to Japan as minerals. In addition to the central tenet of agricultural policy, which continues to be national sufficiency in rice, Japan's interest as an importer lies unambiguously in secure access to necessary imports of grains and soy.

Although Japan is a distant second to the European Community in the volume of its soy and feedgrain imports, its singular foreign economic strategy has the potential completely to undermine the structure of international food relations. Japan began in the early seventies to look for alternative sources of soy supply to the US. Its strategy was to change the nature of surpluses from a problem of disposal, which the US and EC confronted, to an advantage for the buyer. It found a complementary interest among countries of the third world whose national industrial policies created internationally competitive agrofood sectors in the 1960s and after.

New Agricultural Countries

Behind the scenes of the Atlantic conflict which holds centre stage at the GATT, is a new alignment. Trade between Japan (and other commercial importers) and successful new agrofood exporters in the third world continues to destabilize the Atlantic-centred food regime. The new relations began during the early crisis years of the 1970s.

Soviet-American trade brought skyrocketing prices and new export markets in the seventies. These conditions coincided with the new possibilities for public borrowing created by the oil crisis.[51] OPEC states captured a large share of world revenues and deposited them in international banks. The banks in turn pressed these 'petrodollars' on borrowers. Many of the borrowers were third world and socialist states, including some which hoped to invest in export agriculture and to use the earnings to repay the loans. Another set of borrowers, on a scale equivalent to third world debt, was US farmers. Seventies lending of petrodollars fueled both buyers and sellers of an expanding world market.

The differentiation of the third world into oil exporters, successful exporters of manufactured products, and those left behind in poverty (sometimes called the 'fourth world'), began in the early seventies. The new industrial countries, called NICs, were part of a transnational restructuring of industrial production. As we have seen, the technical basis of the American model of agriculture, which was replicated and integrated in different ways in other parts of the world, comprised the subordination of crops and livestock into corporate, often transnational, agrofood complexes and the industrialization of agriculture itself. The successful development of export agriculture was as important as that of manufactures, and created a comparable set of 'new agricultural countries,' or NACs. Some, such as Brazil, are both NICs and NACs.

[51] Friedmann, 'Warsaw Pact Socialism'.

Brazil is the most important NAC. Its export capacity was based on a particularly successful development of the industrial agrofood economy in the 1960s, by means of state guided policies of industrialization through import subsitution. Starting in the 1960s, the Brazilian state used a strategic mix of agricultural settlement, credit, and taxation policies to create an intensive livestock sector based on nationally produced grain and soya. Not only that, but export taxes on unprocessed soya encouraged national processing, whether by state or private, national or transnational, corporations.

Brazil *replicated and modernized* the US model of state organized agrofood production. It *shifted* the focus of domestic policy from agricultural subsidies to agroindustry, which increased the value of commodities and did not create surpluses. Brazilian export policy replaced the US focus on stabilization of domestic farm programmes, with an emphasis on high value added exports.[52]

Within four years of the US soy embargo of 1973, NACs had cut into the previous virtual US export monopoly. By 1977, the US share of world exports of oilseeds and meals, of which soy was the largest, was only 54.6 per cent.[53] Ten years later, the US share of world oilmeal exports had fallen to one-sixth. It exported less than Brazil and only slightly more than Argentina. China, Chile, and India had joined the ranks of major oilmeal exporters.[54]

Ironically, the US retained a nearly two-thirds share of unprocessed oilseed exports, while Brazil exported high value-added meal. When Japan, the Soviet Union, and other import countries looked for alternatives to US supplies, Brazil was especially well poised to concentrate on value added meal rather than unprocessed soybeans. By 1980 Brazilian soybean production was a third as large as that of the US, and its soymeal production half as large; Brazilian exports of soybeans were 10 per cent of US exports, but its soymeal exports were virtually equal. Then within a few years, as we saw, Brazilian soymeal exports exceeded those of the US.[55]

Thus, Brazil's successful adaptation of the US model, which shifted the focus from agriculture to agro-industry and from the management of surpluses to commercial exports, involved a complex web of international and social transformations. It gave Brazil a competitive advantage in a technically evolving and increasingly open international food economy—at a high cost to the victims of capitalist transformation of the agro-food economy of Brazil.[56] Most important for international food relations, the NAC phenomenon revives the intense export competition on world markets that existed prior to

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[52] Vincent LeClercq, *Conditions et limites de l'insertion du Bresil dans les echanges mondiaux du soja*, Institut National de Recherches Agronomiques, Etudes et Recherches No. 96, Montpellier: Ecole Nationale Superieure Agronomique, 1988.
[53] Revel and Riboud, *America's Green Power*, p. 193.
[54] Hathaway, *Agriculture and the GATT*, Table 3.14, p. 52.
[55] Ibid., p. 52; Bertrand, et al., *Le monde du soja*, p. 16.
[56] Vincent LeClercq, 'Aims and Constraints of the Brazilian Agro-Industrial Strategy: The Case of Brazil', in Goodman and Redclift, *International Farm Crisis*, pp. 275–91.

the postwar food regime, and shifts advantage from exporters to importers.

This fitted neatly with Japanese strategies to diversify world supplies with minimal investments and commitments abroad. Like many other states caught in the debt trap, as Bunker and O'Hearn point out, public investments and joint ventures in third world export sectors allowed Japanese capital to gain leverage with minimal direct investment. This link between third world states and (often Japanese) foreign capital supplanted the earlier combination of direct (US and European) foreign investment and state investment and controls favouring import substitution.

Liberalization has created an unstable situation in which importers (with strong currencies) benefit and the largest exporter wields the greatest power in international rule-making. Paradoxically, liberal trade practices now so desperately pursued by the US to manage short term deficits, reinforce the long term shift of advantage to (economically strong) import countries. With success at the GATT the US could find itself in a new game, in which the rules convert export surpluses from a source of power into a source of dependency.

III The End of the Surplus Regime

The impasse over agricultural subsidies at the GATT reflects the contradictory foundations of the postwar food regime, foundations which are crumbling rapidly. Overt conflict between replication and integration of national agro-food sectors at the end of 1992 was reduced to a few million tons of oilseeds. That it was important enough to jeopardize the comprehensive multilateral agreement to extend corporate power in key areas for future accumulation, such as services and intellectual property rights, testifies to the strength of residual tendencies in the food regime. Even if tit-for-tat trade restrictions seem to have been avoided—French acceptance of the agreement is in question as I write—nothing assures the future envisioned in the larger GATT agreements. The contest will continue between political projects envisioning different futures.

The End of Commodity Programmes?

Recent farm policies are catching up with the structural end of the food regime—whatever the outcome at the GATT. Changes in agricultural policy unimaginable at the outset of the Uruguay Round anticipate an end to national surpluses.

The separation of farm income supports from production—that is, the end of price supports—is the likely future for North America and Europe. This would undo the key feature replicated in the food regime—government generated surpluses. In the US, although farm lobbies gained provisions requiring reinstatement of old measures if the Uruguay Round breaks down, the farm bill of 1985 accelerated the shift from price to income supports—even as it intensified export subsidies.[57] After 1987 fiscal pressures reduced the level of price supports. Most of the states which are the stronghold of the farm lobby voted Republican in the November 1992 US elections, and the Democratic incumbent may feel less beholden to them than the past decade's ruling Republicans. In the EC, reforms of the Common Agricultural Policy initiated in 1988 and intensified in 1991, point more decisively in the same direction. Payments to farmers will support their incomes directly, instead of indirectly through the prices of their commodities. While farmers will no doubt continue to be forced off the land, at least some will be supported as a combined rural welfare and tourism project. Farm income supports may also be tied to management of rural resources and to environmental programmes.[58]

The shift to income supports promise eventually to end the mountains and lakes of surplus agricultural commodities disposed of abroad by government subsidies and credits. It is easy to ignore the remarkable concensus on this way of ending an epoch of agricultural policy because (at least to proponents of urgent liberalization) implementation seems glacial.[59] Yet the shift is likely to continue, because it confirms in policy what has already occurred structurally. Whatever stocks may be intentionally created for stabilization or security, whatever export subsidies and import controls may be retained or introduced, will have—indeed already do have—effects on the global agrofood sector different from those which shaped the food regime.

The Food Regime Unhinged

The two trade hinges of the food regime are coming unstuck. Countries of the third world and more recently of the former socialist bloc, have joined the multilateral trade negotiations at the GATT.[60] This

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[57] An intriguing argument has been made that the aggressive US stand was initiated by the US farm lobby in a strategy to *keep US farm programmes.* According to this view, the lobby was initiated and pressed for the 1987 US 'zero-option' demand for total abolition of all subsidies within ten years. The goal was to legislation reinstatement in case of failure, and to provoke the EC into rejection, thus ensuring failure. The game may work, but it may also backfire, the argument continues. If agreement is secured—not the zero-option but something wildly beyond what was thought to be possible in 1987—then the US farm lobby is caught in a legislative and ideological trap of its own making. See Robert L. Paarlbert, 'Why Agriculture Blocked the Uruguay Round: Evolving Strategies in a Two Level Game', MS, Harvard Center for International Affairs, March 26, 1991.

[58] Ironically, deficiency payments were the cornerstone of British agricultural policy before entry into the Common Agricultural Policy. Whilst they may be considered a welfare measure, subsidized via taxes and not affecting imports or prices, the recipients were members of the only national class of capitalist farmers in the world. The subsequent experience of the CAP, which enriched farmer and rewarded scale, make it difficult to remember this rational policy.

[59] Organization of Economic Cooperation and Development, *Agricultural Policies, Markets and Trade, Monitoring and Outlook*, Paris, 1991, pp. 199–200.

[60] See Tim Josling (Food Research Institute, Stanford University), 'Emerging Agricultural Trade Relations in the Post Uruguay Round World', and 'Conflicts between Free Trade and Domestic Policies in Agriculture and the Environment', presented at the Faculty of Political Science, University of Rome, May 1992. Josling's account of the relationship between international changes and the GATT negotiations is remarkably

reflects (and reinforces) the unhinging of Atlantic agrofood integration, and of the US-Third World grain trade.

The Atlantic hinge is weakening as Western Europe and the US are reorientating trade towards their respective continents. The North American Free Trade Agreement of 1992 and the potential expansion of the European Community to Nordic, former socialist, and other countries, promises to extend 'decoupling' to the continents of North America and Europe. This has been envisioned by corporate policy advocates for some time. As early as 1987, the President of Cargill Ltd. told the leading Canadian financial journal, 'Major agricultural producing countries should concentrate on devising actuarially sound income insurance policies ... but we must avoid like the plague commodity-specific programs that encourage overproduction or distort land use decisions.'[61] Continental integration is also emerging in Asia, centred on Japanese imports and investment.[62] Whether these turn out to be rivals or partners, they replace the US centre of the food regime with multiple centres.

The Atlantic hinge held because of the Cold War divide of Europe. The collapse of the socialist bloc was crucial in breaking the impasse over West European farm policy, by separating reform of the CAP from the conflict with the US. Prospective incorporation of Eastern Europe (and new Nordic and Alpine members), according to Tim Josling, was the most compelling reason for the MacSharry reform proposals.[63] The former socialist countries include large fertile regions, which are politically divided, economically underdeveloped, and culturally distinct. Much like the US South in the fifties and sixties, where soy rapidly replaced cotton, it opens a rich hinterland with abundant land and labour for reconstructing continental agrofood relations. If stability returns to the former Soviet Union, the indiscriminately maligned state and collective farms may provide ripe pickings for agrofood transnationals (not only European-based, of course), particularly in the livestock sector. Similar openings could include China in Japanese diversification of investment and trade.

The other hinge was between the US on one side, and the third world (and Japan) on the other. The decline of US economic power parallels

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[60] (*cont.*)
insightful and pragmatic, and informs my account. However, despite his recognition that '"new" trade is based not on old-style comparative advantage, based on resource endowment, but on intra-industry specialization, intra-firm investment decisions, and niche markets', ('Emerging Agricultural Trade', p. 4), Josling does not really incorporate economic power into his analysis.

[61] *Financial Post*, 26 January 1987, quoted in Brewster Kneen, *Trading Up: How Cargill, the World's Largest Grain Company, is Changing Canadian Agriculture*, Toronto 1990, p. 112.

[62] Philip McMichael, 'Agro-food Restructuring in the Pacific Rim', in R.A. Palat, ed., *Pacific-Asia and the Future of the World-System*, Westport, 1992. Also Geoffrey Lawrence and Frank Vanclay, 'Agricultural Change and Environmental Degradation in the Semi-Periphery: the Murray-Darling Basin, Australia', forthcoming in P. McMichael, ed., *Agro-food System Restructuring in the Late Twentieth Century*, Ithaca, NY. Current new reports suggest that Japan is also making overtures to China, whose agricultural potential is enormous.

[63] Josling, 'Emerging Agricultural Trade', pp. 18–19.

the transformation of exports from a source of power into a source of dependence. US exports were a source of economic and strategic power. In many underdeveloped countries, the food regime left a legacy of food import dependence, stagnating export revenues, and debt. Later, a few became New Agricultural Countries, whose competitive exports helped to disrupt the food regime. Now, in the twilight of the regime, the export imperative prevails. For strong importing economies, such as Japan, this is an advantage. For the third world as a whole, the transformation of their economies into agricultural export platforms intensifies new global international hierarchies between North and South.[64]

The export imperative completely undermines US centrality in the food regime. The 'inevitable trend toward export dependence'[65] which was built into US farm and export-and-aid programmes, has come to fruition. For a decade, Republican governments in the US have sacrificed longterm restructuring to aggressive export practices. The US zeal to force open commercial markets implicitly recognized the failure of concessional sales, longterm credits and other forms of 'aid' to create new markets. Surpluses have come to signify weakness rather than power, a burden rather than an opportunity.[66] The need for markets and the need to restructure domestic agriculture have led to contradictory foreign economic policy—aggressive trade practices combined (since 1987) with insistent demands to abolish such practices.

The accession of former third world countries into the GATT and their sudden conversion to free trade signals the subordination of food restructuring to international debt.[67] Promotion of agricultural exports, especially those called 'non-traditional' (geared to new niche markets for exotic foods, flowers, and other crops), is an explicit aim of structural adjustment conditions imposed by creditors. They usually intensify social inequalities and conflicts in poor countries. For instance, in Brazil, which is a stunning success as measured by investment in agrofood production and exports, is also a nightmare of evictions from the land, displacement of local food systems, hunger, and social unrest.[68] As I write, major social unrest has precipitated massive food distribution to the poor. It is certainly less orderly and less integrated with public policy than were the food subsidies abolished in the past decade of austerity.[69] These are part of a string

[64] Philip McMichael, 'World Food Restructuring Under a GATT Regime', forthcoming in Frances Ufkes, 'The Political Geography of Agricultural Trade', special issue of *Political Geography Quarterly.*

[65] Gilmore, *A Poor Harvest*, p. 77.

[66] As I write, Canada, whose resources are fewer than those of the US, has refused to ship more subsidized grain to Russia despite the desperate state of the farm sector and the trade balance.

[67] See McMichael, 'World Food System Restructuring'.

[68] Fernando Homem de Melo, 'Unbalanced Technological Change and Income Disparity in a Semi-Open Economy', in F.L. Tullis and W.L. Hollist, eds., *Food, State, and International Political Economy*, Lincoln 1986.

[69] Jane Collins gives a remarkable account of the innovative labour relations and other practices of fruit and vegetable firms established in the wake of irrigation in the 1970s of the Sao Francisco Valley in Northeastern Brazil. See 'Production Relations in

of 'IMF riots,' frequently over food prices, during the past decade of austerity.[70] They reflect the suffering imposed in new centres of accumulation like Brazil, no less than in the vast regions pushed to the margins of accumulation, which include much of the African continent.

Debtor countries are caught in a scissor between the export imperative and import restrictions in Northern markets. They are thus forced to support free trade, however wrenching is the shift from decades of import substitution, controlled flows of goods and money, and state enterprises. Debt repayment, currency reform, and the rest, require access to highly protected food markets in North America, Europe, and Japan. Liberal capitalism is the new, externally imposed form of austerity in the late 20th century. It is opposite to the austerity chosen by revolutionary third world states of the Cold War era, which took the form of autarkic socialism. Collectivization regardless of national circumstances was often futile and even disastrous. The same can be said of the creation of agrofood export platforms regardless of national circumstances.

Yet the export imperative, despite the faith in comparative advantage prevailing in expert circles outside Europe, does not create new regime rules. 'Decoupling' and 'tariffication' are the words used to dismantle farm policies and trade policies which once worked in tandem to regulate the food regime during years—now a distant memory—when it was stable. But if farm incomes are supported for reasons other than agricultural production—social insurance, keeping a lid on unemployment, environmental protection, promotion of tourism—then what will become of agriculture? Direct payments to farmers can address rural poverty and outmigration, can support rural tourist industries, and perhaps mollify farm organizations, but they intentionally *do not regulate agriculture*. Likewise, to increase the 'transparency' of trade controls by converting them all to tariffs does not regulate agrofood power or property.

IV What Next?

Emergent tendencies have unfolded quickly since the Uruguay Round began in 1986. These prefigure alternative rules and relations. One is the project of corporate freedom contained in the new GATT rules. The other is less formed: a potential project or projects emerging from the politics of environment, diet, livelihood, and democratic control over economic life. Farmers (who are heterogeneous) must somehow

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[69] (*cont.*)
Irrigated Agriculture—Fruits and Vegetables in the Sao Francisco Valley in (Pernambuco/Bahia), Brazil', Working Paper #23, Fresh Fruit & Vegetable Globalization Network, University of California, Santa Cruz, 1992. The network has already produced a large number of working papers from its first conference, organized by William H. Friedland and David Goodman. Little has been published on this important aspect of global agrofood restructuring. For a new report on recent events in Brazil, see *Manchester Guardian Weekly*, November 8, 1992, p. 10.

[70] John Walton, 'Debt, Protest, and the State in Latin America', in Susan Eckstein, ed., *Power and Popular Protest*, Berkeley 1989.

ally themselves in the main contest over future regulation: will it be mainly private and corporate, or public and democratic? What international rules would promote each alternative? The answers depend on the ways that emerging agrofood policies are linked either to accumulation imperatives or to demands raised by popular social movements.

Private Global Regulation

At present, agrofood corporations are the major agents attempting to regulate agrofood conditions, that is, to organize stable conditions of production and consumption which allow them to plan investment, sourcing of agricultural raw materials, and marketing.[71] If new rules are put into place of the type envisioned in the present GATT proposals, their main effect will be to empower transnational capital. This empowerment concerns not only the freedom to trade and invest in agriculture (cattle and potatoes), industry (frozen hamburgers and chips) and services (hot hamburgers and chips). Provisions for intellectual property rights also have serious implications for uses of biotechnologies, for control over genetic resources, and for standards protecting craft and regional foods.[72]

However, transnational agrofood corporations have now outgrown the regime that spawned them. In particular, even US-based corporations have long had interests of their own, not related to those of the US state or national economy, and certainly not to those of US farmers.[73] A major reason why US embargoes never worked, for instance, was corporate collusion with import countries to evade US trade restrictions.[74] Even before the food crisis, subsidiaries of US corporations were working independently of US national policy. For instance, in 1970, subsidiaries of Cargill and Continental, assisted by a trade agency of the French government, joined with other major grain companies in a cartel, Francereales, to promote French exports. The cartel was dissolved in 1973, under pressure from public authorities and from excluded competitors, but was revived in 1975 to

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[71] For the general shift to corporate control in the 'new issues' of the Uruguay Round—services, intellectual property rights (TRIPs) and international investment rights (TRIMs)—Luis Abugattas Majlof, 'World Economic Restructuring and the Multilateral Trade Negotiations: the "New Issues" in the Uruguay Round, Problems and Prospects for Latin America', International Political Science Association, Lincoln, NB, 1991. Also see Chakravarthi Raghavan, *Recolonization: GATT, the Uruguay Round and the Third World*, London 1990. For agrofood corporations, see McMichael, 'GATT, global Regulation, and the Construction of a New Hegemonic Order', MS, Cornell University, 1992, and 'World Food System Restructuring'.

[72] For the issue of genetic resources, see Jack Kloppenberg, ed., *Seeds and Sovereignty: The Use and Control of Plant Genetic Resources*, Durham and London 1988. For instances of challenges to craft and regional products, France and the US disagree about the rules governing the names of wines, and this and related disputes reach to other countries and other products. Warren Moran has a fascinating discussion of the dispute over 'appellation controllee' in 'Rural Space as Intellectual Property', MS, 1992.

[73] Already in 1976, J.-P. Berlan, J.-P. Bertrand, and L. Lebas noted that 'les interets des agriculteurs et des multinationales americaines ne sont pas aussi unis que dans la periode precedente'. See 'Elements sur le developpement du "complexe soja" Americain dans le monde', *Revue Tiers-Monde*, XVII, p. 66.

[74] The details in each case can be found in Gilmore, *A Poor Harvest*.

respond to the new Soviet market.[75] Because the US state could not control or even monitor shipments by transnational corporations, US policies to increase US food exports, at the same time undercut US political power.

Within the limits of international rules, corporate integration of a global agrofood sector has proceeded as quickly and thoroughly as changing technologies permit. A new degree of global sourcing is made possible by feedstuffs that substitute for the standard corn and soy combination of the food regime.[76] Three examples may suggest how 'substitute feeds' at once integrate agrofood complexes and render substitutable the exports (and farmers) of any nation. First, orange pulp, a byproduct of the frozen orange juice industry, integrates the livestock and durable foods complexes. This adds complexity to the competition between Brazil and the US, which becomes (among others) an interplay between now-traditional feeds (soy) and durable foods (frozen juice). Second, tapioca, mainly exported from Thailand, directly seizes upon a traditional human dietary staple and converts it into a commercial export feed crop. The expansion of tapioca in Thailand perversely detracts from rather than enhances human diets—but then so does the export of fishery products for human consumption abroad. Third, the most complex relations surround corn gluten as a substitute feed. This product, which is highly protected by the European Community, is the byproduct of manufacture of high fructose corn syrup. The latter is the main sugar substitute in food manufacture. Without export revenues from gluten feed, the use of corn as a sweetener is too costly, and the domestic US demand for corn will fall considerably. Not surprisingly, this was one of the European import duties most intensely contested by the US.[77]

Meanwhile, as the rules have shifted, so have the commodities central to accumulation. While feedstuffs, the heart of the food regime, are becoming globalised rather than merely internationalised, the completely new markets in 'exotic' fruits and vegetables are global from the outset. Any state can enter, and in the push and shove of new markets, there is room for fly-by-night entrepreneurs and instant transnational corporations, as well as the giants of the postwar agrofood regime.[78] Rapacious entrepreneurial practices are encouraged by slavish state policies to attract investments and promote exports. The paradise of eternal strawberries and ornamental plants for rich consumers depends on an underworld of social disruption and

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[75] Ibid., pp. 61–63.

[76] For an excellent analysis of the longterm phenomenon, written before the current fluidity in the use of products for human and animal consumption became apparent, see David Barkin, Rosemary L. Batt, and Billie DeWalt, *Food Crops vs. Feed Crops: Global Substitution of Grains in Production*, Boulder and London 1990.

[77] W. Jos Byman, 'New Technologies in the Agro-Food System and US–EC Trade Relations', in P. Lowe, T. Marsden, and S. Whatmore, eds., *Technological Change and the Rural Environment*, London 1990, p. 148.

[78] Laura Raynolds, 'The Restructuring of Export Agriculture in the Dominican Republic', and William H. Friedland, 'The Global Fresh Fruit and Vegetable System', both forthcoming in McMichael, ed., *Agro-Food System Restructuring*.

ecological irresponsibility. Whilst no rules have yet stabilized 'non-traditional' export markets, the main corporate agenda points to global sourcing and marketing, that is, the impulse to diversify suppliers and cultivate tastes for 'exotic' foods (pears in Mexico no less than starfruit in Canada). Superimposed on the diversification of raw materials for mass produced durable foods is this postfordist nightmare of 'flexible specialization' and 'niche markets'.

Democratic Public Regulation?

Stable rules cannot come from private and competitive organizations, despite the global reach of some corporations. There are two reasons for this. First, the very conditions which allowed for agrofood capitals to become pivots of accumulation have created new social actors and new social problems. Second, agrofood corporations are actually heterogeneous in their interests.

Classes of producers and consumers have changed radically from the time when transnational agrofood corporations were born. The agrofood sector is now focused on food—industry and services—rather than on agriculture. The character of classes, urban and rural, involved in food production has shifted. In meatpacking, for instance, the scale of production has increased dramatically. This has been accompanied by massive restructuring of the labour process and a standardization of products. The main result in the US over the past two decades has been to replace a native born, male workforce—both disassembly line workers in packing plants and skilled butchers in supermarkets—with new immigrants, often female, recruited new plants in small cities in the US plains.[79] Restructuring is occurring as well in Australia, mainly for export to the Pacific rim, at massive environmental cost.[80] Both cases echo in the old centres of accumulation a process that began in NACs, such as Mexico, to create the 'world steer' at the expense of the traditional markets for peasant sideline production of cattle.[81]

As farmers have declined in numbers and unity, and workers have lost some of their bargaining power with agrofood corporations, food politics have shifted to urban issues, that is, to *food* rather than *agriculture*. Consumers in the food regime have been constructed by agrofood corporations to desire first standard foods, and then exotic foods from the entire globe. Yet contradictions have emerged in the sphere of consumption. Poverty limits access to food and demand for the products of the agrofood economy. In the poorest parts of the world, and the poorest populations of rich countries, many are forced

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[79] Fran Ufkes, 'The Changing Social Structures of Livestock Marketing in Illinois, 1950–1990', MS, Association of American Geographers, Miami, April 1991 and Kathleen Stanley, 'Industrial Change and the Transformation of Rural Labor Markets in the US Meatpacking Industry', forthcoming in McMichael, ed., *Agro-Food System Restructuring*.

[80] Lawrence and Vanclay, 'Agricultural Change and Environmental Degradation'.

[81] Steven Sanderson, 'The Emergence of the "World Steer": Internationalization and Foreign Domination in Latin American Cattle Production', in F.L. Tullis and W.L. Hollist, eds., *Food, the State, and International Political Economy*, Lincoln, NB 1986.

to withdraw from commodity relations into self-provisioning and informal networks. More privileged consumers have come to appreciate the dangers to health and environment from the dominant practices of agrofood production created by the food regime—mainly the chemical intensive monocultures of farming and the chemical intensive production of durable foods. The most privileged consumers have revived demand for handcrafted goods, including meals, now expressed in the language of 'designer' foods.

A *food policy* is more adequate to present conditions than the farm policies left behind by the waning food regime. It is made possible by the decoupling of farm incomes from agricultural production. The national agricultural policies of the food regime not only support prices and generate surpluses. Through credit and insurance criteria, for instance, they also foster large farms, monocultural practices, and the environmentally destructive use of chemicals and heavy machinery. They also encouraged technological and social dependence of farmers on corporate suppliers of packages of chemical inputs and purchasers of contractually (or simply monopoly) specified crops and animals. As national farm policies are come under increasing pressure, the possibility arises to create a positive food policy.

The social basis for a *democratic food policy* lies in movements for employment and incomes, for safe and nutritious food, for environmentally sensitive agriculture (including treatment of animals) and for democratic participation. The main social movements concerned with aspects of food focus on poverty, hunger, employment, health, cultural integrity, the environment, rural recreation, and even animal rights. Within this field of issues, agricultural regulation can become part of a comprehensive plan to use the capacities of people and the land to meet the needs of communities for nourishment, cultural expression, and a congenial habitat.

A democratic food policy is quite a different prospect from the implicit policy posited by liberalization of trade and empowerment of transnational corporations. The latter embodies the principles of distance and durability, the subordination of particularities of time and place to accumulation. It moves beyond the global promotion of American diets, such as hamburgers and cola drinks, to the creation of a global diet consisting of an array of manufactured meals and ingredients, called Chinese, Mexican, Middle Eastern, or whatever, in the freezers of supermarkets throughout the world.

Democratic principles, by contrast, emphasize proximity and seasonality—sensitivity to place and time. This means the use and development of technologies and markets to facilitate local enterprises in every possible link of agrofood chains. What is increasingly clear is that healthy food and environmentally sound agriculture must be rooted in local economies. These must respond to the capacities and limits of bioregions, including the needs and capacities of the people who dwell there. In other words, food to nourish people and communities can only be linked to agriculture in harmony with nature, by means of chains of commerce and transformation located as much as possible within regions. A democratic food policy can reconstruct the diversity destroyed by the monocultural regions and transnational integration of the food regime. It is also about employment, land use, and cultural expression.

Of course, community Davids cannot contest the power of corporate Goliaths unless they find allies. To act locally entails acting at all levels, up to and including the world economy. National states can protect and link regional projects if pressed to do so. Indeed, some of the most progressive technical possibilities, such as the substitution of fossil fuels by ethanol, depend entirely on the present structure of subsidies and protection. Even if that specific structure cannot be saved, important fractions of capital are engaged in longterm projects, such as Archer-Daniel Midlands in the US and Ferruzzi in Europe, whose interests, at least in part, lie in public regulation of agrofood economies.[82] They are potential allies of popular movements for regional food economies.

This possibility could only be pursued through institutions at all levels, from the municipal to the international. In various parts of the world, municipal and regional governments—or popular organizations—are experimenting with ways to support regional agrofood networks. These include community kitchens and links to farms, support for scientific research geared to local industries, and publicly supported community catering in schools and other public institutions.[83] With the exception of Sweden, however, no national state has undertaken to create a food policy as a framework for reshaping agriculture to meet environmental and social needs.[84] To the contrary, perhaps the most comprehensive national food system in the capitalist world is in an advanced stage of dismemberment in Mexico. A public corporation, whose activities ranged extended beyond regulation of agricultural prices into basic processing, distribution, and provision of affordable food to low income consumers, effectively 'decoupled' rights to the land and rights to food from market dictates.[85] Against popular resistance whose scale and intensity are not yet evident, a decade ago new political elites began to dismantle the Mexican system

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[82] Byman, 'New Technologies in the Agro-Food System', p. 148.

[83] I have in mind examples from northern Italy, Mexico City, and Toronto. For a discussion of the London Food Commission, created by the Greater London Council, see Robin Jenkins, 'Urban Consumptionism as a Route to Rural Renewal', in Bernstein, et al., *The Food Question*.

[84] These were the elements of the food policy adopted by the Swedish Social Democratic Party under electoral pressure for the Green Party in the 1980s. A supporting element was public education in the merits of locally produced foods using lower chemical inputs and lower density of land use for grazing animals. All is suspended since the Swedish application to join the EC. See David Vail, 'Economic and Ecological Crises: Transforming Swedish Agricultural Policy', in W.H. Friedland, et al., eds., *Towards a New Political Economy of Agriculture*, Boulder, CO 1991.

[85] For an analysis of the last extension of CONASUPO (Compania Nacional de Subsistencias Populares or National Staple Products Company) into direct provision of food, shoes, and other agrofood products in the Echeverria Administration, see Merilee Serrill Grindle, *Bureaucrats, Politicians and Peasants in Mexico*, Berkeley 1977. It is possible to appreciate the merits, actual and potential, of the system without celebrating Mexican politics and bureaucracy.

under pressure of negotiated austerity measures and anticipated continental free trade.

Even with national support, the success of regional agrofood systems depends on international institutions. The World Food Board proposal of 1947, which expressed the hopes of a wartorn and hungry world for international cooperation to plan food and agriculture, belongs to the past.[86] But it is important to remember that alternatives did exist and choices were made. Despite the multiplication of the number of states since 1947, when many countries were part of European colonial empires or of the emerging Soviet bloc, virtually all have agreed to multilateral economic negotiations. Most are doing so at the very time when national states are being restructured in response to transnational capital.[87] The consequences are dangerous for livelihoods and democracy. A better outcome depends on whether, despite their variety and inequality, movements for livelihood and democracy can shape the contest over new international institutions.

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[86] For the connection between international regulation and regional agriculture, see Peterson, 'Paradigmatic Shift'.

[87] Philip McMichael and David Myhre, 'Global Regulation vs. the Nation-State: Agro-Food Restructuring and the New Politics of Capital', *Capital and Class* 43, 1991, argue for the possibility of a 'transnational state', consisting of strengthened ministries of trade and finance, integrated with each other and with international agencies, and distanced from other—especially social—national ministries. Robert Cox suggests a similar concept in *Production, Power and World Order*, New York 1987.