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BERNSTEIN-MCMICHAEL-FRIEDMANN DIALOGUE ON FOOD REGIMES

Agrarian political economy and modern world capitalism: the contributions of food regime analysis

Henry Bernstein

This paper provides a selective survey of food regimes and food regime analysis since the seminal article by Harriet Friedmann and Philip McMichael in 1989, and further traced through their subsequent (individual) work. It identifies eight key elements or dimensions of food regime analysis, namely the international state system; international divisions of labour and patterns of trade; the 'rules' and discursive (ideological) legitimations of different food regimes; relations between agriculture and industry, including technical and environmental change in farming; dominant forms of capital and their modalities of accumulation; social forces (other than capitals and states); the tensions and contradictions of specific food regimes; and transitions between food regimes. These are used to summarise three food regimes in the history of world capitalism to date: a first regime from 1870 to 1914, a second regime from 1945 to 1973, and a third corporate food regime from the 1980s proposed by McMichael within the period of neoliberal globalisation. Questions of theory, method and evidence are noted in the course of the exposition and pulled together in a final section which criticises the 'peasant turn' of the 'corporate food regime' and the analytical and empirical weaknesses associated with it.

Keywords: world capitalism; food; international divisions of labour; agrarian political economy; the 'peasant turn'

Introduction

The central foci of agrarian political economy in its resurgence from the 1960s were (1) transitions to capitalism in their original English and other European versions, not least late-nineteenth-century and early-twentieth-century Russia; (2) the histories of agrarian change in the colonial conditions of Latin America, Asia and Africa, which were very different; and (3) the relevance of both to the prospects and problems of national development in the former colonies, now politically independent, not least the role of agrarian transformation in national development, typically centred on industrialisation. Pervading and linking all these historical and contemporary concerns was 'the peasant question' in its diverse constructions, both socio-economic and political.

The socio-economic focussed on the dynamics of commodification of the countryside in the era of capital and the formation of classes definitive of capitalism: agrarian capital, capitalist landed property and agricultural wage labour, whether driven by 'accumulation from above' or 'accumulation from below'. Key questions here concerned the 'disappearance' of peasantries in the course of capitalist development, and/or their 'transformation' into other

classes through dispossession and proletarianisation 'from above' and class differentiation 'from below', and/or the apparent anomaly of the widespread 'persistence' of peasants into the era of modern capitalism.

Key foci of political interest in the 'peasant question' were peasant struggles against feudalism, imperialism and capitalism, and their role in the making of modern states; the sources and effects of 'everyday forms of resistance' by peasants to the forces of capital and political authority; and the 'peasant question' in experiences of 'national development' and socialist construction.¹

Also implicit in these investigations, and the intense debates they generate, are issues concerning 'internal' and 'external' dynamics and determinants of agrarian change (Bernstein 2015). Transitions to capitalism in Europe were framed largely in terms of social forces 'internal' to the countryside. Colonial histories were framed largely in terms of 'external' determinations: the subordination of peasants to imperialism and its exactions including their contributions to 'primitive accumulation' in Europe – although the types of commodification introduced or imposed by colonial rule did not exclude peasant class differentiation. Paradoxically, the problematic of national development after the end of colonialism returned to a largely 'internal' focus: on social forces in countryside and city, agriculture and industry, and on the role of now-independent states in facilitating or 'blocking' industrialisation, including the contributions to it of agriculture. Those contributions might be similarly facilitated or blocked by dominant agrarian classes whether regarded as capitalist or, very often, 'pre-capitalist' because incompletely transformed by colonial capitalism, e.g. the 'semi-feudalism' debate.

To anticipate what follows, Harriet Friedman and Philip McMichael's essay on 'Agriculture and the state system: the rise and decline of national agricultures, 1870 to the present' (1989) proved one of the most fertile arguments of historical sociology/political economy of its time, subsequently regarded as the foundational statement of food regime analysis. Their aim was to explore 'the role of agriculture in the development of the capitalist world economy, and in the trajectory of the state system' – to provide a 'world-historical perspective', as they said (Friedman and McMichael 1989, 93). The notion of food regime 'links international relations of food production and consumption to forms of accumulation broadly distinguishing periods of capitalist accumulation' (95), and they identified two food regimes so far: a first (1870–1914) during the period of British hegemony in the world economy, and a second (1945–1973) under US hegemony in the postwar world economy.²

The launch of food regime analysis greatly enriched the means available for a theoretical and historical framing of capitalist *world* economy with reference to agriculture. Moreover, it did so coming from a very different direction in several senses, including the historical and geographic, than the classic 'agrarian questions' just outlined.

¹For an elaboration of these observations about agrarian political economy, and many references, see Bernstein and Byres (2001).

²They explicitly acknowledged the influence of regulation theory in the work of Aglietta (1979) in their periodisation, in which Polanyi (1944) and Arrighi (1978) were also important influences. Subsequently, the influence of Wallerstein's world-systems analysis (Wallerstein 1983), which was there from the beginning, was acknowledged explicitly (e.g. Friedmann 2000). The original article 'shifted Regulation School focus from national states to the system of states, and from industry to agriculture. It added to early world-systems theory empirical mappings of class relations and geographical specializations related to historically specific commodity complexes' (Friedmann 2009, 335). The first published appearance of the term 'food regime' I am aware of was in Friedmann (1987), although Friedmann (1982) had used 'international food order'.

First, its periodisation of food regimes pointed to a turning point from the 1870s³ when food staples started to be produced on an increasingly large scale, for world markets and to travel long (transoceanic) distances.

Second, large-scale international trade in food staples focussed attention on the temperate colonies of settlement – the USA and Canada, and also Argentina, Australia and New Zealand – which were the principal sources of grain and then meat exports from the late nineteenth century onwards.

Third, a new social form – commercialised 'family farms' – was central to producing export food staples in those regions of settlement that lacked 'peasantries' in any sense familiar from the pre-capitalist agrarian class societies of Asia and Europe.⁴

Fourth, starting to emerge in the first food regime and crystallising from the second, the multiple dynamics and (contradictory) determinations of world markets in food expanded the limited categories of class agents, and institutional forms, at the centre of inherited notions of agrarian questions (Bernstein 1996/1997).

The article was most timely, appearing when attention was being focused on a new phase of world capitalism, that of 'globalisation' (or 'neoliberal globalisation'), and its drivers and consequences. Some 25 years after 'the present' inhabited by the original article, much of that attention has focused increasingly on changes in food production and consumption, in agriculture more broadly, and on linked dynamics of global inequality and ecological destruction and sustainability. In short, a comprehensive complex of issues has arisen, in which food regime analysis has become highly influential, and generated debates about the formation, character and effects of a third food regime since the 1980s.

This paper presents a survey that can only be selective as food regime analysis, and associated currents (notably political ecology), have produced an ever-larger literature, of ever-expanding scope, ambition and diversity.⁵ I begin with a preliminary presentation of key formulations and claims of food regime analysis, then move on to summarising the succession of food regimes identified in the capitalist world economy to date, and finally comment on debates and discussions, including further issues of theory, method and evidence. More space is devoted to the current food regime – if there is one – as this is most topical and attracts the greatest attention.

Food regimes in modern capitalism

Food regime analysis considers some fundamental questions in the changing political economy ('transformations') of capitalism since the 1870s:

- Where, how and by whom is (what) food produced in the international economy of capitalism?
- Where and how is food consumed, and by whom? What types of food?
- What are the social and ecological effects of international relations of food production and consumption in different food regimes?

³Also, of course, the moment of the inception of modern imperialism in Lenin's (1964) account.

⁴If not most of Africa; see Goody (1982).

⁵Other sources include Magnan's survey of food regime analysis (2012), McMichael's 'food regime genealogy' (2009), and his recent book on *Food regimes and agrarian questions* (McMichael 2013). Interested readers are advised to consult for themselves these sources and some of the many references they contain.

Answers to such questions, so simply stated, require investigation of different food regimes: their determinants and drivers; their 'shape', so to speak, and consequences; and their tensions, crises and transitions, including struggles within and against different food regimes, and responses to their contradictions.

Key elements that are identified in different food regimes – and that bear on their determinants and drivers, 'shape', and consequences – include:

- The international state system;
- International divisions of labour and patterns of trade;
- The 'rules' and discursive (ideological) legitimations of different food regimes;
- Relations between agriculture and industry, including technical and environmental change in farming;
- Dominant forms of capital and their modalities of accumulation;
- Social forces (other than capitals and states);
- The tensions and contradictions of specific food regimes; and
- Transitions between food regimes.

So comprehensive a list of elements ('factors') expresses the 'world-historical' scope and ambitions of food regime analysis applied to the last 150 years:

The difference made by food regime analysis is that it prioritises the ways in which forms of capital accumulation in agriculture constitute global power arrangements, as expressed through patterns of circulation of food ... the food regime concept offers a unique comparative-historical lens on the political and ecological relations of modern capitalism writ large. (McMichael 2009, 141, 142)

Of course, it is somewhat easier to grasp such multiple, and interconnected, elements of food regime analysis, and to assess their explanatory power, through the arguments and evidence deployed to construct specific food regimes, which I present in a moment. First, it is useful to note briefly some of the elaborations that have expanded the analytical and thematic toolbox of food regime analysis since Friedmann and McMichael's original article.

Friedmann, for example, provided a more rule-based or 'institutional'-type definition of food regime as referring to

a relatively bounded historical period in which complementary expectations govern the behaviour of all social actors, such as farmers, firms, and workers engaged in all aspects of food growing, manufacturing, distribution and sales, as well as government agencies, citizens and consumers. (2004, 125)

Such expectations reflect the 'rules', often implicit, widely accepted as operating in different regimes, which connects with her observation that food regimes

are sustained but nonetheless temporary constellations of interests and relationships ... even at their most stable, food regimes unfold through internal tensions that eventually lead to crisis ... At this point, many of the rules which had been implicit, become named and contested ... *Contests have lasted almost as long as the regimes themselves*. (Friedmann 2005, 228–29, emphasis added, see also 231–34; McMichael 2009, 142–43).

The thematic scope of food regime analysis was further expanded by bringing in (1) social movements as agents in the formation and functioning, tensions and crises, of food regimes,

and (2) environmental change as central to the dynamics of food regimes and their contradictions (Friedmann 2005).

More recently, the most programmatic and extensive (re-)statements of food regime analysis have come from McMichael. His 'food regime genealogy' notes that the initial conception of food regimes was 'primarily structural' (McMichael 2009, 144) and 'the evolution of food regime analysis from a rather stylised periodization of moments of hegemony in the global order to a refocusing on moments of transition, and the various social forces involved in constructing and reconstructing food regimes' (163), Today, 'the original food regime conception is undergoing a transformation as we experience transition and massive global uncertainty' (McMichael 2013, 7).

McMichael (2013) now uses the notion of 'The Food Regime Project', which is especially pointed given that the first food regime manifested the historical period of 'The Colonial Project', the second that of 'The Development Project', and the third (and current) that of the 'The Globalization Project' (McMichael 2006, 170–71) – in effect, all 'projects' of capitals and states. However, for McMichael, the 'Food Regime Project' seems not only to express the agenda and findings of a particular intellectual approach but also to embrace the ('world-historical') challenge to the current 'corporate' food regime from the resistance of farmers' movements that champion agro-ecology: 'capital's food regime has generalized an agrarian crisis of massive proportions, registered now in a growing movement to stabilize the countryside, protect the planet, and advance food sovereignty against new assaults on farming cultures and diversity ...' (2013, 19).

I turn next to the sequence of food regimes in modern history, which gives substance to the analytical elements noted so far, and which helps identify issues of theory, method and evidence in their application.

The first food regime

The original formulation

Friedmann and McMichael (1989) identified 'the first food regime' (1870–1914) centred on European imports of wheat and meat from the 'settler states' of Argentina, Canada, the USA, Australia and New Zealand: 'cheap food' which helped to underwrite British and other European industrial growth. This period of British hegemony in the world economy also saw the culmination of European colonialism in Asia and Africa – colonies of 'occupation' – and the 'rise of the nation-state system' in which former colonies of 'settlement' were now independent. This provided the political basis of a 'truly international division of labour', comprising three principal zones:

- (1) Specialised grain and meat production in the 'neo-Europes' (Crosby 1986) of the temperate colonies of 'settlement';
- (2) Agrarian crisis in Europe, at least in large-scale grain production, in the face of cheap(er) wheat imports, leading to measures of protectionism in some countries

⁶McMichael (2009, 141) subsequently dated the first food regime from the 1870s to the 1930s, in effect including the three decades following its demise (1914–1945) before the emergence of the second food regime.

⁷ 'International' to signal that in this phase exchanges were between national economies, rather than transcending their political reach to become transnational or 'global', on which more below.

- and accelerating rural out-migration (including to the diasporas of colonies of 'settlement'; see further below);
- (3) Specialisation in tropical export crops in colonial Asia and Africa.

Friedmann and McMichael's analysis of the first food regime deployed a subtle dialectic of national and international dynamics and their interactions, of which the financing of international trade through the gold standard operated by the City of London was a key foundation. Indeed, the functioning of finance capital in relation to trade, investment and borrowing by governments in different moments of modern world capitalism remains central to food regime analysis, as we shall see.

The 'national framework of capitalism, itself contingent, was the basis for replacing colonial with international specialization' (Friedmann and McMichael 1989, 100). 'World agriculture of the late nineteenth century had three new relations with industry, all mediated through international trade between settler states and European nations:

- (1) 'Complementary products based on differences in climate and social organization [like colonial trade, HB] gave way to competitive products traded according to Ricardian comparative advantage ... '; thus 'the first price-governed [international] market in an essential means of life' (Friedmann 2004, 125).
- (2) 'Market links to industry clearly demarcated agriculture as a capitalist economic sector...' (for example, growing use of chemical and mechanical inputs to farming, and advances in transport, notably the railways):⁸
- (3) 'The complementarity between *commercial* sectors of industry and agriculture, which originated in international trade and remained dependent on it, was paradoxically internalized within *nationally organized economies*', both in Europe and the (now independent) settler states (Friedmann and McMichael 1989, 102, emphases in original).

While Friedmann and McMichael focus on the emergence and functioning of the first food regime from the 1870s, they do not disregard earlier international trade in agricultural commodities, not least sugar and other tropical products. However, establishing 'a world price for staple foods' (McMichael 2013, 24) is the distinguishing, and world-historical, feature of food regimes. Earlier (colonial) trade represents the 'pre-history' of food regimes in the term of McMichael (2013, 22–24), who refers briefly to plantations rather than the transformations of peasant existence in Asia and Africa (and Latin America), which I consider later.

The question of why the first food regime came to an end was not addressed by Friedmann and McMichael (1989 and my Table 1), but crises of food regimes and transitions between them became more central to subsequent conceptions, especially in connection with the end of the second food regime and debate on the formation of a third regime (below).

⁸Albeit agriculture in the settler states 'was industrial mainly in its *external links*, purchasing inputs from industry and providing raw materials to industries doing minimal processing', but had not yet internalised industrial production in its labour processes (Friedmann and McMichael 1989, 102, 111, emphasis in original). The more comprehensive industrialisation of agriculture emerged more strongly in the second food regime, and is a central focus of political ecology today (see the excellent analysis by Weis 2010), on which more below.

⁹Indeed, the seminal work on sugar by Sidney Mintz (1985) made its own contribution to the formation of the food regime approach.

Table 1. First food regime (1870–1914): summary.

International state system	Formation of state system: • Britain and Europe • Settler states
Dominant forms of capital	'Culmination of colonialism' (Asia and Africa) British (and other European) industrial capital?
Dominant forms of capital	Gold standard in international trade (London-based, hence British finance capital)
International division of labour/trade	British hegemony in world market • Settler states: wheat exports to Europe • Crisis of European grain production • Colonial exports of tropical products (Europe and elsewhere)
Rules/legitimation	'Rhetoric of free trade' (pushed by Britain)
Social forces	European working classes? Family farmers in settler states?
Technical and environmental change Tensions/contradictions	Expansion of farming frontier in settler states (and soil mining) – extension of cultivated area ?

The first food regime: elaborations

The original formulation of the first food regime was strongly state-focussed and maybe also capital-centric, with finance, trade and industrial capital, as well as states, centre-stage and agrarian capital (and other agrarian classes) largely absent. Subsequent elaborations of food regime analysis, noted in the previous section, added little to further consideration of the first regime and its crisis/demise.

Friedmann revisited the first food regime – 'framed within the general rhetoric of free trade and the actual workings of the gold standard' (2005, 229) – which she later termed 'the settler-colonial food regime' (Friedmann 2004) and 'the colonial-diasporic food regime' (Friedmann 2005). Here, she emphasises that the first food regime created 'a new class of farmers dependent on export markets' from the European immigrant diasporas of settler colonies (developing Friedmann and McMichael 1989, 100). 'Indeed, the central innovation of the colonial-diasporic food regime was the fully commercial farm based on family labour' (Friedmann 2005, 235). The emphasis on a particular *form* of farm production in specific *social and ecological conditions* is used to explain why American grain exports to Europe were so 'cheap'. This resonates a classic and familiar theme of the political economy of capitalist development, namely the price of staple foods and its effect for wage levels, the costs of reproduction of labour power, and the expenditure of variable capital and its effects for accumulation (see, *inter alios*, recent analyses by Araghi 2003; Moore 2010a, 2010b).

Comments

One must note Friedmann's reminder (2005, 237) that 'in the first regime, the US was not a dominant wheat exporter ... [but one of] a number of new export regions' established by migration and settlement, of which she pointed to the Punjab, Siberia and the Danube Basin. This point may easily be missed in the strong focus on the USA in both the first

¹⁰Also termed by McMichael (2013, 26–32) 'the British-centered imperial food regime'.

¹¹This specific element derived from Friedmann's previous work (1978a, 1978b, 1980).

and second food regimes, and as the key link between them (Friedmann and McMichael 1989, 94–95), and in such observations that the first food regime was 'anchored in the American family farming frontier' (McMichael 2009, 144). Maybe at play here is an instance of 'reading history backwards' from the undoubted hegemony of the USA in world capitalism and its second food regime after 1945?

In relation to the US prairies in particular, Friedmann advanced two reasons for the cheapness of their wheat exports. First, she suggested that 'reliance on unpaid labour of men, women and children – family labour – allowed them to lower costs relative to farms in England and elsewhere ... Despite notorious exploitation of agricultural labourers, English farmers nonetheless did have to pay wages' (2005, 236). This resonates another longstanding and continuing debate about the relative 'efficiency' in price terms of 'family'/small-scale versus capitalist/large-scale farming, given the capacity for 'self-exploitation' of the former. In this application it seems unconvincing to me: US family farms had to meet their costs of daily and generational reproduction (the equivalent of their 'wage'); the labour of farmworker household women and children was commonly exploited in European capitalist farming too; no evidence is provided to support this explanation of the (monetary) cost, hence price, advantage of diasporic family farming.

Second, and possibly implied by Friedmann's observations of (1) a contemporaneous 'shift in measurement [of productivity, HB] from yields per unit of land to yields per person' (2004, 127), influenced by grain monoculture on much larger 'family farms' than the norm in Europe, and (2) shortages of labour in settler states, more likely in this case is that there was a notable (and growing) difference in average labour productivity in prairie family farming, manifested in prices for its grain. ¹² Moreover, that labour productivity in prairie farming benefitted from initial and massive 'ecological rents' in the cultivation of virgin land, even if that was only temporary because of 'soil mining' (Friedmann 2005, 236; also Friedmann 2000, 491–94).

What of social movements and their role in the first food regime? Despite the invocation of 'social movements' by Friedmann (2005), they feature less in accounts of the first regime than they were to do subsequently, especially concerning the third food regime. For the period 1870–1914, they are covered only by general references to working-class movements in Europe struggling (successfully) for better standards of living, including the means to eat better, and some elaboration of the 'new class' of commercial family farmers in the USA and elsewhere (Friedmann 2005, 238; see also Friedmann 2000), though they only became a potent organised political force later (Winders 2012). Table 2

And the crisis/demise of the first food regime? As noted, this has not been much explored. The 'ecological catastrophe' of soil mining was dramatised in the US dust bowl in the 1930s (Friedmann 2000, 493), but this also followed the end of the first food regime if it is dated as 1914. Otherwise, we have only a more general list of factors absorbed within the 'demise of the British-centered world economy in the early twentieth century', resulting from

national and imperial conflict among European states and the collapse of the gold standard. Economic depression and urban unemployment following World War I, in addition to a

¹²Also relevant here is the apparently limiting case of capitalist 'high farming' in England in the eighteenth and nineteenth centuries, with its high labour intensity and exceptional yields until it was outcompeted on price by transatlantic grain imports. The achievements of 'high farming' and their conditions were stressed in the work of Colin Duncan (1996, 1999), referred to by Friedmann (2000, 489–91) and McMichael (2013, 70–71).

broad agricultural crisis in Europe resulting from cheap overseas grains, resulted in widespread protectionism. Economic nationalism in Europe and the ecological disaster of the American dust bowl sealed the fate of the frontier model of soil mining and the liberal trade of the first regime. (McMichael 2013, 31–32)

In short, the end of the first food regime was clearly marked by the beginning of World War I in 1914 and what led to it. 13 That war was followed by the uncertain 1920s, the Depression of the 1930s (both of which McMichael indicates), and World War II: three decades that prepared the way for the second food regime, above all through farm politics in the US New Deal, wartime economic organisation and US agricultural and foreign policy after 1945 – all of which have received much more consideration from food regime analysis.

The second food regime

The original formulation

The period 1945–1973 saw the extension (and completion) of the international state system with the emergence of independent states from former colonies in Asia and Africa, in the context of US hegemony in the capitalist world economy and the US dollar as the medium of international trade and financial transactions (Friedmann and McMichael 1989). The emergence and functioning of the second food regime had very different effects for the capitalist countries of the North (First World) and South (Third World).

In the North there were several developments (or departures). One was that US agricultural policy, long engaged with issues of overproduction, especially of wheat and of maize/corn for animal feeds, and its pressures on prices hence farm incomes, had moved towards price supports versus direct subsidy of farm incomes, which encouraged further (over)production. ¹⁴ Production and productivity growth was also spurred by comprehensive technical change, and now combined with foreign policy in the form of food aid that helped dispose of grain surpluses, initially to facilitate postwar reconstruction in Europe through Marshall Aid and then to the Third World under Public Law 480 (PL480) enacted in 1953.

A second, and definitive, development was the 'transnational restructuring of [agricultural] sectors' under the stimulus of now increasingly global agribusiness corporations and their role in creating agro-food complexes, characterised by 'increasing separation and mediation by capital of each stage between raw material inputs and final consumption' (113), including through global sourcing. This was manifested in (1) massive expansion of meat production and consumption – the emergence of an 'intensive meat complex' or 'meat/soy/maize complex' (106–08); (2) the 'durable' or manufactured 'foods complex'; along with (3) substitution of tropical sugars and vegetable oils by sweeteners made from grain and soy oil respectively (109).

¹³Magnan (2012, 377) locates the crisis of the first food regime between 1925, when world grain prices collapsed, and 1945.

¹⁴Explanation of how US grain surpluses returned so quickly after the 'ecological catastrophe' of the 1930s remains elusive in accounts of the second food regime and the transition to it from the first. New Deal farm support programmes were key, as well as measures applied by the Soil Conservation Service, formed in 1935, in the worst-affected areas (the southern high plains). The drama of the dust bowl in the midst of the Great Depression of the 1930s and US government policies of environmental conservation had a wide international impact including on colonial administration in Africa (e.g. Anderson 1984).

These developments central to the second food regime also registered a more complete industrialisation of plant and livestock production, as well as its linkages (the 'meat/soy/maize complex') in the North. In the context of postwar recovery and then the boom of the 1950s and 1960s, the North experienced rising incomes and the growth of mass consumption. In Europe, agricultural policy aimed to replicate the US pattern by a 'renationalization of domestic agriculture' (109), that led to some European countries also becoming surplus producers of grain (notably France) and other products which they sought to 'dump' on international markets.

For the Third World, US wheat exports (and soy oil) subsidised through PL480 were accepted, and even welcomed, by many governments as providing 'cheap' food to help fuel industrialisation and proletarianisation, at the cost of their domestic food farming (and in some cases with new agricultural export orientations). This marked the beginning of food-import dependence for many countries of the South, although an opposite tendency was the promotion of Green Revolution technologies which led to some notable advances in national self-sufficiency in grain production, especially in parts of South and Southeast Asia. ¹⁵

At the same time, subsidised imports of US (and later EU) wheat and other products 'remained outside the main organizational changes of capital in the agro-food sector' (105), leaving the emergence of powerful agribusiness corporations, and the ongoing industrialisation of farm production they promoted (or imposed), together with Third World dependence on food imports, as key legacies of the second food regime, as we shall see.

Although Friedmann and McMichael (1989) were clear that the end of the second food regime signalled, in the title of their paper, 'the decline of national agricultures', they did not address centrally the tensions of the second food regime and its crisis from 1973, which received more treatment in later analyses.

Elaborations

Subsequent elaborations of the second food regime have termed it variously 'the surplus regime, 1947–72' (Friedmann 1993), 'the mercantile-industrial food regime' (Friedmann 2004) and the 'US-centered intensive food regime' (McMichael 2013, 32–38). The most detailed further analysis was by Friedmann (1993), which followed the main lines sketched above in a complex and subtle argument, identifying and illustrating the interactions of a number of determinations. ¹⁶ Here are some of the key points.

First, the 'rules' of the second food regime, in effect established by the USA, 'created a new pattern of intensely national regulation' (Friedmann 1993, 32). A key moment in this process was what Friedmann called 'the Atlantic pivot': 'the corporate organization of a transnational agro-food complex centred on the Atlantic economy', hence linking the USA and Europe (Friedmann 1993, 36). However, the particular type of mercantilism that structured this arrangement (centred on price supports, including export subsidies) 'led to competitive dumping and potential trade wars, particularly between the European Economic Community and the US' (Friedmann 1993, 39).

Second was the industrialisation of agriculture, presumably advancing beyond the previous 'external links' of farming with industry (above) to transform labour processes in US

¹⁵Friedmann (2009, 337, note 5) later observed 'key exceptions, notably India' to the generalisation of food-import dependence in the South during the second food regime.

¹⁶In my estimation, this remains the single most powerful application of a food regime analysis.

and other Northern farming. This was now increasingly organised around much greater degrees of mechanisation and 'chemicalisation' pushed by agri-input corporations upstream of farming, as well as to meet the demands of agro-food industries downstream, both in animal feeds (the 'meat/soy/maize complex') and for the manufacture of 'durable foods'.

Third, the South 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. 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 food supplies would depend on finding some other source of hard currency to finance imports. (Friedmann 1993, 38–39)

Friedmann (1993) also has a fuller account of the demise of the second food regime, centred on two linked dynamics. One was 'a tension between the *replication* and the *integration* of national agro-food sectors' reflecting 'on an international scale the problem inherent in US farm programmes – chronic surpluses' (32, original emphasis). 'The *replication* of surpluses, combined with the decline of the dollar as the international currency' contributed to 'competitive dumping and potential trade wars' (Friedmann 1993, 39, original emphasis). The other was that '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' (39, original emphasis). In short, the fault lines between the 'industrial' and 'mercantile' components of the second regime – its peculiar 'combination of the freedom of capital and the restriction of trade' (Friedmann 1993, 36) – generated its crisis at the expense of the latter (see also Friedmann 2004).

The catalyst of crisis of the second food regime in the early 1970s was

the massive grain deals between the US and the USSR which accompanied Detente Soviet-American grain deals of 1972 and 1973 ... created a sudden, unprecedented shortage and skyrocketing 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. (Friedmann 1993, 39–40)

Of these factors, first, the USA and EU provided a continuing 'mercantilist' element of farm subsidies into the current period of trade liberalisation, much emphasised by its critics.¹⁷

Second, US 'farm debt more than tripled in the 1970s, fueled by high prices and speculation in farmland' (Friedmann 1993, 40), and agrofood corporations replaced farmers to exercise the most effective lobby. 'When the bubble burst in the 1980s, US farmers had lost their monopoly over agricultural exports, and their political weight in US trade policy' (Friedmann 1993, 42).

Third, state debt, above all in the South (and Eastern Europe), compounded by the effects of oil price hikes in the 1970s and increased borrowing, led to 'Promotion of

¹⁷Although note Friedmann's prediction (1993, 47–48, emphasis added) that 'The separation of farm income supports from production – that is, the end of price supports – is the likely future for North America and Europe. The shift to income supports is likely to continue, because *it confirms in policy what has already occurred structurally*'.

agricultural exports, especially those called "non-traditional" (geared to new niche markets for exotic foods, flowers, and other crops) ... [as] an explicit aim of structural adjustment conditions imposed by creditors' (Friedmann 1993, 50).

Fourth, international competition in agricultural commodity trade intensified with the entry or increased prominence of NACs ('New Agricultural Countries', by analogy with NICs – 'New Industrial Countries') in world markets, of which Brazil notably 'replicated and modernized the US model of state organized agrofood production' (Friedmann 1993, 46, emphasis in original). The 'NAC phenomenon revives the intense export competition on world markets that existed prior to the postwar food regime' (Friedmann 1993, 46–47, emphasis added). Significantly, and postdating Friedmann's article, the World Trade Organization (WTO) was established in 1995 to replace the General Agreement on Tariffs (GATT), founded in 1946 as one of the Bretton Woods institutions. Agricultural trade was excluded from GATT at the insistence of the USA, but subsequently became one of the most contested areas of the WTO as competition in world markets for agricultural commodities intensified, and the WTO looms large in accounts of the third food regime as a driving force in world market liberalisation (e.g. McMichael 2013, 52–54; but see also note 41 below).

Finally, the changing balance of power among states presumably refers to the erosion of US hegemony in the postwar capitalist world economy, a much-debated hypothesis in the context of 'globalisation'.

Friedmann (1993, 54–57) concluded by considering the social basis of democratic food policy and arguing for 'democratic public regulation' of food production and trade.

Comments

Friedmann's more detailed and incisive account of the second food regime, like accounts of the first regime, arguably remains primarily 'structural' and capital centric, albeit that it provides a subtle narrative of political dynamics and arrangements in the international state system in the decades following the end of World War II. These are encapsulated, in effect, by its 'mercantile' elements and their consequences for its 'industrial' elements that were increasingly restricted by them and finally played an important part in the crisis of the second regime.

The strongly political dimension of the structuring and eventual demise of the second food regime addresses primarily the politics of states and inter-state bodies, and the domestic and international forces that shape them, and in doing so created contention (and contradiction?) (Table 2). Similarly to accounts of the first food regime, also absent here is any prominent part played by 'social movements'. Taking that term to refer in its broadest (and loosest?) sense to movements not based in states, nor their electoral and other formal processes (other than lobbying on government policy), the strongest candidate for a 'social movement' is again the US farm lobby (and by extension farm lobbies in other Northern countries), which were taken over by agribusiness with the decline of the second food regime (above). While Magnan (2012, 377) mentions 'social movements' as a key

¹⁸On the plane of inter-state and multilateral organisation and rules, Friedmann (2005, notes 9 and 15, 260–61) notes the missed opportunities of more progressive arrangements in the proposed International Trade Organization (1948), opposed by the US Congress and which gave way to GATT, and the kinds of 'global Keynesian solution'(s) of issues of international trade and their bearing on economic development in the South associated with the founding rationale of United Nations Conference on Trade and Development (UNCTAD) (1967) and the Brandt Commission recommendations (1980).

Table 2. Second food regime (1945–1973): summary.

International state system	Completion of state system with decolonisation in Asia and Africa (Cold War, US and Soviet blocs)
Dominant forms of capital	Growing power, and transnationalisation, of agribusiness capital
International division of	US hegemony in world capitalism
labour/trade	In USA food economy:
	'Meat/soy/maize complex'
	Manufacture of 'durable foods'
	Both with some sourcing of 'inputs' from South
	In Europe (EU): 'replication' of US model of national regulation of
	agriculture, including support prices and export subsidies
	In the South:
	 US food aid to help 'national development' → Third World
	food import dependence
	 Loss of export markets with substitution of sugar and vegetable
	oils
	 New 'non-traditional' agricultural and horticultural exports
Rules/legitimation	'Mercantilist' model of national regulation of agriculture
	'National development' in the South, assisted by US (and other
	Northern) aid, especially US food aid (and in competition with
	Soviet aid)
Social forces	Emergence of environmental and other 'social movements' → (see third food regime)
Technical and	New stage of industrialisation of farming in North = mechanisation
environmental change	and 'chemicalisation', hence intensification of cultivation (and environmental effects \rightarrow see third food regime)
	Green Revolution
Tensions/contradictions	Replication/integration
'Alternatives'	Localisation of food production and distribution
	Democratic food policy
	1 2

player in the second food regime, he does not specify who or what he means, although he offers several suggestive observations on US farm lobbies:

On the national scale, the postwar alliance between the state and the class of independent farmers eroded, as deficit politics prompted many neoliberal governments to scale back public spending on agriculture [with the 'important exceptions' of the EU and USA, HB]. At the same time, farm politics [in North America] became more fractionated and marginal, as farmers became increasingly *differentiated* by size and commodity, and continued to decline in number. (Magnan 2012, 380, emphasis added)¹⁹

In fact, 'social movements' only make a full appearance in considerations of a third food regime.

¹⁹Winders (2012) is an essentially 'interest group'-type account of farm lobby politics and the trajectories of US farm policy that argues for the significance of three lobbies differentiated by commodity and regionally, those for wheat, maize/corn and cotton. He traces their divisions and alliances, and shifting fortunes, during the twentieth century. Winders (2009) compares the formation of US agricultural policy in the second food regime with British policy in the first regime, notably the emblematic repeal of the Corn Laws in 1846 ('corn' here being wheat), the division between British livestock and wheat interests, and subsequent British imposition of free trade in grains on other European countries.

A third food regime?

Anticipations

From its inception, food regime analysis functioned as a critique of food regimes in world capitalism, a critique which expanded, intensified and became more explicit in the context of contemporary 'globalisation'. The world of 'neoliberal globalisation' is marked by massive change and contradiction, not least in terms of the modalities of capital accumulation (including its 'financialisation'), new technologies and markets for food and other agricultural commodities, rising awareness of ecological threat, and crises of reproduction of 'classes of labour'. All these and other similarly encompassing, and connected, themes enter conceptualisations and debates of a third food regime, with a much greater wealth of contemporary documentation and evidential claims than deployed for previous regimes. For these reasons, this section can aim only to identify some of the key ideas and arguments concerning a third food regime, rather than try to cover all that might be assimilated to its scope.²⁰

Writing in 1989, following the demise of the second food regime and the onset of globalisation, Friedmann and McMichael proposed two 'complementary alternatives' (112):

- (1) 'truly global institutions to regulate accumulation, minimally a world reserve bank with real controls over a real world currency; and
- (2) the promotion and redirection of regional, local and municipal politics of decentralization ... to reconnect and redirect local production and consumption' (113)

Here there are echoes of Polanyi, starting with finance, and then moving to advocate (re-)localisation of food provisioning which, together with advocacy of small(er)-scale farming on agroecological principles, was to become a central plank of opposition to the current world food system under the banner of food sovereignty (below).

In 1993, Friedmann, addressing 'a global crisis' of food, concluded that agrofood corporations, having

now outgrown the regime that spawned them ... 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. (52)

She continued, more expansively than four years earlier:

[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. 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. As national farm policies are come under [sic] increasing pressure, the possibility arises to create a positive food policy (54–55)

²⁰Indeed, for some purposes the issues around a third food regime, and resistance to it, might be stated without any reference to work on the previous two food regimes, nor the political economy of capitalism it deployed – and often are, especially in activist discourses.

To this new phase of increasing corporate dominance, with its 'principles of distance and durability, the subordination of particularities of time and place to accumulation' (1993, 53), Friedmann counterposed 'democratic principles' that

by contrast, emphasize proximity and seasonality – sensitivity to place and time ... healthy food and environmentally sound agriculture must be rooted in local economies. 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. (53–54)

In short, the ecological concerns central to much discussion of a third food regime are already stated here.

A corporate-environmental food regime?

In 2005, Friedmann suggested that 'We are due for a new food regime, if there is to be one', and asked 'is a new food regime emerging?'. She considered 'changes that might constellate into a new food regime' which she named 'the corporate-environmental food regime':

After a quarter century of contested change, a new round of accumulation appears to be emerging in the agrofood sector, based on selective appropriation of demands by environmental movements, and including issues pressed by fair trade, consumer health, and animal welfare activists. (Friedmann 2005, 228–29)

Her central point is that 'A green environmental regime, and thus green capitalism, arises as a response to pressures by social movements' (230) that emerged 'in the interstices of the second food regime' (227). This process reveals the character of food regimes as based in implicit rules which then become explicit – have to be 'named' – as tensions intensify (as noted earlier). If successful, a new (third) regime

promotes a new round of accumulation as a specific outcome of the standoff between 'conventional' and 'alternative' food systems. If a new regime consolidates, a new frame will make terms like these redundant; it will need no name. Challengers will seek to name it, that is, to expose its implicit workings. (Friedmann 2005, 231)

The emergence of a corporate-environmental food regime thus represents a 'convergence of environmental politics' and corporate repositioning, especially through 'retail-led reorganization of food supply chains' (the 'supermarket revolution', HB) aimed – in very different ways – at 'increasingly transnational classes of rich and poor consumers' (Friedmann 2005, 251–52, see also 258). The former are located in the North together with 'the rise of privileged consumers in large countries of the global South and China' (252). At the same time, regulation has increasingly moved towards corporate agribusiness, facilitated by 'a continuing impasse among governments in the North in international organizations' concerning trade, hence notably the WTO (252, emphases added), and, one could add, an impasse that expresses the drawn-out demise of the 'mercantilist' elements of the second food regime: 'faltering international organizations, including the WTO, are being outflanked by private transformations of agrofood supply chains in response to social movements of consumers, environmentalists, and others' (253, emphasis in original).²¹

²¹One possible expression of the 'faltering' WTO is the proliferation of regional trade blocs and bilateral trade agreements.

Other important features of an emergent third food regime include declining US hegemony (Friedmann 2005, 255), and a continuing 'key role' of *national* states in regulating aspects of food and agriculture' that 'private capital alone cannot regulate': 'conditions of production such as land use and labor markets, or of consumption, such as food safety' (257). At the same time, the thrust of capital accumulation in a third regime, and its modalities including the application of 'standards' by global agribusiness, 'deepen long-standing processes that dispossess and marginalize peasants and agrarian communities, and create more poor consumers and more people without stable incomes to consume at all' (257). The theme of peasant dispossession has become central to the more programmatic statements of a third 'corporate food regime', as we shall see in a moment.

Friedmann (2005, 257–59) finishes with 'No conclusion: the contest continues': the 'emerging corporate-environmental food regime is already contested by the very movements it draws on' to 'green' itself (to the extent that it does), with such movements themselves 'regrouping' (including networking internationally) like the Food Alliance in the USA and the Slow Food Foundation for Biodiversity (259).

A corporate food regime?

In contrast with this tentative assessment, McMichael's version of a global corporate food regime that has crystallised since the late 1980s (McMichael 2009, 142) is more definitive and encompassing, as indicated by the quotations in the second section of this paper.

He believes that a third food regime is distinguished 'as a new moment in the history of world capitalism' by 'the politics of neo-liberalism' (McMichael 2005, 273):

The corporate food regime is a key vector of the project of global development ... characterized by the global de-regulation of financial relations, calibrating monetary value by credit (rather than labour) relations – as practiced through the privatizing disciplines internalized by indebted states, the corporatization of agriculture and agro-exports, and a world-scale casualization of labour The corporate food regime exemplifies and underpins these trends, through the determination of a world price for agricultural commodities strikingly divorced from costs ... the world price of the corporate food regime is universalized through liberalization (currency devaluation, reduced farm supports, and corporatization of markets) rendering farmers everywhere vulnerable to dispossession as a precondition of the construction of a world agriculture. (266–67). ²²

The first key feature of the corporate food regime, then, is its location within the general dynamic of liberalisation (of markets) and privatisation (of formerly public functions and services) at the core of neoliberal globalisation. As both effect and instrument of this dynamic, states become subservient to (global) capital, and follow the 'rules' imposed by the ideology of the market: 'a set of rules institutionalising corporate power in the world food system' (McMichael 2009, 153).

Second, 'corporate globalization' proceeds through 'mechanisms of "accumulation by dispossession", in the term popularised by David Harvey (2003), such as the 'global displacement of peasant cultures of provision by dumping, the supermarket revolution, and conversion of land for agro-exports' (McMichael 2005, 265), with 'a state-finance capital nexus dedicated to constructing new frontiers of accumulation' (McMichael 2013, 130).

²²As McMichael would no doubt agree, issues of the relations between costs of production and prices are more complex than his abbreviated formulation here suggests.

A 'world agriculture', involving 'accumulation by dispossession', emerges for the first time, as 'a transnational space of corporate agriculture and food relations integrated by commodity circuits' (if not 'the entirety of agriculture across the earth'; McMichael 2005, 282). Its divisions of labour and markets both continue from those of the previous regime, thus 'Northern staple grains traded for Southern high-value products (meats, fruits and vegetables)' (McMichael 2009, 286), and add to them, for example, the appropriation of massive areas of land in the South – 'a land grab express' (McMichael 2013, 118) – for the production of bulk staples that are not destined for direct consumption as food but as industrial inputs, both for animal feeds and increasingly for biofuels or as 'flex crops' substitutable between food and non-food uses.²³

Moreover, international trade in all these leading agricultural commodities – from grain and oilseed staples to 'traditional' exports from the South (e.g. coffee, cacao, tea) to its 'non-traditional' exports of high-value FFVs (fresh fruit and vegetables, plus prawns and other aquacultural commodities, cut flowers, and so on) – takes place increasingly through global commodity chains dominated by corporate agribusiness, whether upstream and/or downstream of production and/or organising it directly or indirectly (for example, through contract farming).

One particular form of land grabbing is by foreign states through their sovereign wealth funds and other entities, in order to produce food (on large-scale farms) for export to their domestic economies – what McMichael terms 'agro-security mercantilism' (2013, 125–28).

Third, the corporate food regime generates an ever increasing, and ecologically destructive, industrialisation of agricultural production, 'undermining conditions of human survival', through:

- Its intensive dependence on fossil fuels,
- Its accounting for about a third of GHG [greenhouse gas emissions],
- Its degradation of soil (intensifying dependence on petro-fertiliser),
- · Its destruction of biodiversity, and ultimately
- Its depletion of cultural and ecological knowledges about living and working with natural cycles by wiping out smallholder diversified farming, shown to be more productive and more environmental than specialised industrial farming. (McMichael 2009, 153)

A major instance of this process is the 'neoliberalization of nature' (McMichael 2013, 130) beyond the mechanisation and 'chemicalisation' historically associated with industrial agriculture and intensified today; that is to say, the pursuit by corporations of private property rights in the genetic qualities of biological instruments of production, notably seeds and animals. This is the new frontier of genetically modified organisms (GMOs), sometimes drawing on the (re-)engineering of existing plant species appropriated through practices of 'biopiracy' and then patented under the provisions of the WTO's Trade Related Intellectual Property Rights (TRIPS).

Fourth are the effects of the corporate regime for questions indicated earlier about food: where and how is food produced and consumed, and by whom? What types of food? These questions have various dimensions which generate different, if connected, answers.

²³ The agrofuels project represents the ultimate fetishization of agriculture, converting a source of human life into an energy input at a time of rising prices' (McMichael 2009, 155).

Probably the most overarching answer, reflecting a feature of food regimes from the beginning but intensified in the third food regime, is the prevalence of food consumed far from where it is produced, hence a kind of generic 'food from nowhere': 'the corporate food regime embodies *a central contradiction* between a "world agriculture" (food from nowhere) and a place-based form of agro-ecology (food from somewhere)' (McMichael 2009, 147, emphasis added). A qualification to this follows from Friedmann's distinction (above) between 'increasingly transnational classes of rich and poor consumers', of which the former can afford foods branded by source, or place of origin – and additionally certified as 'organic', 'fair trade', etc. – even though they may also travel considerable distances (for example, high-priced wines, coffees, teas, chocolate).²⁴

Other issues concerning food distribution and consumption in the current regime include the health effects of industrially produced foods (with high levels of toxicity and other consequences of 'chemicalisation'), not least in 'fast foods' and diets based on them (Lang and Heasman 2004). To this can be added 'nutritionalisation': (chemical) engineering of foods in the field (as GMOs) or through processing in their journeys from field to plate, ostensibly to boost their nutritional value (Dixon 2009), as well as the damaging 'ecological hoofprint' of expanding industrial meat production (Weis 2013).

There is also the issue of the distribution of food among the world's population, and especially patterns of persistent hunger. Here McMichael (and other advocates of 'food sovereignty', on which more below) usually recognise that this is not an effect of an aggregate shortfall in global food output, despite their opposition to how much of that is produced by industrialised agriculture, and albeit that extensive conversion of land to cultivation of biofuel feedstocks reduces total food availability, other things being equal. Rather, hunger and its distribution – who goes hungry, where and why – is an effect of the extreme inequality of income distribution in contemporary capitalism (that is, of class relations), as well as of volatility in the prices of staple foods.

The last, registered in the dramatic spike in world food prices in 2007–2008, may be considered an index of a crisis of the third food regime (McMichael 2013, 109–14), an 'agflation' that represented the end of an era of 'cheap food'. ²⁵ Contributing to that historic moment were

- (1) 'a long-term crisis' of industrial agriculture, marked by declining productivity growth in its grain farming and its rising production costs (because of its heavy dependence on fossil fuels);
- (2) 'an integration of food and energy markets', especially the diversion of crop land to biofuel production; and
- (3) 'an associated legitimacy grab by governments with short-term horizons deepening the crisis by sponsoring an agrofuels project'. (McMichael 2013, 114).

The response of capital to the crisis was to extend further its frontiers of accumulation, especially by intensifying characteristic mechanisms of the third food regime already

²⁴China presents a characteristically distinctive, apparently aberrant, example here: in the face of the country's food scandals of recent years, there is a preference by those who can afford it for buying meat from large corporatised companies which claim (and are believed) to exercise strict quality controls over the chain from livestock production through slaughter to retail distribution (Schneider and Sharma 2014).

²⁵Recall that the crisis of the second food regime was manifested in rapid price inflation in the early 1970s.

noted, like land grabbing and the types of production it installs (McMichael 2013, 117–25). This can only deepen the social and ecological contradictions of the corporate food regime.²⁶

This summary of McMichael's third 'corporate' food regime, abbreviated as it is, demonstrates both how definitive and, at the same time, how encompassing his arguments are. The summary has also given sufficient clues about the explicitly political quality of 'the food regime project' in the conditions of contemporary globalisation. Indeed, resistance to the current regime, it is claimed, expresses the most fundamental social contradiction *intrinsic* to the third food regime, capable of not only facilitating its 'terminal crisis' but generating a radical progressive alternative to it. Such resistance is exemplified by the transnational social movement La Vía Campesina ('the peasant way') and its programmatic goal of 'food sovereignty', in the context of some definitive features of the third food regime, notably its accelerated dispossession of 'peasants'/family farmers', especially but not only in the South; the contribution to that process of the liberalisation of agricultural trade (and its uneven playing field given continuing subsidies to agribusiness in the USA and EU); and the ecologically destructive industrialisation of agriculture.

McMichael writes prolifically about La Vía Campesina and 'food sovereignty', as about many aspects of the third food regime. Here, again for the sake of convenience, I summarise some of the key points of the final chapter of his recent book (McMichael 2013, chapter 7) which presents a comprehensive, indeed 'world-historical', thesis and antithesis: capital and 'peasants' as 'capital's other' (in the term of Bernstein 2014).

Thesis derives its broadest foundation from the nature of capitalism and how it undermines the mutually reproductive relation between human society and (extra-)human nature. Above all, and drawing on Marx, is the definitive tension between use value and exchange value, and capital's drive to commodify all the conditions, activities and means of human existence in pursuit of the expansion of (exchange) value, profit and accumulation. What this entails is especially well exemplified by food, the most essential and intimate product of relations between human society and (extra-)human nature. Its historical trajectories have been traced through the sequence of food regimes in world capitalism over the past 150 years, culminating in the social and ecological destruction generalised and intensified in the period of neoliberal globalisation. At the same time, if pursued properly, this ('ontological') understanding entails rejection of 'development narratives' claimed in the name of Marxism (as in other traditions of social thought) that construct 'modernity' as the endless development of the productive forces, hence 'conquest of nature' (see also Araghi 2003):²⁸

capital's self-valorization imposes a violent ontology privileging a development narrative and misconstruing and devaluing other cultural claims based on quite distinct practical experience. Where capital commodifies and fractionates ecology, the price form abstracts from, and

²⁸ The problem here, ultimately, is epistemic' (144).

²⁶There is also an echo here of the second food regime in which US (and European Union) agricultural policies deepened, rather than resolved, the problem of chronic surpluses and how to manage them (above). In this instance, though, the point is more fundamentally systemic: the current moment 'of *absolute* exhaustion of the conditions of capital accumulation ... with land grabbing going through the motions of a final, desperate enclosure' (McMichael 2013, 156, emphasis added).

²⁷Central here is Marx's notion of the 'metabolic rift' which is at the centre of much recent materialist work and debate in ecology – for example, in Foster's claims for 'Marx's ecology' (2000) and in Moore's extraordinary project of capitalism as 'world ecology' (2011, also 2010a, 2010b, forthcoming) – and is deployed by McMichael (e.g. 2013, 107–08).

invisibilizes, biological processes The contemporary agrarian question, then, concerns how to transcend the exchange-value consensus, as applied to agriculture. (McMichael 2013, 136, 137).

Antithesis is signalled by both the need and the possibility of transcending these dynamics of capitalism manifested in the third food regime:

At this point in the story, the focus on peasant mobilisation is an acknowledgement that the human and ecological wake created by the 'globalisation' of the corporate food regime is the central contradiction of the twenty-first century global food system. (McMichael 2009, 147)

In 'revaluing agriculture as the key to social and ecological reproduction writ large' (McMichael 2013, 138), 'other worlds are not only possible, but already in existence' (134) in the form of 'extant food cultures' that manifest 'a healthy logic of reproduction of social and ecological relations' (131). That is to say, *peasant farming* which is 'distinct from other forms of farming in prioritizing ecological value. In this sense it is unthinkable in modernist terms, and distinguished by the centrality of labour' (146). Drawing substantially on van der Ploeg (2008), McMichael argues that peasant farming aims to maximise its 'ecological capital', to reproduce and enhance its 'sustainability', through

- (1) High levels of labour intensity (hence the 'centrality of labour') in maintaining/restoring soil fertility and water resources, and generating practices of polyculture (vs monoculture);
- (2) A 'knowledge commons' that shares the results of experience and experiment (vs the drive of capital to 'enclose' or privatise all aspects of production); and
- (3) A culture of cooperation more generally (peasant 'community').

This also means that peasant farmers avoid or reduce their dependence on purchased (commodified) inputs, which strengthens their position in negotiating the sale of their produce including through alternative avenues of marketing, such as various forms of 'farmers' markets'.²⁹ Thus, while peasants may be market producers they are not petty commodity producers constituted within capitalism (McMichael 2013, 157, note 7). Indeed, these dynamics of (relative) 'decommodification' characterise 're-peasantisation', that is to say, shifts in the practices of existing small-scale farmers as well as the entry of new farmers who are committed to agro-ecological principles.

Smallholders are by far the majority of farmers in the world, in some estimates producing 70 percent of the world's food, over half of which they consume themselves, with international trade accounting for only 10 percent or so of total world agricultural output (157, note 10). Moreover, 'several studies conclude that the relative yields of organic/agro-ecological friendly farming are sufficient' to meet global food needs (151).

In short, millions (tens of millions?) of small farmers already show the way forward, as long as they are not dispossessed directly (by land grabbing) or indirectly by the politically constituted market forms and effects of the third food regime. This is where La Vía Campesina, a transnational social movement committed to mobilising for 'the peasant way', is crucial, as is the 'civilizational movement' of food sovereignty with its principle of 'democratic rights for and of citizens and humans [sic]' (McMichael 2013, 150). The food

²⁹This is strongly emphasised, and explored, in the work of van der Ploeg (2008) and others.

sovereignty movement advances an (alternative) 'politics of modernity rooted in a global moral eco-economy' which is gathering in its impact, including through some United Nations (UN) institutions, representing 'a shift in the balance of moral forces' in the period of globalisation (156, 155; see Table 3).

Debates and discussions of McMichael's third and current 'corporate food regime' – the most topical, comprehensive and explicitly political of the three food regimes to date – are the principal focus of the following sections.

Debates and discussions

It is striking that there has been relatively little critique of food regime analysis, and especially concerning McMichael's corporate regime, given the (increasing?) boldness of its claims and its high profile in the contemporary 'politics of food'. This may be because it is mostly taken up from green, anti-capitalist and anti-globalisation, and food sovereignty and other pro-farmer/'peasant' perspectives – in short, by those who broadly agree with the political message forcefully articulated by McMichael among others. I will return to this, after presenting briefly two critiques of the food regime approach and discussions and developments within food regime analysis.

Critiques

A first substantive critique appeared relatively early, in the 1990s, before food regime analysis had acquired as strong and distinctive profile as it has today, and when it was assimilated to the rubric of 'agro-food systems'. Goodman and Watts (1994, followed up in Goodman and Watts 1997) emphasised what they saw as the problem of 'mimesis' in attempts to characterise a new 'global agro-food system' by applying to agriculture the periodisation of recent capitalism in regulation theory, and in particular a shift from 'Fordism' to 'post-Fordism' in industrial organisation. 'In our view, the parallels between agriculture and industry are radically overdrawn ... [with] little room for diversity and differentiation within and between agrarian transitions' (Goodman and Watts 1994, 5).

The critique of 'Fordism'/'post-Fordism' occupied much of their article (5–18), with another part directed principally at Friedmann (1993) and also at McMichael and Myrhe (1991) (Goodman and Watts 1994, 19–25, 25–26). Friedman was accused of veering close to 'a sort of capital-logic functionalism' (22) and McMichael and Myrhe of 'an unsatisfactory amalgam of reworked functionalism with elements of the international food regime approach' (25). To counter such problems, Goodman and Watts argued for (1) starting from fundamental differences between agriculture and industry, as noted, with new explorations of territoriality and spatiality central to differentiating forms of agriculture and patterns of agricultural trade; (2) basic elements of continuity from the second food regime after its definitive demise announced by Friedmann as they read her;³¹ (3) the continuing salience of states in the regulation of agriculture (as one source of heterogeneous

³⁰LeHeron and Lewis (2009, 346) refer to a 'resurrection moment' of food regime analysis from the mid-2000s, with reference to Friedmann (2005) and McMichael (2005) – which begs the question 'resurrection' without crucifixion?

³¹In fact, Friedmann (2009, 341) later refers to the 'prolonged death throes of the old [second] food regime' and their effects up to the present moment.

Table 3. McMichael's third (corporate) food regime (1980s-?): summary.

International state system	Reconfigured by 'politics of neoliberalism' (boosted by end of USSR); states as instruments of corporate capital
Dominant forms of capital	(Financialised) corporate agribusiness capital
International division of	Northern grain exports to the South
labour/trade	 Southern export of 'exotics' to the North
	 New frontiers of production of bulk staples in some parts of the
	South (and 'land grabbing' to effect this)
	 'Integration of food and energy markets'
Rules/legitimation	 Markets rule
	 Ideology of agricultural 'modernisation'
	• ('Westernisation' of diets?)
Social forces	 Environmental and other oppositional social movements
	 La Vía Campesina and other agroecological small farmer movements
Technical and	 Ongoing mechanisation and chemicalisation of farming, with
environmental change	intensifying fossil fuel usage (and pollution)
	 Genetically modified organisms, biopiracy, 'neoliberalisation
	of nature' through private property rights in biochemistry of organisms
	Mounting ecological devastation
Tensions/contradictions	Ecological crisis
	 Volatility of food markets and prices
	Widespread (and increasing?) hunger
	Crises of profit and accumulation
'Alternatives'	 'Civilisational movement' of La Vía Campesina, and allied and
	similar movements
	 Food sovereignty: localised production, distribution and consumption = 'food from somewhere' versus 'food from
	nowhere'

dynamics and outcomes) in the context of so-called 'globalisation'; and (4) the importance of contingency, polyvalency, heterogeneity, agency and the like.³²

For Farshad Araghi (2003, 50–51, also 63, note 13), Goodman and Watts' 'case for agrarian exceptionalism is symptomatic of the postmodern turn... leading them to dismiss the concept of a global food regime *tout court'* – and, in effect, any notion of the world-historical of capitalism. This verdict was endorsed by McMichael (2009, 144), who cited Araghi to suggest that Goodman and Watts' critique threw out the baby of a 'significant world-historical periodisation anchored in the political history of capital' with the bathwater of particular flaws in Friedmann and McMichael's theorisation of food

³²The last kind of point is found in other critics, like Busch and Juska (1997) who recommended going 'beyond political economy' and bringing in actor-network theory, and later LeHeron and Lewis (2009), influenced by 'Post Structural Political Economy', who remark that 'the concept of food regime has proven to be very productivist, and thus resistant to recognising the diversity of actor subjectivities in both production and consumption' (346). Goodman (1997) elaborated aspects of his earlier article with Watts through a detailed assessment of literatures on internationalisation, advising that globalisation be treated as 'a contingent empirical category and not as a metatheoretical construct or heuristic framework' (677), and warning against representations of it 'as the consummated transition to a new era of world economy' (674).

regimes.³³ Araghi's own critique of those flaws came from a different direction, indeed in a sense from the opposite direction to Goodman and Watts:

The problem with Friedmann and McMichael's account of the food regime is that their excellent world historical analysis of the relationship between food and imperialism and of food regimes as *political* regimes of global value relations are juxtaposed with theoretical concepts borrowed from the regulation school. (Araghi 2003, 50).

His principal argument is that, purged of regulationist and similar theoretical contamination, the fruits of food regime analysis can be incorporated in 'global value relations' as the proper framework for investigating the history of world capitalism/imperialism. This requires concretising Marx's more abstract ('deep') concepts of value in *Capital*, which Araghi sketches thus:

because deep concepts are not concrete ... they must be historically concretized so as to reveal the 'many determinations', and 'unity of the diverse' in real phenomena. In this sense, the concepts such as 'global value relations', 'global working day' and 'global worker' are world historically informed concepts posed at a less abstract level precisely to allow one to capture the 'unity of the diverse'. Global value relations include the politics of state relations, the world market, colonization and imperialism, and the (often geographically separated) labour regimes of absolute and relative surplus value production. In other words, instead of understanding the production of absolute and relative surplus value in dualistic, localistic, oppositional evolutionary ways (legacies of the late nineteenth-century nationalism, evolutionism and positivism), the concept of global value relations emphasizes their dialectical/relational and contradictory unity. (Araghi 2003, 49)³⁴

His own historical framing of 'global value relations', as elaborated in Araghi (2009a), consists of:

(1) 1492–1832: 'the era of colonial enclosures and the original primitive accumulation of capital in England', marked at its two ends by the arrival of Columbus in the Caribbean and the Poor Law Amendment Act in Britain, which signified 'the beginning of a systematic attempt by the English liberal industrial bourgeoisie to

³³There is much slippery ground here, which it is inevitably risky to try to cover in the truncated manner of this paper. Araghi's charge of 'agrarian exceptionalism' might apply to the postmodernist 'abstract particularism' he detects in Goodman and Watts (1994), but surely not to their abbreviated formulation of 'agriculture's difference' (with industry), deriving from 'the land-based character of production, the physiological requirements of human food consumption, and the cultural significance of food in social practice' (Goodman and Watts 1994, 37–38, 39–40). These qualities are central to the agroecological turn of food regime analysis, and not least its criticism of how capital dispossesses 'peasants', industrialises farming processes and generates 'food from nowhere', all of which contribute to social and ecological devastation, as Araghi agrees (e.g. Araghi 2009b).

³⁴Araghi points to broadly similar issues to those highlighted, albeit in very different manner, by Jairus Banaji (2010), and his arguments about applying Marx's method in constructing 'theory as history'. One problem in both Araghi and Banaji concerns the character and range of theoretical 'determinations' needed to pursue historical analysis, raised in my review essay on Banaji (Bernstein 2013). One should ask of Araghi's 'global value relations include ...': where does the list of possible inclusion end? Is there any hierarchy of 'determinations'? If so, how is that hierarchy itself determined? If not, then what? And so on.

- dismantle the ... rudimentary welfare system' that existed (120) in order to discipline the working class;
- (2) 1832–1917: 'the food regime of capital' marking the emergence and then dominance of industrial capitalism and the global divisions of labour it created. The 'agrarian policy of the colonial-liberal globalism of this period was ... depeasantization, proletarianization and urbanization at home, and peasantization, ruralization and the superexploitation of coerced labour in the colonies' (122);
- (3) 1917–1975, established at its two ends by the Bolshevik revolution and the victory of the Vietnamese national liberation struggle, and characterised as a period of 'global reformist retreat from classical liberalism' (122), including the developmental state (of which the USSR was the first major example);
- (4) 1970s on: neoliberal globalisation, during which 'the relative depeasantization and displacement of the postwar period gave way to absolute depeasantization and displacement' through a wave of 'global enclosures' (133–34).

This results in several idiosyncracies concerning Friedmann and McMichael's delineation of the first two food regimes. The historical boundaries of their first food regime (1870– 1914), and the arguments they used to specify its distinctiveness as 'the first price-governed [international] market in an essential means of life' from the 1870s (above), are dissolved within Araghi's longer period of 'the food regime of capital' from 1832. Moreover, Araghi barely discusses Friedmann and McMichael's first food regime at all, other than to note that one of their 'most important contributions' (even if they did not follow it through sufficiently, in his view) was their recognition that it was 'based on the international integration of wage labour and non-wage labour' (Araghi 2003, 52). This is important to Araghi because of his construction of the 'global worker' across sites of relative and absolute surplus value production, and proletarian and non-proletarian, free and unfree, labour. However, the 'non-wage labour' that was the basis of world market grain production in the first food regime represented for Friedmann and McMichael the (world-historical) innovation of 'the fully commercial farm based on family labour' in the settler colonies (above). How well this bears the weight of representing other (or all) 'non-wage labour' (e.g. 'peasants') in the modern capitalist world economy is another matter.³⁵

And the second food regime? In effect, Friedmann and McMichael's analysis, in both their original and subsequent papers, of the centrality of the second regime to US hegemony in the world economy after the Second World War, is dislodged by Araghi's similarly stretched period of 1917–1975 and its characterisation as 'global reformist retreat from classical liberalism'. After that – and especially following the demise of the USSR? – it was business as usual for imperialism, resuming where it had drawn back after 1917. As McMichael noted (2009, 154), for Araghi the second food regime 'was actually an interregnum in the history of capital ... more appropriately understood as an "aid-based food order of an exceptionally reformist period of world capitalism" (Araghi 2003, 51)'. In other words, as McMichael adds (2009, 154), for Araghi 'global value relations – the organising principle for the British-centered regime, and arguably, for the late-twentieth century (neo-

³⁵In fact, Friedmann (1980) addressed the differences between simple commodity production, exemplified by the North American family farm, and 'peasant' production in the Third World; her argument was discussed by Bernstein (1986). She also made it clear that the most pervasive and strategic manifestation of 'non-wage labour' in capitalism, and in both simple commodity production and 'peasant' farming, is generated by gender relations.

liberal) regime - were compromised in the postwar Keynesian/Fordist compact of "embedded liberalism".

McMichael (2009, 155-56) acknowledged that

In shifting the focus from institutional ['regulationist', HB] to value relations, Araghi refocuses an enduring dimension of the original food regime analysis, namely its attention to the political history of capital – as expressed or realised through the structuring of global food relations.

At the same time, he criticised the 'global value relations' approach inasmuch as it remains capital-centric: 'To the extent that food regime analysis deploys the lens of value relations, it discounts the ecological calculus' (McMichael 2009, 162). This is not inevitable, however: the 'value relation analytic' can reveal 'how capital's food regime exploits labour-power and nature together' (McMichael 2013, 135).

Discussions and developments in food regime analysis

The principal recent developments in food regime analysis concern the third food regime, especially as formulated by McMichael, summarised above and considered further below. The earlier summary pointed to differences between Friedmann and McMichael concerning a third food regime: an emergent and still open 'corporate-environmental food regime' or a consolidated 'corporate food regime' (above). McMichael (2009, 151) suggests that he and Friedmann 'have diverged in focus, laying groundwork for distinct (but not necessarily contradictory) understandings of what "food regime" might mean'. They have both introduced social movements into their approaches but with different purposes, with McMichael focussing on 'social movements from the global South as the key hinge in a current food regime dynamic' (146–47). Later, he observed that his difference with Friedmann 'raises the issue of what constitutes a regime' (McMichael 2013, 42), a basic issue then. For her part, Friedmann (2009, 337) noted that 'McMichael makes greatly expanded claims for the food regime approach' and posed a series of questions about his third (corporate) food regime:

Are tensions stabilized? What institutions provide the pivot and give meaning to a stable constellation of relationships? For instance, is there a counterpart in a financialized food regime to food aid as a pivot of the 1947–73 food regime? [D]oes the food regimes approach add value, as it were, to a Polanyian interpretation? ... Where does international money fit into McMichael's account?

On that central issue of international money:

Although the Bretton Woods system ended at the same time as the last food regime, nothing has replaced the dollar as international currency. Yet the dollar does not function as it did under Bretton Woods. Instead, the US is able to run deficits in its government account and in trade supported by the default position of the dollar as reserve currency. Not only can other

³⁶There is thus also a political difference between Friedmann and McMichael, whether cause or effect of their intellectual differences concerning food regime analysis and its uses. Friedmann has produced several studies of alternative food politics in action (e.g. 2011; Friedmann and McNair 2008). Her article with Amber McNair (Friedmann and McNair 2008, 427) counterposes 'the Builder as opposed to the Warrior approach to social change' and explains the authors' preference for the former; the latter is exemplified by 'oppositional politics of a "call to the barricades" kind', as LeHeron and Lewis (2009, 347) characterise McMichael's stance.

countries not do this, but the richer of those countries are financing the US involuntarily for lack of alternatives to the dollar. This is not stable. (Friedmann 2009, 337–38)

In addition to Friedmann's analytical questions, and different answers to them among food regime analysts, there are also specific differences of interpretations of the WTO and other rules governing global trade in agricultural commodities, and of commodity chains for particular agricultural products and the changing configurations of those chains (McMichael 2009, 149–51). Implicit or explicit in both are issues of the unevenness of change and its explanation – matters raised by Goodman and Watts (1994) but pursued within the food regime framework rather than rejecting it as they did.

An important issue highlighted by Friedmann (above), also noted earlier and which I come back to, is the encompassing scale and claims of some food regime analysis. As a 'lens' (McMichael 2005, 272, 274) and 'vector' (265), it

complements a range of accounts of global political economy that focus, conventionally, on industrial and technological power relations.... It is also complemented by commodity chain analyses, dependency analyses, and fair trade studies that focus on particular food relationships in international trade. And, finally, there are studies of agriculture and food that focus on case studies, questions of hunger, technology, cultural economy, social movements, and agribusiness, that inform dimensions of food regime analysis, once positioned historically within geo-political relations. (McMichael 2009, 140)

McMichael further observed (2009, 156–61, emphasis added) that 'one reason why it has become *difficult to specify the* "food regime" *as any one construct* is the appearance of new dimensions in food regime analysis', giving as examples new kinds of analysis of technology, notably GMOs, financialisation which 'possibly portends the further centralisation of the corporate food sector as the global financial crisis unfolds',³⁷ nutrition, and environment, all of which can be illuminated by new 'conversations between food regimes and science history' in Friedmann's view (2009).

This immense range of themes that might be absorbed within, as well as generated by, food regime analysis as 'lens' and 'vector' leads to the point where I provide my own assessment, drawing on and extending the presentation so far.

An assessment

Contexts and contributions

As noted in the Introduction, the launch of food regime analysis by the pioneering article of Friedmann and McMichael greatly enriched the means available for a theoretical and historical framing of capitalist *world* economy with reference to agriculture. For example, and as illustrated in the exposition of the three food regimes to date, food regime analysis introduced and mapped relations between agriculture and the development of industry *on an international plane*; the effects of international migration (colonies of settlement); shifts

³⁷Finance is central to the theorisation of 'systemic cycles of accumulation' in the history of capitalism as world system by Arrighi (1994), conveniently summarised in Arrighi and Moore (2001). In the 1920s, Chayanov (1966, 202) had already suggested the domination of American farmers by finance capital. 'Financialisation' – often, and plausibly, regarded as the dominant mode of accumulation in 'neoliberal globalisation' – and its effects for agricultural investment and trade today are explored by Moore (2011), Clapp (2014), Fairbarn (2014) and Isakson (2014).

in hegemony in world capitalism; the monetary and financial arrangements and international state systems that underpinned and helped shape world markets; the international as well as domestic politics and policies of states that affected patterns of agricultural production and connected them through the circuits of world trade and finance; the emergence of corporate agribusiness as a new form of organisation of capital and accumulation, and that over time came to shape how industrial and mercantile, financial and agrarian, capital combined or otherwise interconnected – a central theme in ideas and debates of a third food regime.³⁸

All this has produced a great deal of necessary and valuable documentation, empirical analysis, and theoretical work that identifies, synthesises and suggests connections between a range of tendencies and trends, and what drives them, in world agriculture. Indeed, it is impossible, or at least fruitless, to consider agrarian change in the world today without engaging with the issues and ideas generated by food regime analysis over the last 25 years or so (Bernstein 1996/1997). At the same time, and despite the encompassing sweep of food regime analysis, as illustrated, there are two important absences in its framework concerning the question of population and 'the peasant question'.

Population

The lack of any demographic dimension in food regime analysis is striking, and is highlighted by contributions with titles like 'feeding the empire' (Friedmann 2004) and 'feeding the world' (McMichael 2006) which actually say nothing about the (growing) numbers who have to eat. One would hope, and expect, some consideration of this from those who pioneered and developed the analysis of international food regimes. The world's population has increased by roughly 12 times over the past 250 years or so, and at an accelerating pace since the start of the first food regime some 150 years ago. To course, many today go hungry in a context of perverse under-consumption and over-consumption of food, as food regime analysts (among others) emphasise, but world population growth at this historically unprecedented rate requires significant and continuing incremental growth in food production. What part in the growth of food production and availability, then, has been (and is) played by the kinds of (capitalist) agriculture and agricultural trade on which accounts of the three food regimes to date have focussed our attention?

Of course, these brief observations and questions concern only food 'quantities' – tons of grains, calories, etc. – and not those notable shifts in types of food and diets that food regime analysis points to.⁴⁰ It is not the only approach to do so, of course, but has gone

³⁸It can be suggested here, though not pursued further, that agribusiness had two locations of origin (both in the period of the first food regime): the world market grain region of the American prairies centred on Chicago (Cronon 1991) and the organisation of export agriculture in the 'new' (industrial) plantations of the colonies, notably in Southeast Asia (Stoler 1985) as well as Brazil and the Caribbean.

³⁹McMichael (2006, 178–79) moves directly from a sentence about the corporate food regime to report that today 'about 40 percent of the surface of the planet has been converted to crop or pasture lands, compared with 7 percent in 1700'. What is the link here, or is it a *non sequitur*? Why the reference date of 1700? What happened between 1700 and the 1980s when the corporate food regime started to emerge? Is it significant that the increase in the area farmed over three centuries that he cites is (much) *less* than the increase in world population in the same period?

⁴⁰I am grateful to Harriet Friedmann (personal communication) for this important point of clarification, among others. I should also note here the important observation by one of the anonymous

much further than others in linking 'quantity' and 'quality' issues in patterns of food distribution and consumption, as well as production, to questions of change in the capitalist organisation of farming and agriculture on an international scale.

The population question also provides one kind of link to the 'peasant question'.

The corporate food regime and the 'peasant turn'

McMichael's corporate food regime, as summarised above, rests on a thesis and its antithesis. The thesis is the immanent destructive force of capitalism, both ecological and social, manifested with ever-greater intensity in the practices (and ideologies) of industrialised agriculture and agribusiness within the current period of neoliberal globalisation. At the same time, the relationship of industrialised agriculture and agribusiness to the broader framework and dynamics of neoliberal globalisation is not altogether clear: is the former driven (principally) by the latter? Is the former the most important driver or cutting edge of the latter? And is the corporate food regime the most important terrain of struggle in the world today? An affirmative answer to the last question points to the antithesis: 'peasant mobilisation' for social justice and ecological sanity (below).

The danger is that, following the turn to the 'food regime project' (in McMichael's sense, above), this opposition can become a binary rather than the definitive 'contradiction' asserted. By this I mean that empirical evidence is gathered and deployed selectively to support the opposition of thesis and antithesis, rather than to test its arguments. In short, *investigation* of complex and contradictory realities is displaced by *verification* of the definitive vices of agribusiness and virtues of small-scale farmers. One indication of this is that the literatures used in support of the 'food regime project' overwhelmingly comprise statements by the enemy (the World Bank and International Monetary Fund (IMF), agribusiness corporations) to demonstrate their ideology and intent, ⁴¹ descriptions of the ravages of agribusiness, and accounts of virtuous 'alternatives' – supportive 'evidence' that includes the ever growing flood

reviewers of this paper that historically 'there were also less stark divisions between agricultural and non-agricultural land, and vastly greater absolute and relative scale of food/biomass to be extracted from surrounding ecosystems'.

⁴¹Intent is central to any notion of a 'project', of course, but is not always self-evident nor adequate to explaining the rationale of any project, let alone the actions taken (or not taken) to realise it and their relative success or failure. Friedmann (2005, 232) observed that 'The world wheat market that arose in the decades after 1870 was not really anyone's goal', although it helped meet the goals of different classes at the time. Treating the documents of organisations like the World Bank and WTO as selfevidently 'legible' statements of intent is also problematic. Matteo Rizzo (2009) usefully distinguished between challenging the World Bank's World Development Report of 2008 on Agriculture for development 'for what it says' and not challenging it 'when it contradicts itself' - 'the politically more fertile way of reading the [Report] ... is to make sense of its numerous internal contradictions'. Ways of 'reading' the WTO as the cutting edge of global market liberalisation, as La Vía Campesina and other social movements do, tend to overlook its various contradictions, which have made it much less effective as a 'neoliberal' institution, as various commentators recognise. More (most?) generally here, in terms of methodology, is the danger of explaining everything that happens in capitalism as manifesting a 'capital logic', with any further assumption that such logic is pursued by capitals rationally and consistently both in their economic strategies and a fortiori politically. That is indeed the road of 'functionalist' explanation. Rather, much of what happens in capitalism is the unintended and unexpected effects of contradictory social relations – and effects which then exert their own determination, of course.

from the websites of campaigning organisations, some of it very much in 'agit-prop' mode. Analyses of trends in agriculture that point to different conclusions, or conclusions more problematic for McMichael's 'food regime project', are largely ignored.⁴²

Another indication is provided by Friedmann's questions just cited – about restructurings and strategies of agribusiness and other capital, notably finance capital, in the current moment, their conditions and their effects – and by her observation (quoted earlier) that 'agrofood corporations are actually heterogeneous in their interests' (Friedmann 1993, 55). What those heterogeneous interests are, how they are manifested – for example, in competition and what shapes competition (including international money) and its outcomes – the destabilising effects of volatile finance capital moving into, *and out of*, agricultural production and trade, remain key issues for the analysis of global agriculture and its specific modalities and directions of change. Such issues tend to get lost in the impulse to document the vices of agribusiness in order to 'verify' them. In sum, what are the *questions* posed by the analytical framework of the corporate food regime? Are there questions to which answers are not given *a priori* by its binary structure?

Verification as a mode of using evidence has further effects or correlates. One is that everything 'bad' concerning trends in food production, trade and consumption – including pressures on the reproduction of classes of labour – is attributed to the ravages of corporate agriculture. This helps explain the increasingly sweeping assimilation of so many diverse (negative) phenomena to verify the thesis, what may be termed the *sponge effect*. Related to that is the *steamroller effect* which flattens accounts of current history in the cause of the overarching narrative of the thesis, documenting and asserting much but asking less and, at worst, explaining little. Finally, there is the *recognition effect*: the 'food regime project' embraces so many topics of contemporary concern – from corporate power and 'land grabbing' to nutritional problems and health hazards, to ecological destruction and climate change – that there is something here for almost everyone, as suggested earlier.

Of these, 'land grabbing' has an especially potent topical resonance. Indeed, it has moved into discourses where it is appropriated for unexpected purposes, from attacks on attempts to change the distribution of property rights in land in Scotland (said to be the most unequal in the world) to condemnation of 'fast-track land reform' in Zimbabwe and the activities of ISIS (Islamic State in Iraq and Syria). For the food regime project, 'land grabbing' – and 'peasant' dispossession more generally – is a key 'proof' of its central theme, highlighting its binary between global agribusiness capital, and other capital including sovereign wealth funds from the Middle East and China, and small farmers. Other accounts suggest more complex ensembles of social forces, not least indigenous capitals, including forms of 'accumulation from below' by agrarian capitalists and more ambitious petty commodity producers, and 'host' states, as well as pointing to sweeping exaggeration of the extent and effects of 'land grabs' and the evidence used to support it (see, *inter alios*, Baglioni and Gibbon 2013; Brautigam and Zhang 2013; Edelman 2013; Oya 2013a, 2013b; Cotula et al. 2014).

The construction of 'the peasant way' as the necessary and desirable antithesis to a world dominated and destroyed by corporate capitalist agribusiness and trade, is the definitive hallmark of the food regime conceived as political 'project', which departs from its

⁴²For example, in the 24 pages of references in the little book by McMichael (2013), there is no mention of the research of the Copenhagen–Montpellier group on commodity chains, with its mass of empirical research and precise analysis – for example, Raikes and Gibbon (2000), Daviron and Gibbon (2002), Gibbon and Ponte (2005), Daviron and Ponte (2005).

original conception as an analytical approach. Its banner of food sovereignty is now producing some lively debate, as it should, in the pages of the *Journal of Peasant Studies* and elsewhere.⁴³

This peculiar re-entry and reformulation of 'the peasant question' is also striking because 'peasants' in the Third World or South were largely absent in accounts of the first and second food regimes, or at best passive bystanders (victims?), as noted earlier. The changing place of the Third World/South in the structure of the second and third food regimes is explained largely via the world-system method of identifying large 'blocs' within international divisions of labour and unequal powers – in effect, a focus on the 'external' (above) as a more or less one-way street, determining (changing) structures of agriculture within countries. He McMichael's response to this observation is limited, to say the least: that during the first food regime 'Peasants produced some export crops' but, he continues, 'were arguably not yet world-historical subjects' (2015, 196, note 6):⁴⁵

It was only the third (corporate) food regime that encompassed all world regions with cheap food, via neoliberal structural adjustment and the free trade agreements of the WTO era, thereby bringing all peasantries directly into play as potential global actors in the food sovereignty movement. (McMichael 2015, 196)

This appears to bypass insights of earlier food regime analysis concerning the origins of Third World food-import dependence and its effects claimed for the second food regime, as well as much world-systems analysis, the massive restructurings of rural labour and land in the histories of colonialism, 'peasants wars of the twentieth century' in the making of the modern world (Wolf 1969), and Araghi's concern with world-historical waves of 'peasantisation' and 'depeasantisation' in his periodisation summarised above (see also Araghi 1995). At the same time, it explicates the dramatic turn to 'peasants', and their centrality to the oppositional 'project' of the third food regime. Further assessment of this 'peasant turn' will be compressed as it has been covered elsewhere (Bernstein 2010, 2014).

A first question here is: who are 'peasants' and what equips them to be the 'world-historical subjects' of our times, 'capital's other'? And, indeed, a 'class' or with class-like characteristics? The problem here is that there is no adequate theorisation and specification of 'peasants', and their various synonyms – 'small farmers', 'small-holders', 'family farmers' and the like – which makes it difficult to know who is being signified, where and when. ⁴⁶ The glossary of McMichael's little book (2013) has no entries for 'peasants'

⁴³The second issue of the 40th anniversary volume of the *Journal of Peasant Studies* is titled *Critical Perspectives on Food Sovereignty*. It contains some more and less critical articles by Agarwal (2014), Bernstein (2014) and Edelman (2014), albeit outnumbered by (re-)statements by food sovereignty advocates, including van der Ploeg (2014) and McMichael (2014). The last is subject to a critical discussion by Jansen (2014); among other recent papers in the *Journal* see also Li (2015) and McMichael's response (2015) to Bernstein (2014).

⁴⁴In a similar vein, McMichael (2013, 84–96) provides sketches of large regions (East Asia, Latin America and the Middle East) within the third food regime.

⁴⁵Were there any 'world-historical subjects' of earlier periods of (international) capitalism? If so, who were they?

⁴⁶And makes it impossible to assess such highly aggregated 'stylised facts', like the claim that small-holders in some estimates produce 70 percent of the world's food, cited above. What exactly is the 'small' in these 'smallholders'? Who are they? Are they all farming in the same ways? etc.

or 'farmers', although the entry for 're-peasantization' refers to "peasant practices" of selforganizing agro-ecology in the service of rebuilding ecological wealth' (163).

Can this problem be made to vanish by asserting that "peasantness" is a *political rather than* an *analytical* category' (McMichael 2013, 59, emphasis added)? As a political category it might comprise (1) a desirable goal, like 'self-organizing agro-ecology';⁴⁷ (2) its practice by some small farmers, who then represent a kind of vanguard; and (3) others, maybe a majority of small farmers, who may want to follow 'peasant practices' but are unable to do so because of their direct and indirect subjection to markets, technologies, credit and so on, dominated by corporate capital – or, because they do *not* want to and are committed to reproducing themselves as petty commodity producers and maybe petty accumulators (Agarwal 2014; Jansen 2014).⁴⁸

A further question that is begged here, surely, is whether 'corporate agribusiness', and indeed finance capital, is also a 'political' category in an essentially similar sense to peasantry (or peasantness)? That is, conceptually well beyond the political machinations that such capital engages in, or tries to? If so, why and how? If not, then this gives a strangely lop-sided character to the binary structure of McMichael's third food regime: the thesis portrays corporate agribusiness – and contemporary capital in general? – in a highly 'structuralist' manner (which recalls the implicit element of self-criticism in tracing the 'food regime genealogy', cited earlier) while the antithesis rests on the 'politicisation' of categories.

Even allowing for a relatively coherent 'political' (or ideological) view of 'peasantness' but without an analytical framework, how do we understand the long and extremely diverse histories of agrarian change in which 'peasants' in many different ways embrace and negotiate, as well as contest, the commodification of their conditions of existence? (Bernstein 2010, chapter 3, and references therein). Any fruitful analytical inquiry into these diverse histories has to centre on the different times and places of the capitalist world economy, including when, where and how the geographical expansions of capital (its 'commodity frontiers' in the term of Jason Moore 2010b) encountered different pre-capitalist social formations and with what effects, rather than aiming to theorise 'peasantness' in any supra-historical hence essentialist fashion.⁴⁹

This is where agrarian political economy remains relevant and vital to addressing the tendencies to class differentiation of farmers as they are incorporated in, and have to reproduce themselves through, capitalist social relations as petty commodity producers or as rural-based classes of labour combining the sale of their labour-power with some farming – a theme that requires attention to historical contexts and sequences. In debates of the emergence and early histories of capitalism (before industrialisation), it may seem more plausible to investigate agrarian class formation exclusively with reference to social dynamics internal to the countryside. Subsequent histories require further

⁴⁷The same reviewer cited earlier suggests that "'Self-organizing and agro-ecology" are ... antithetical – agroecology entails the deliberate/conscious organization of agro-ecosystems, focusing on diversity and complementarity, and if the "self" is meant to refer to peasants as individual agents, that doesn't fit with agroecology either as it is interested in not only peasant knowledge but combining modern scientific research in "communities of practice"".

⁴⁸Also relevant here, from another context, is Michael Burawoy's discussion (2010, 2011) of the 'false optimism of global labor studies'.

⁴⁹And/or voluntarist fashion, as in Ploeg's insistence on peasants' definitive striving for autonomy, recently restated in his 'Chayanovian manifesto' (2013). McMichael (2013, 145) observes that van der Ploeg (2008) 'universalizes the peasant condition' and commends this, while I suggest it is part of the basic problem; see also Araghi (1995) on this issue.

determinations shaping various kinds of rural–urban interconnections – notably what I term 'agrarian capital beyond the countryside' and 'rural labour beyond the farm' – and 'national' paths of capitalist development. The formation and evolution of the capitalist world economy, and its effects for class formation in the countryside, rural–urban (and agricultural–industrial) interconnections, and the prospects for 'national' paths of capitalist development, introduces further determinations, of course. Some scholars argue that world economy dynamics shaped capitalism from the beginning (Wallerstein 1983, Araghi 2009a, Banaji 2010); others that they acquired a specific 'shape', force and consequence subsequently in the history of capitalism, as in the first food regime from the 1870s and *a fortiori* in the current period of the third food regime.

Outlining such issues of historical sequencing, and their tensions, I argue (Bernstein 2015) that all three kinds of determinations, distinguished by their 'locus' – internal to the countryside, internal to 'national' economies and 'external' emanating from the world economy – are relevant to studying agrarian change today. The point is that the third kind of determination (world economy) does not make the others redundant but rather locates and elaborates them for the fruitful investigation of rural class formation, including 'peasant' differentiation, in changing historical conditions.

Peasant populism has always denied the dynamics of class differentiation among small farmers, a legacy of the most important theorist of 'peasant economy', A.V. Chayanov (Bernstein 2009; van der Ploeg 2013). In today's conditions, class differences among farmers may be acknowledged by champions of 'the peasant way', but this remains gestural. Such differences are strictly subordinate to the political purpose of unity of (all) 'people of the land' against their principal enemy, corporate agribusiness (supported by states). Such displacement of the analytical by the political impoverishes the means for understanding some key drivers and directions of agrarian change and class formation today, as it does historically.⁵⁰

There are several other points about 'peasantness' as 'capital's other'. One is that the use of 'emblematic instances' of small-scale farming to support 'the peasant way' can be added to verification and associated effects noted earlier – and 'emblematic instances' that typically do not stand up to close scrutiny (Bernstein 2014). Another is whether the agroecological ideal used to define 'peasantness', which entails depressing labour productivity in farming in favour of more sustainable yields, can produce sufficient food to provision all those who do not grow their own, not only urban populations but great numbers in the countryside too – a point that connects with population dynamics (above). ⁵¹ Finally, the distribution of

⁵⁰For illuminating illustrations of rural class formation, and dynamics of accumulation from below and above, in China today, exploring the first and second types of ('internal') determination, see Zhang, Oya and Ye (2015), Yan and Chen (2015) and Zhang (2015) in the special issue of the *Journal of Agrarian Change* (Oya, Ye and Zhang 2015). For recent class analyses of Indian agriculture in the context of liberalisation since the early 1990s, combining to various degrees 'internal' and 'external' determinations, see Basole and Basu (2011); Lerche (2013); Ramachandran (2011); Ramachandran and Rawal (2010); and for excellent analyses of 'accumulation from below' in contemporary Southeast Asia, Hall (2012) and Li (2014).

⁵¹Weis (2007) is among those who argue that small-scale agroecological farming can feed the world, and indeed must do so on a smaller-area portion of the globe than is currently used for agricultural production (Weis 2013, chapter 4), a position that requires radical changes in diets, especially away from current and growing levels of meat consumption; more sceptical interrogations of this belief are provided by, *inter alios*, Woodhouse (2010); Jansen (2014). This is not to argue by default in favour of hypertrophied, and reified, notions of labour productivity – criticised by Weis and Friedmann – which in practice are almost always associated with reifications of economies of scale.

food connects with questions about markets. It is customary for La Vía Campesina and its supporters, including McMichael, to say that they are not 'anti-market', that 'peasants' can and do produce effectively for markets, and the like, but beyond 'emblematic instances' of 'alternative' markets (above), this does not attempt to specify the determinants and complexities of 'real markets', and hence also remains largely gestural (Bernstein and Oya 2014).

Conclusion

One aspect of selection in this paper is both evident and uncomfortable: the extent to which the survey has proceeded through presenting and examining, also selectively, the ideas of the two pioneers of food regime analysis, Harriet Friedmann and Philip McMichael. This is somewhat unfair to them and to others, but is a means of convenience for mapping the rich and diverse bodies of analysis and evidence that originate with food regime analysis, have been stimulated by it or otherwise connect with it, and for commenting briefly on the need for it to connect with other currents of agrarian political economy. In a crucial sense, the achievement of food regime analysis extends beyond the (continuing) contributions of its founders. There is a 'second generation' at least of researchers and authors whose work aims to advance understanding of the kinds of issues that prompted the original framework, and continuously to elaborate, update and debate them.

Does food regime analysis stand or fall with the 'peasant turn'? The short answer is that it can stand without bending itself to the service of the 'peasant way', and in my view is better off for that. The most salient thrust of the criticism of the 'peasant turn' argued above is not to condemn it for utopianism, but rather how it short-circuits the analytical and empirical demands of advancing knowledge of the moment of world capitalism we inhabit. Ironically, that applies with particular force to class dynamics in the countryside, neglect of which marks an unfortunate departure from the openness of (earlier) food regime analysis.

It also remains an open question whether there is a current third regime or not, especially on some of the more stringent criteria of what constitutes a food regime. First, perhaps those criteria are easier to apply retrospectively than contemporaneously, let alone predictively – a familiar syndrome of social science theory. Second, it may be that the notion of a single and dominant food regime is overwhelmed by the expansion of its scope to encompass so much (everything?) in the period of neoliberal globalisation, if not population growth and the dynamics of rural class formation!

In any case, this is less important than investigating and trying to understand the volatility of change in the current moment of world history. The agenda of food regime analysis – the range of issues it has identified, and the means it suggests for investigating them – remains key to that endeavour.

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