

Cultural Geographies

<http://cgj.sagepub.com>

Supermarkets and imperial knowledge

Susanne Freidberg

Cultural Geographies 2007; 14; 321

DOI: 10.1177/1474474007078203

The online version of this article can be found at:
<http://cgj.sagepub.com/cgi/content/abstract/14/3/321>

Published by:

 SAGE Publications

<http://www.sagepublications.com>

Additional services and information for *Cultural Geographies* can be found at:

Email Alerts: <http://cgj.sagepub.com/cgi/alerts>

Subscriptions: <http://cgj.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Supermarkets and imperial knowledge

Susanne Freidberg

Department of Geography, Dartmouth College, US

Supermarkets employ codes of standards to assure the uniform safety, quality and 'ethical' content of their food products. These standards represent a form of epistemic knowledge, intended to override the kinds of practical, local knowledge long employed in food production and trade. This form of food governance by standards bears a striking resemblance to other forms of imperial governance. This article explores the historical parallels and inherent contradictions of supermarket rule.

Keywords: food production • imperial governance • supermarket

To be ruled is to be kept an eye on, inspected, spied on, regulated, indoctrinated, sermonized, listed and checked off, estimated, appraised, censured, ordered about . . .¹

Since their early days, supermarket chains have lured customers with bargain prices, consistent quality, convenient shopping, and broad choice. In recent years, many chains have broadened their marketing tactics. In addition to goods, they sell goodness, and more specifically the assurance that their goods come only from suppliers who meet their rigorous standards of safety, quality and social responsibility. Most consumers know nothing about the details of these standards, which nonetheless have had enormous consequences for the farm, firms and regional economies that depend on the supermarkets' business. Indeed, such standards have enabled supermarkets to transform the world's food supply by dictating not just which foods can be sold on their shelves, but also how and by whom they can be produced.

Given supermarkets' expanding control of national and global food supplies,² it is worth considering their standards in light of the broader history of what political scientist James Scott has called 'schemes to improve the human condition'. In *Seeing Like a State* Scott invokes the ancient dichotomy between abstract and local knowledge – or what the Greeks called, respectively, *episteme* and *métis* – to understand the failures of some of modern history's most ambitious social and environmental engineering projects.³ He shows how urban planners, agronomists, and colonial administrators (among others) have employed standardizing technologies to advance both imperial ambitions and imperious assumptions about their capacity to, in their own eyes, improve the world. To 'see like a state', he argues, is *not* to see the complexity of social and ecological life.

Yet what about corporations that have come to *seem* like states? Scott's historical survey of state power ends before the advent of neoliberalism, and before a series of late 20th century food scares raised serious doubts, especially in Britain, about the state's capacity to protect the food supply. Ever since, Britain's top supermarket chains have acted as the country's *de facto* food 'gatekeepers,' using their standards both to prevent scares and scandals and to discipline and extract value from suppliers.⁴ Now their methods of governance are spreading. Corporate retailers in Europe and beyond are not just emulating their British counterparts, but also collaborating with them on schemes to harmonize standards on a global scale, and thereby allow them (at least in principle) to assure the quality of foodstuffs procured from and sold anywhere in the world.

This article considers how such schemes embody a kind of imperial knowledge, one that threatens the practical knowledge traditionally employed in the production and trade of food, and in particular perishable fresh produce. It thus aims to demonstrate how cultural geographers' longstanding concern with the spatial context and movement of knowledge systems – particularly those encoded in regulatory regimes – can enrich the broader scholarship on globalizing retailers.⁵ At the same time, the article shows how these retailers' workaday technologies and discourses have shaped, in concrete and critical ways, the power relations of food commerce between global South and North. In this sense it contributes to ongoing efforts to 're-materialize' post-colonial geography.⁶

To begin, I briefly review the rise of supermarket regulatory power, especially in Britain, and especially as it has played out in Kenya and Zambia, two former British colonies that now supply the supermarkets with high-value fresh vegetables. The empirical material discussed here and in later sections draws on Dolan and Humphrey's important study of Kenyan export horticulture as well as my own research comparing the Zambia–Britain fresh vegetable trade with a parallel trade between Burkina Faso (a former French colony) and France. This research employed multi-site ethnography, conducted in all four countries, to explore the contemporary differences between the 'Anglophone' and 'Francophone' trades in light of their distinctive colonial and culinary histories. For the purposes of this article, the most important differences lie in the practices and knowledge systems employed by corporate supermarkets on the Anglophone side versus independent fresh produce importers on the Francophone side.⁷

Next, I situate contemporary supermarket statecraft in the longer history of knowledge systems that wield *information* as a tool to demystify, control and standardize expert practice. Drawing on Scott's analysis as well as the recent literature on audit culture, I show how the supermarkets' information-intensive methods of assuring food quality have instructive parallels in both imperial and neoliberal times. To support this argument, I contrast the French importers' commercial *métis*, which has historically helped procure quality and cope with inherently volatile and uncertain markets, with the abstract knowledge employed by a supermarket initiative known as EurepGAP. This influential though largely invisible (at least to consumers) 'quality assurance' scheme intends to make supermarkets' globalized fresh produce supply chains more 'transparent,' and therefore less risky and more profitable. Here I want to show how such

schemes resemble high modernist projects to 'improve the human condition' not simply in their imperial use of information, but also in their potential to fall far short of their lofty goals. In particular, such schemes may undermine the very expertise, social relations and livelihoods that have historically helped to both define and provision quality food.

Seeing like a supermarket

These days, size, selection and bargain prices might most distinguish corporate supermarkets from 'mom and pop' corner shops. The earliest grocery chains, however, carved out a rather different niche: they promised to take the doubt out of food shopping. In the mid- to late-19th century, when market vendors and shopkeepers often weighted their scales, watered down their milk, and mixed sawdust into their dry goods, grocery chains such as Lipton's and Sainsbury's stocked their shelves with packaged, branded, guaranteed-pure products, such as tea they had imported themselves.⁸ Their pitch was not entirely unique; consumer cooperatives recruited members with a similar promise of pure and honest provisions.⁹ Consumers appreciated knowing that a 1-pound bag of flour really contained 1 pound of flour, and this was an important reason why both kinds of retailers gained market share rapidly in the turn of the century era. Later, the chain stores' introduction of self-service appealed for similar reasons: it let shoppers check prices, inspect goods more closely, and choose at their leisure. It allowed them to leave the store feeling more confident not only about what they had bought but also about their abilities to buy wisely.

Supermarkets have encouraged these feelings ever since. Their tools for nurturing consumers' trust and willingness to spend – 'own-brand' goods, money-back guarantees, coupons and sales – have become an entirely ordinary part of retail capitalism. Yet in the late 20th century, corporate food retailers confronted an extraordinary set of challenges. These challenges were distinct but related, and most pronounced in Britain.

First, as national food retail markets became increasingly saturated and concentrated – by the late 1990s Britain's top five retailers controlled 75 percent of the national market – supermarkets had to adopt new competitive tactics. They could not rely on new store construction or price-cutting indefinitely. Second, government regulatory reform (in particular, the 1990 Food Safety Law) gave supermarkets, like other food businesses, greater autonomy in matters of safety and quality. Although the retailers had lobbied for this reform, it nonetheless required companies to take on new and unfamiliar responsibilities in order to demonstrate 'due diligence'.¹⁰ Third and most importantly, Europe, and especially Britain, experienced an unprecedented series of food scares, beginning in the late 1980s. As the headlines darkened with reports of salmonella in eggs, *e coli* in beef, carcinogenic pesticides, dioxin-tainted poultry, and mad cow disease, the public increasingly questioned not only the safety of particular foodstuffs, but also the ethics and sustainability of the entire industrialized food system – which, as media and food activists pointed out, the supermarkets supported and indeed had helped to create.¹¹

Faced with fierce competition, increased regulatory responsibility, intense media scrutiny and widespread consumer anxiety, Britain's top food retailers took steps to banish doubt, just as their ancestors had done a century earlier. This time, though, these steps went well beyond improved packaging, and indeed beyond improved products per se (though by the mid-1990s the top retailers' product quality and safety standards typically exceeded government regulations¹²). Above all, they aimed to improve the *processes* of food production on and beyond the farm.

To carry out this improvement, they required that suppliers adhere to codes of agricultural and food industry 'best practice.' At the broadest level, these codes required suppliers to develop *hazard analysis* and *traceability* systems: in other words, systems that enabled them both to monitor hazardous points in the production process and to track the products themselves, from seeding to shipping. Both of these broader practices in turn entailed an assortment of internal surveillance and information collecting activities, as well as the expectation of periodic external audits. In short, these codes of practice told suppliers, in more or less detail, how they had to run their farms or factories, how they had to police them and, not least, how they had to prove to their supermarket clients that they were effectively self-policing.¹³

It must be stressed that the retailers were not concerned only about legal liabilities, but also about threats to their brand image. Thus, in the late 1990s, when the popular media and non-governmental organizations (NGOs) exposed assorted labor abuses on fruit and vegetable export farms in Africa and Latin America,¹⁴ the most image-conscious supermarkets quickly bolstered their 'social welfare' standards. They also agreed to cooperate with NGOs on two initiatives to assure a fairer as well as cleaner food supply. The Ethical Trading Initiative (ETI), founded in 1998, focused on improving labor conditions in the retailers' overseas supply regions by first creating a code of 'ethical principles' (i.e., no child labor) and then overseeing supplier compliance with those principles.¹⁵ The Race to the Top (RTTT), a more ambitious but ultimately short-lived project, sought to 'track supermarket progress towards a greener and fairer food system' in seven areas of performance, from animal welfare to relations with developing country smallholders.¹⁶ The participating retailers were expected to provide detailed information about their supply chain practices and then, in consultation with the NGOs, work towards 'benchmarks' of improvement.

The RTTT re-enters the picture at the end of the article. At this point it is simply worth noting how these NGO projects effectively endorsed both the retailers' self-interested use of best practice codes as a defense against brand-damaging scandal *and* the broader post 'Washington consensus' faith in corporate social responsibility as a force for development and poverty reduction.¹⁷ Whether the supermarkets' codes actually helped to reduce poverty in their developing country supply regions was unclear. During the 1990s, for example, the supermarkets' shifted much of their sourcing of fresh vegetables in Kenya away from smallholders and towards plantation-scale enterprises.¹⁸ Supermarket managers and importers explained the shift in frank terms. At a time when the supermarkets were frequent fodder for media scare stories, one importer said, smallholders gave them 'nightmares' about everything from improper pesticide use to child labor scandals. Large, centralized operations did not necessarily

produce better or cheaper vegetables – and they did not offer their predominantly casual labor force much job security – but they did appear to pose less risk.¹⁹

The events in Kenya reflected British supermarkets' more general preference, when sourcing fresh produce from developing countries, for the kind of large, typically white-owned and managed farm enterprises established when such countries belonged to Britain's colonial empire.²⁰ In Africa, in particular, they get most of their produce from former British settler colonies, and often from farms owned by descendants of the settlers themselves. This was the case in Zimbabwe (until president Robert Mugabe's land expropriations effectively destroyed the horticultural export industry) as well as in Zambia. There, the fresh vegetable export industry only really took shape in the mid-to-late 1990s, when the British supermarkets' hygiene and social welfare standards were already quite stringent. Two large companies, each owning thousands of hectares, controlled the entire industry. Both were owned by offshore, predominantly British capital, and the bigger of the two, Agriflora, supplemented its own production with vegetables grown by white 'outgrowers'.

Although by Zambian standards the outgrowers possessed an abundance of agricultural resources (large irrigated farms, motorized transport, access to credit and information, advanced schooling, etc.) even they quickly found the supermarkets' hygiene and ethical standards burdensome. By 2000 many of them were abandoning export horticulture, saying that the costs of compliance wiped out any profits they had hoped to make off their baby corn and peas.²¹ As the outgrowers left the industry – each of them laying off dozens or even hundreds of workers, mostly women – Agriflora acquired more land and increased its own production. The company's managers, meanwhile, boasted about their ability to comply with the supermarkets' high expectations; they were eager to show off their spotless packhouse and to explain how well they housed, fed and otherwise cared for their workers. But as we will see, this apparent transparency concealed – as transparency often does – a deeper conceit.

Imperial information

It is clear that as the top British supermarkets' control over food retailing increased, so too did their capacity to act as *de facto* policymakers.²² This capacity stretched beyond Britain and other retail markets to distant supply regions. It is also clear that the supermarkets have exercised this regulatory prerogative most aggressively in poor countries where domestic policymakers cannot, for a variety of reasons, assure suitably clean and scandal-free production conditions.²³ But how have these activities both drawn on and advanced a particular kind of knowledge about food and farming? This question has received much less attention, yet it is crucial to understanding both the power and pitfalls of supermarket statecraft. Parry's research on intellectual property rights demonstrates that even the most globalized regulatory regimes codify and value knowledge in culturally specific ways.²⁴ They gain acceptance only insofar as their underlying knowledge claims are accepted. This path towards normativity (however partial and resisted) has both a history and a geography.

In the case of the knowledge system underlying the supermarkets' supply chain governance, the history is long and the discussion here necessarily brief. The chief aim is to show how the supermarkets are sustaining a centuries-old tradition of information collection and classification. Imperial in scope and ambition, this tradition has sought (and in some times and places, found) legitimacy through the virtuous goal of improving agriculture. We can trace the history of the resulting knowledge system through three overlapping developments.

The first and oldest is the practice of botanical collection. In *Nature's Government*, Drayton roots this practice in the ancient belief that knowledge of nature's 'universal' truths could benefit 'the highest human purposes'.²⁵ Accumulated and displayed in a garden, such knowledge sent a powerful message in itself. The botanical collections of Popes, emperors and merchant princes, Drayton notes, served as

... not merely status symbols. They helped to identify secular authority and wealth with a Providential or natural right. The dream of possessing all nature in microcosm, and understanding its order, was comforting to those seeking earthly power. From a world in a garden, men might organize the government of the world.²⁶

Centuries later, the first wave of European colonialism yielded vast botanical wealth. Then as now, companies assisted or even assumed the status of conquering states; they helped the botanists with everything from shipping to bookkeeping.²⁷ By the 18th century, garden owners and patrons, overwhelmed by 'the shock of the world's diversity', needed order restored, and botanical scientists such as Linnaeus obliged. His classification systems made the natural world appear more manageable, even to those with little scientific background. And this capacity to manage nature increasingly mattered, once rulers' gardens no longer represented divine authority. In a secularizing Europe, knowledge of the natural world had to prove that it had practical as well as aesthetic worth.²⁸

Thus both home country and colonial botanical gardens turned their attention towards the discovery, improvement, and acclimatization of crops.²⁹ To do this they needed to study not just plants but also their interactions with people, as producers and consumers. In turn, the harvest of knowledge generated by these far-flung research efforts needed, again, careful management. In this way, Drayton shows, the governance of colonial nature (and the subjects who cultivated it) shaped ideas about the nature of bureaucratic government. In particular, it shaped ideas about how governing institutions (including companies) could collect and use knowledge about agriculture to advance the broader economic and social projects of empire.

Among these projects, as other scholars have shown, was the creation of colonial countrysides resembling the metropole's pastoral ideal, both aesthetically and socially. During the second wave of European colonialism, this project advanced furthest in the relatively temperate, settler-populated regions – places like New Zealand, Mediterranean North Africa, and the highlands of Rhodesia and Kenya.³⁰ But colonial agriculture more generally was also expected to draw on botanical (as well as veterinary) science to produce food and related commodities (cocoa, coffee, tea) for the home country. In this way, the practices of collecting, classifying and managing nature shaped the landscapes and social relations of imperial food production, establishing patterns that

would in many cases endure long after the formal end of colonial rule. The emergence of these practices dovetailed with a second, equally important historical development: the birth of information and, more precisely, the notion that expertise, long considered achievable only through apprenticeship and practice, could be acquired and applied out of context. Diderot's *l'Encyclopedie*, published in the mid-18th century, has been called 'one of the most important books in history' in this regard.³¹ It assembled the craft knowledge of many places and professions – knowledge traditionally orally transmitted, and sometimes carefully guarded – into one easily accessible place, namely the printed page. In other words, it abstracted from the *métis* of the weaver, the blacksmith, the tailor and the gardener the kind of information that any literate person anywhere could understand and use. It assumed that expertise could and should be converted into the codified, universal knowledge that the Greeks called *episteme*, and we might more commonly call book learning.³²

On one level, Diderot's encyclopedia signaled a radical shift in the meaning of knowledge, one that brought enormous increases in productivity and living standards. Yet the ascendance of information also enabled new kinds of subjugation, destruction and deception. In particular – though, as Bayly and Beasley show, in different ways in different places – it helped to fuel 19th century European colonial expansion.³³ This occurred not simply because expansion became easier to plan and accomplish, nor simply because it promised to help scientists collect information, botanical and otherwise. In addition Europeans, convinced of the superiority of their knowledge and its applications, saw expansion as a moral right.³⁴

The third historical development, the rise of high modernism, reinforced this conviction. As Scott shows in *Seeing Like a State*, this is an ideology hugely confident in science and technology's capacity to satisfy ever more human needs, to master nature, and to establish 'rational social order'.³⁵ It fed and was fed by the fast pace of 19th century innovation, as well as by the many state-led initiatives to make human and territorial subjects more governable. These initiatives involved, among other things, the standardization of measurements and timekeeping, and all kinds of programs to collect, analyze, disseminate and display knowledge – or more precisely, *information* – about nature and society.³⁶

High modernism's technocratic zeal pervaded many dimensions of the colonial project, from primary education to public health to (not least) agricultural extension.³⁷ But Scott contends that this ideology actually reached its zenith in the post-World War II era. As a rationale for strong state action, it found support across the Cold War political spectrum, and especially in decolonizing regions where politicians and their publics shared, if little else, the dream of development.³⁸ Schemes that relied on abstract knowledge to pursue this goal ranged from the planned city of Brasilia to the Green Revolution to agricultural collectivization in Ethiopia, Tanzania, and the Soviet Union.³⁹

In each case, states and their experts invoked the promise of better living through rational design to justify authoritarianism and to discredit practical knowledge, especially that of the peasantry.⁴⁰ Collectivized villages, grid-like irrigation schemes and 'integrated' agricultural development projects, by standardizing and centralizing the distribution of crucial resources (seeds, fertilizer) aimed to make rural areas not just more productive,

but also easier to monitor and control. In these ways, Scott argues, postcolonial states employed *episteme* in an imperial fashion well after the imperial age. But the planners' blueprints and the agronomists' improved seeds did not account for the diverse and variable conditions, both social and ecological, in which local knowledge had necessarily developed. The results proved uneven at best (the Green Revolution), and at worst catastrophic (as when collectivization led to famine in Ethiopia and Ukraine). Most often, the stubborn particularity and unpredictability of local peoples and ecologies insured that high modernist projects simply did not accomplish half of what they intended.

As such disappointments accumulated, faith in the state's capacity to carry off 'technofix' development collapsed. So, too, did the post-World War II geopolitical and economic order that had assured funding for costly state-run development schemes.⁴¹ By the late 20th century, decentralization and privatization had become the new metrics of effective governance.⁴² Yet efforts to codify knowledge and standardize practice hardly abated. On the contrary, they became defining features of neoliberal regulation, and more specifically of the 'audit culture' that now pervades all manner of public and private institutions, from investment firms to academia to international aid organizations. While Power identifies Britain as the original 'audit society,' audits and other 'rituals of verification' are now practiced worldwide, and often across national borders.⁴³ Among the institutions that have helped to globalize audit culture are Britain's supermarkets and, somewhat ironically, many of the NGOS seeking to reform them.

Four premises of audit culture merit brief mention. First, it presumes that information collected about the workings of organizations and individuals can be used to assess how *well* they work. Second, it presumes that such assessments can and should be based on standards that are not only 'objective' in form but also, in the interests of both efficiency and equity, harmonized in scope. This is of course the premise of many nationwide auditing tools, such as standardized educational tests and public health codes. International harmonization efforts, however, have historically proven much more difficult, especially in the realm of food and agriculture (as decades of European and GATT/WTO negotiations have demonstrated). Third, audit culture presumes that the very practice of *transparency* – that is, the sharing of information – not only demonstrates *accountability*, but also builds trust between those 'checking up' and those being checked-up on. Lastly, because transparency allows for critique and encourages self-discipline, it drives 'continuous improvement' in organizational performance and output, whether the organizations produce automobiles, financial advice, college graduates, or kiwi fruit.⁴⁴

Audit culture's basic norms may seem familiar to the point of banality. Nonetheless, critiques of these norms are directly relevant to current supermarket initiatives. Tsoukas, for example, contends that audit culture's preoccupation with bits and pieces of information – test scores, check lists – distracts rather than edifies. 'The more information we have about the world [or a particular place in the world, such as a farm] the more we distance ourselves from what is going on and the less able we become in comprehending its full complexity. Information becomes a surrogate for the world'.⁴⁵

In addition, Tsoukas suggests that audit practices may actually erode rather than build trust, in part because many kinds of *métis*, whether possessed by the farm laborer,

the teacher or the brain surgeon, can neither be codified nor even understood by outsiders. 'The paradox is that the more information on the inner workings of an expert system observers seek to have, the less practitioners are trusted, the less likely it is for the benefits of the specialized expertise to be realized.'⁴⁶ While observers sometimes possess the same expert knowledge as the observed (the principle of peer review), this is rarely the case when supermarkets conduct audits in overseas supply regions. However, the paradox of more transparency generating less trust owes not only to the inherent *knowledge* gap between outsider and practitioner but also, often, to the *power* gap. Corporations and other powerful private interests, in particular, can demand transparency from others in ways and for reasons that are not themselves transparent, and certainly do not inspire trust.

Hughes takes up this point in her analysis of the British supermarkets' 'ethics' auditing in Kenya and other horticultural supply countries.⁴⁷ She contends that it amounts to a 'corporate-led defense strategy' that aims more to avoid scandals and other unexpected costs than to improve labor conditions on supplier farms. Her critique echoes Strathern's, who describes audit as a bureaucratic form of 'bulletproofing,' similar to the painted shields used by Papua New Guinean warriors to impress enemies and avoid their arrows.⁴⁸ Like the shields, supermarkets' audit practices protect corporate image, at least in principle, through both demonstration and deflection. That is, they display 'responsible' corporate behavior, and they generate information that helps to eliminate apparently risky suppliers.

In sum, British supermarkets' methods for addressing contemporary consumers' food anxieties draw on a knowledge system deeply rooted in the history of European imperialism. Not coincidentally, they employ these methods in the corners of empires where, as in Zambia, agricultural 'improvement' was not exactly a rousing success.⁴⁹ Still, the metaphor of the shield highlights at least two important ways that the supermarkets' relations with their postcolonial suppliers *differ* from earlier imperial incarnations. First, as Hardt and Negri discuss at length, this is an age when even the mightiest Goliaths must dodge the arrows of the globalized media and sharp-shooting NGOs.⁵⁰ Second, the knowledge systems underlying food governance in Britain and France, the nearest and next biggest former colonial power, have arguably diverged (or at least become more oppositional) in the past decade or so. This divergence may reflect primarily French unease about the incursions of 'Anglo-Saxon' food culture and, as I suggest later, it may not last long. Nonetheless, it does mean that alternatives to the British supermarkets' methods of procuring quality food lie not so far away – in fact, just across the Channel.

The commercants' *connaissance*

Although *hypermarchés* such as Carrefour now thoroughly dominate food retailing in France, independent importers and wholesalers of fresh produce still survive in relatively large numbers, and still rely on inherited knowledge to run their businesses. In the Paris region, many of these traders operate out of Rungis, the vast suburban

wholesale market that replaced the famous *Halles Centrales* in 1968.⁵¹ Many come from families who previously ran import and wholesale businesses at *les Halles*. While this previous generation of traders dealt in what would now seem very small volumes, their networks stretched far, and their knowledge ran deep. They competed by procuring ever more exotic fruits, and ever-earlier springtime vegetables, and they catered to some of the world's most discerning customers. Their *métis* (which they called *connaissance*) was not really 'local', but it was contextual, experiential, and reliant on all the senses – including, sometimes, the sixth sense of intuition. As the son of one Italian-born importer said of his father's generation:

they were much more specialized [than today's wholesalers]; everyone sold only a few products . . . from the point of view of *connaissance*, they were much more professional than today. My father, my uncle; they taught me a great deal . . . My father, if you gave him a lemon, he could tell you what country it came from, if it had seeds, if it had a fine skin, what variety it was; he only had to look at it. He knew his product well.

Their *connaissance* was as much social as technical. The importer continues, speaking of pre-internet days:

We knew intimately the people we did business with, and they knew us. They were ties of friendship, really. But we had to communicate rapidly; there wasn't time to write letters, contracts; business goes faster than that. Even the telephone, calling abroad you might have to wait 4, 5, 6 hours to get a line . . . often we called in the middle of the night, because it was faster and cheaper! But everything was done like that; there was much more trust than today . . .

Trust mattered not only over long-distances, but also locally:

If you lost the trust of your colleagues and clients, you were done for . . . because in the end, colleagues, competitors, they have to help each other. For example if you had a license to import small quantities, two or three tons, you couldn't order a [train] wagon to deliver just two tons; that would be too expensive. So you got together with others to make a group purchase. It was necessary, if you will, to have correct and friendly relations to do business . . .

Traders' familiarity with specific products, places and people helped them to negotiate inherently unstable and uncertain markets. It helped them assure, in other words, both quality supplies and consistent sales. But for much of the 20th century, French fresh produce traders (and their counterparts in southern Europe) sold to a retail sector as fragmented and family-run as their own. In the 1970s, French supermarket chains began a rapid conquest of the food retail landscape, despite relatively strict zoning laws.⁵² By 2003, Carrefour alone controlled one-quarter of French food retailing, and on a global scale ranked second only to Wal-Mart. In the face of such concentrated retail power, how could independent produce traders' traditional skills still have practical value? After all, most of their British counterparts did not survive a similar, earlier conquest, for as Tesco and its peers expanded, they also increasingly circumvented the wholesale market.⁵³ But the histories of British versus French chain retailer expansion differ, for current purposes, in at least two important ways. First, it took considerably longer for the big French chains to take control of fresh produce retailing.

This owed partly to the decentralized geography of fresh fruit and vegetable marketing, but partly also to enduring French cultural norms, which assume that greengrocers and outdoor markets sell the best and freshest produce.⁵⁴

Second and related, even as the big French retailers' share of fruit and vegetable sales increased (up to about 70 percent by the mid-1990s) French importers remained more autonomous than their British counterparts. This was in large part because the French retailers did not care where or from whom they bought produce, as long as it arrived on time, looked good, and did not violate (or get caught violating) government sanitary or phytosanitary laws. They rarely audited their overseas suppliers, and only began requiring them to move towards traceability after it was clear that it would become an EU law. The French importers have thus been able to rely on their own *métis*, rather than a rigid set of retailer standards, to assess the performance of both potential and existing suppliers. As a result, many of them continue to do business with a wide range of enterprises, including the kind of African smallholder cooperatives that British supermarkets have increasingly shunned. These tend to be located in regions that during the colonial era were also shunned by European settler farmers, given their harsh climates and often poor soils.

The diversity and human scale of the French importers' supply chain relationships does not, it should be emphasized, make them any more humane than those of the British supermarkets. The world of francophone fresh produce trading abounds with tales of importers who cheat their overseas suppliers (especially those who lack the resources to prosecute them). Nonetheless, such relationships merit comparison with British retailers' because they sustain and are sustained by a radically different cultural geography of expertise. In particular, they sustain the notion that agrarian *métis* is learned and manifested differently in different places, and therefore cannot be adequately measured against universal standards. Rather, according to this view, the best judges of agrarian expertise in far-off lands are the importers themselves, whose livelihoods depend on an equally practical, uncodifiable kind of expertise.⁵⁵

The future of the importers' expertise, however, has grown increasingly uncertain. Their autonomy vis-a-vis the French hypermarket chains has not protected them against the latter's price-squeezing power, meaning that many independent import firms at Rungis have gone out of business. Beyond France, meanwhile, more and more corporate retailers have shown increasing interest in the British supermarkets' methods of supply chain governance, and a willingness to cooperate on efforts to replicate their 'best practice' standards on a global scale.

EurepGAP: the panoptic 'partnership'

In fresh produce, the most important such initiative, so far, is EurepGAP. Formed in 1997 as the Euro-Retailer Produce Working Group, EurepGAP now calls itself 'The Global Partnership for Safe and Sustainable Agriculture', to emphasize that its membership includes not just retailers, but also producers and a variety of companies selling agricultural equipment, inputs, and services.⁵⁶ EurepGAP aims 'To respond to Consumer

Concerns on Food Safety, Animal Welfare, Environmental Protection and Worker Health, Safety and Welfare' in the following fashion:

- 1.1 Encouraging adoption of commercially viable Farm Assurance Schemes, which promote the minimisation of agrochemical inputs, within Europe and Worldwide.
- 1.2 Developing a Good Agricultural Practice (GAP) Framework for benchmarking existing Assurance Schemes and Standards including traceability.
- 1.3 Providing guidance for continuous improvement and the development and understanding of best practice.
- 1.4 Establishing a single, recognized framework for independent verification.
- 1.5 Communicating and consulting openly with consumers and key partners, including producers, exporters and importers.⁵⁷

Simply put, EurepGAP wants its horticultural good practice standards to become *the* standard of producer goodness, whether the producers are in the next county or a continent away. These standards, described in 25 pages of Control Points and Compliance Criteria (CPCC), have been drawn up by a technical committee of 11 retailer and supplier representatives (all but one European). They cover worker welfare but prioritize environmental sustainability and food safety, and especially hazard analysis techniques to monitor pesticide use. To gain EurepGAP certification, suppliers must undergo and pay for a lengthy and arduous audit process.⁵⁸

As Hugh Campbell's study of EurepGAP has already pointed out, many small-scale developing country farmers could not realistically comply with standards requiring, for example, on-farm First Aid boxes, and annual laboratory microbial and chemical soil analyses.⁵⁹ Such farmers had no say in establishing such standards. Yet EurepGAP's publicity materials make much of its 'benchmarking' option, which allows local and national quality assurance schemes to demonstrate, also through an audit, that they are as rigorous as the CPCC. This option is supposed to save suppliers the time and money of multiple audits. More generally, EurepGAP's publicity materials emphasize its democratic, consultative structure. As Foucault pointed out, however, a panopticon created by a democracy does not necessarily discipline in a democratic fashion.⁶⁰ EurepGAP's measures of 'continuous improvement' are defined and assessed by retailers, not suppliers. This assessment in turn helps to rank suppliers, said one supermarket fresh produce manager, as either 'first division' or 'premier league':

If you are a premier league grower, which means that you have got very high levels of compliance in health and safety and all these sorts of areas, you have shown commitment and all the rest of it, you will have first call on [store X's] orders . . . Any cutbacks that do have to occur falls on the first division. And it creates a tension, if you like, where if you're toward the bottom of the premier league you're going to improve your ability. And if you're the top of the first division you're going to be trying to improve your ability. Because they can change places . . . So all the time we are committed to the concept of continuing improvement.

As suggested earlier, retailers are also committed to minimizing their risk of liability and scandal, preferably at minimal cost. Here again EurepGAP is helpful, because certification (and arguably even an application for certification) demonstrates a level of

competence and accountability that does not need constant surveillance. Already, by 2000, horticultural export firms in Zambia were accustomed to their supermarket clients' audits-by-fax, which required them to supply immediate and detailed records of a particular shipment. Although these audits only covered food safety and quality (as opposed to social welfare) practices, they were challenging in a country where the phone and fax lines often went down. But they did encourage the Zambian firms to stay alert. One company's technical manager boasted about his fast response to faxed audits – 'My record's about an hour and a half' – as well as about the quality of his bookkeeping:

Anybody can come on to this farm any time without notice and they can see our records and I'll guarantee you they'll be as damn near 100 percent as they'll ever be, and they won't be fixed, they won't be pretty, you know, they'll be accurate. We have to be.

This kind of diligence saved time and money on the other end of the supply chain. As one UK importer said of his Zimbabwean growers' vegetables, 'We don't actually need to inspect our product when it arrives, because they know what's expected and how to run the quality controls. Everything is actually done out there. So we do have a cursory look at it, but nothing more than that. We look at one percent of it.'

As Alex Hughes' research has shown, British supermarkets' 'ethical' sourcing policies have become, if anything, even more reliant on methods of risk assessment that require little or no on-site 'checking up'. Producer questionnaires, an online supplier database,⁶¹ and 'toolkits' of information about the political economic and social conditions of supply regions all help them determine not so much *whether* their ethical policies work (that is, whether they assure decent labor conditions), but rather where they can safely *not* audit for potentially unethical conduct. The aim is to maintain a supply base where the audit culture is so pervasive and internalized – so panoptic – that no one questions its function, or the power relations that imposed it. For one supermarket produce manager, this meant maintaining 'a very discreet supply base, [whose members] understand us, our philosophy and our customers very well.' Foucault's point that 'the perfection of power should tend to render its actual exercise unnecessary' is more than a little apt here.⁶²

This panoptic approach to 'ethical' sourcing, as Hughes points out, effectively renders voiceless the millions of laborers working for presumably 'low risk' suppliers. Then again, even when farms or factories do undergo on-site social welfare audits (and this is not limited to Africa) laborers do not necessarily have much of a voice, either during the visits or in the creation of the labor welfare standards that are supposed to benefit them.⁶³ These are important critiques of retailer-led 'ethical trade,' and of the audit culture it has perpetuated.⁶⁴

But the retailers' risk assessment approaches also illuminate a fundamental (yet perhaps fatally flawed?) premise of quality assurance schemes such as EurepGAP. These schemes presume that the more *information* made available about retailers' supply bases, the fewer *resources* and the less *expert knowledge* needed to manage them. This matters because the retailers' buyers tend to rotate too frequently between posts (e.g., from vegetables to snack foods) to become familiar with particular

products or supply regions. They also tend to be, as one British produce importer noted, 'fresh out of university', and therefore more comfortable reading the paperwork generated by supplier farms than assessing the farms themselves. More experienced management-level employees, meanwhile, rarely have time to visit individual supplier farms. But when they do go, this importer noted, they 'have really, really clear ideas what they want to see there . . . they want to see a UK farm but abroad, a UK packhouse but abroad.'

Harmonization, trickery and discord

The problem with EurepGAP is that it is so very comprehensive that if you hit farmers with it first off, they just crawl under the table and try to hide away. It's just too much for them. (UK fresh produce importer, 2001)

In light of the enormous diversity of ecological and social conditions characterizing farm production worldwide, EurepGAP's long-term goal – the 'global harmonization' of agricultural good practice – is, as the European Commissioner put it, 'nothing if not ambitious'.⁶⁵ It is also not unique. For several years, members of the British Retail Consortium have been holding their own-brand suppliers to the so-called Global Standard (also known as the BRC Packhouse Certificate). In 2000, an international group of supermarket CEOs formed the Global Food Safety Initiative with the aim of creating yet another 'global set of voluntary but universally recognized standards of food safety, quality and security'.

Supermarkets are not, of course, alone in their predilection for voluntary codes of supplier standards. As mentioned earlier, the neoliberal era saw the trappings of audit culture reach across the globe and into all manner of public and private institutions. Amongst corporate codes, those of fast-food chains and brand-name clothing companies have received more attention from both the popular media and scholars.⁶⁶ Nonetheless, the supermarkets' codes are certainly significant insofar as they apply to many realms of food production and exchange where industrialization, for a variety of reasons, has not taken hold, and where *métis* has therefore remained indispensable to both individual livelihoods and the functioning of entire supply networks. So these codes raise a number of questions worthy of more research.

First, how effectively can the 'sourcing' of food, and especially fresh produce, be reduced to a technocratic exercise? For French importers and wholesalers, not surprisingly, this question raises hackles, for it is about whether their *connaissance* and indeed their profession still matters. But even the British fresh produce technologists and managers find that their job titles do not describe nearly all the skills and knowledge needed to do their job well. Given the unpredictable nature of international fresh produce trading – a theme that comes up constantly in conversations with people in the business – they need to know not just how to react quickly to changing conditions, but also *who* they can trust to do likewise. As one manager said,

You can trade with a big branded company, but if you can't get on with the people within that big branded company then you don't trade . . . you have to have people of like minds that understand the business,

understand the variants of producing good quality fruit, good quality vegetables. I mean, it's never easy, it's never the same day in, day out. So, it is a mindset and you're going to have to be dealing with people who understand that mindset and are prepared to put themselves out to try to deliver it, no matter how tough it is out there.

Especially as they try to keep suppliers in compliance with ever more rigorous supply chain standards, managers and importers need the diplomat's skills of translation and persuasion.⁶⁷ Otherwise, suppliers may either give up entirely (and seek less demanding clients, such as the French supermarkets⁶⁸) or resort to deception.

This raises another question. How have these schemes to codify and harmonize good practice inadvertently encouraged the very practices that transparency is supposed to discourage? The literal translation of *métis* is 'cunning' and, as Scott observes in *Seeing Like a State*, the survivors of agricultural collectivization and other ill-fated grand plans have typically been those who still possess the practical, local knowledge needed to beat (or at least circumvent) the system. They divert state-supplied agricultural inputs to their own gardens; they trade on black markets; they manage to get by.

Elizabeth Dunn's research on the Polish pork industry in the late 1990s, when the imposition of new EU hygiene standards pushed small farmers into underground meat trading, offers just one example of how contemporary systems of transparency have sustained agrarian cunning in Europe.⁶⁹ Events in Zambia, similarly, suggests how the costs of demonstrating transparency to British supermarkets – costs which have risen even as prices have stayed flat – might encourage less-than-transparent accounting.

Agriflora, the aforementioned horticultural export company, won renown in the late 1990s for its early adoption of the supermarkets' hygiene and 'ethical trade' standards. British supermarket managers spoke highly of the company's professionalism, and in 2003 it won Zambia's 'exporter of the year' award. The following year, however, Agriflora's managing director and part owner fled the country after a news report exposed 'massive financial irregularities'.⁷⁰ It turned out that he had been cooking the books in order to hide the fact that the company was running a loss of 20 million pounds sterling.

Subsequent investigations did not uncover evidence of personal embezzlement. Rather, it appeared that the whole enterprise had never been financially viable, given the freight costs from southern Africa, the flat prices paid by supermarkets, and not least, all the expense associated with meeting the supermarkets' ever more rigorous standards. Yet it was not difficult to hide the company's losses; it was simply a matter of going through all the routines of accountability (the record keeping, the audits) more 'creatively' than would otherwise be necessary. Agriflora's financial auditor, the accounting firm KPMG, noticed nothing amiss. In fact after the scandal the firm (which ranks alongside Price Waterhouse as one of the world's biggest such auditors) defended its own accountability. Said KPMG's Zambia representative: 'We applied internationally recognized standards in our audit process and we stand by that.'⁷¹

Finally, it seems worth asking whether EurepGAP and other harmonized assurance schemes, as institutionalized forms of information-sharing, really generate much trust between retailers and their suppliers. As mentioned above, audit culture presumes that transparency builds trust. Institutional economists see an even tighter correlation: for

them, the very existence of such schemes demonstrate that trust already exists – that, to use their terms, a firm or sector has shifted from ‘arm’s length’ to ‘relational’ supply chain governance.

Quality assurance schemes have certainly required suppliers to communicate more regularly with their supermarket buyers, and to reveal (or appear to reveal) more about themselves. Along the way, however, this communication has exposed not only incompatible differences between local and global norms of good practice, but also highly lopsided supplier-buyer power relationships. The largest supermarket chains’ oligopolistic market power has enabled them not only to impose standards of transparency and good practice on their suppliers, but also to run their own affairs in flagrant violation of such standards.

Conclusion

Two events in early 2004 illustrate the implications of this concluding point, at least in Britain. First, the government’s Office of Fair Trading released a report on the supermarkets’ compliance with their *own* voluntary code of practice, which they had developed two years earlier in response to widespread criticism about their treatment of suppliers. The OFT reported that the code had accomplished little: suppliers large and small still complained that they were routinely subject to price-squeezing and insecure contracts, not to mention threats and demands for payment by supermarket employees. The supermarkets themselves blandly reaffirmed their commitment to the code.⁷²

Second, the aforementioned ‘Race to the Top’ ended prematurely. This NGO initiative to promote a ‘greener and fairer food system’ through the use of retailer benchmarks had seemingly won a victory when most of the country’s top retailers first agreed to provide information about many different aspects of their operations, from energy use to supply chain relationships. Yet first Tesco and then all but three of the other participating retailers later refused to release this information – without which there could be no benchmarks, and thus no race. The participating NGOs interpreted the RTTT’s failure as evidence of the larger failure of supermarket voluntary standards. ‘Having supermarkets in the driving seat’, said the project’s final report, ‘can only be successful for those areas that create consumer value’ (and thus improve the bottom line).⁷³ Clearly the RTTT demanded a kind of accountability that did not look worthwhile to the supermarkets’ accountants.

Although the events of 2004 reinvigorated NGOs’ demands for ‘more robust’ state regulation to counter the state-like power of the supermarkets, this appears unlikely anytime soon.⁷⁴ On the contrary, corporate retailers such as Tesco, Carrefour and Wal-Mart are now setting up shop in the loosely regulated domestic food economies of Latin America, Southeast Asia, East Europe, and (to a lesser extent) Africa. For more and more food producers in these regions (manufacturers as well as farmers) foreign supermarkets’ standards and auditing methods now regulate access not just to the overseas market, but to the local one as well. Moreover, other segments of the food

service industries in these localities, such as tourist restaurants, are following the supermarkets' lead.⁷⁵

Beneath the internationalization of retail capital there travels a knowledge system that defines food quality and food-producing expertise in culturally specific ways. As this article has shown, both the epistemological assumptions of this knowledge system and the very geography of its travels have drawn on and contributed to a long imperial history. The collection and classification of information about the natural world helped first to motivate conquest and then to manage, though obviously imperfectly and impermanently, colonial natures and societies, and the agricultural commodities they produced. The results were highly uneven, in that some colonized regions were dismissed as largely 'useless' and others deemed worthy of significant European investment and settlement. Today, EurepGAP and related schemes reproduce this unevenness by granting only certain kinds of postcolonial food producers – those capable of complying with the most stringent (and narrowly defined) standards of agro-food 'accountability' – access to the most lucrative markets. Yet, as this article has tried to show, such standards not only exclude the relatively poor and powerless; they also mask the deceits of the rich and powerful. Debunking supermarkets' imperial knowledge thus counts among the worthwhile projects of postcolonial geography.

Notes

- ¹ D. Guérin, *Anarchism; from theory to practice* (New York, Monthly Review Press, 1970), pp. 15–16.
- ² The top 30 corporate food retailers account for approximately one-third of world grocery sales; B. Vorley, *Food, Inc.: Corporate concentration from farm to consumer* (London, UK Food Group, 2003).
- ³ J.C. Scott, *Seeing like a state: how certain schemes to improve the human condition have failed* (New Haven, CO, Yale University Press, 1998).
- ⁴ T. Marsden and N. Wrigley, 'Retailing, the food system and the regulatory state', in N. Wrigley and M.S. Lowe, eds, *Retailing, consumption and capital: towards the new retail geography* (Harlow, Longman, 1996), pp. 33–47; T. Marsden, 'Food matters and the matter of food: towards a new food governance?', *Sociologia ruralis* 40 (2000), pp. 20–9; T. Marsden, A. Flynn and M. Harrison, *Consuming interests: the social provision of foods* (London, UCL Press, 2000).
- ⁵ B. Parry, 'Cultures of knowledge: investigating intellectual property rights and relations in the pacific', *Antipode* 34 (2002), pp. 679–706; N. Wrigley, N.M. Coe and A. Currah, 'Globalizing retail: conceptualizing the distribution-based transnational corporation (TNC)', *Progress in human geography* 29 (2005), pp. 437–57.
- ⁶ I. Cook and M. Harrison, 'Cross over food: re-materializing postcolonial geographies', *Transactions of the Institute of British Geographers* 28 (2003), pp. 296–317.
- ⁷ This research was conducted between 1999 and 2003 with support from the National Science Foundation and the Radcliffe Institute for Advanced Studies. For a more extensive discussion of the research methodology see S. Freidberg, 'On the trail of the global green bean: methodological considerations in multi-site ethnography', *Global networks* 1 (2001), pp. 353–68. See also S. Freidberg, *French beans and food scares: culture and commerce in an anxious age* (New York, Oxford University Press, 2004).

- ⁸ J. Burnett, *Plenty and want; a social history of diet in England from 1815 to the present day* (London, Nelson, 1966); D. Davis, *A history of shopping* (London, Routledge, 1966).
- ⁹ E. Furlough and C. Strikwerda, *Consumers against capitalism? Consumer cooperation in Europe, North America, and Japan, 1840–1990* (Lanham, MD, Rowman & Littlefield Publishers, 1999); P. Gurney, *Co-operative culture and the politics of consumption in England, 1870–1930* (New York, Manchester University Press, 1996).
- ¹⁰ Marsden, Flynn and Harrison, *Consuming interests*.
- ¹¹ G. Harvey, *The killing of the countryside* (London, Jonathan Cape, 1997); J. Blythman, 'Strange fruit', *The Guardian*, 7 September 2002; G. Monbiot, 'Sins of the superstores visited on us', *The Guardian*, 27 February 2001.
- ¹² Marsden and Wrigley, 'Retailing, the food system and the regulatory state'.
- ¹³ T. Marsden, 'Creating space for food: the distinctiveness of recent agrarian development', in D. Goodman and M. Watts, eds, *Globalizing food: agrarian questions and global restructuring* (New York, Routledge, 1997), pp. 169–91; H. Barrett, B. Ilbery, A. Browne and T. Binns, 'Globalization and the changing networks of food supply: the importation of fresh horticultural produce from Kenya into the U.K.', *Transactions of the Institute of British Geographers* 24 (1999), pp. 159–74; C. Dolan and J. Humphrey, 'Changing governance patterns in the trade in fresh vegetables between Africa and the United Kingdom', *Environment and planning A* 36 (2004), pp. 491–509; A. Fearne and D. Hughes, 'Success factors in the fresh produce supply chain: insights from the U.K.', *British food journal* 102 (2000), pp. 760–72.
- ¹⁴ L. Orton and P. Madden, *The global supermarket: Britain's biggest shops and food from the Third World* (London, Christian Aid, 1996).
- ¹⁵ A. Hughes, 'Global commodity networks, ethical trade and governmentality: organizing business responsibility in the Kenyan cut flower industry', *Transactions of the Institute of British Geographers* 26 (2001), pp. 390–406; A. Hughes, 'Multi-stakeholder approaches to ethical trade: towards a reorganization of U.K. retailers' global supply chains', *Journal of economic geography* 1 (2001), pp. 421–37. See also <http://www.ethicaltrade.org/>
- ¹⁶ <http://www.racetothetop.org>
- ¹⁷ C. Dolan, 'Benevolent intent? The development encounter in Kenya's horticulture industry', *Journal of Asian and African Studies* 40 (2005), pp. 411–37; A. Vives, 'The role of multilateral development institutions in fostering corporate social responsibility', *Development* 47 (2004), pp. 45–52.
- ¹⁸ C. Dolan, J. Humphrey and C. Harris-Pascal, *Horticulture commodity chains: the impact of the U.K. market on the African fresh vegetable industry* (Brighton, Institute of Development Studies, 1999); C. Harris-Pascal, J. Humphrey and C. Dolan, *Value chains and upgrading: the impact of U.K. retailers on the fresh fruit and vegetables industry in Africa* (Brighton, Institute of Development Studies, 1998); C. Dolan and J. Humphrey, 'Governance and trade in fresh vegetables: the impact of UK supermarkets on the African horticulture industry', *Journal of development studies* 37 (2000), pp. 147–76.
- ¹⁹ S. Freidberg, *French beans and food scares: culture and commerce in an anxious age*; On labor conditions in Kenya's horticultural industry, see C. Dolan, 'On farm and packhouse: employment at the bottom of a global value chain', *Rural sociology* (2003); F. Lawrence, 'Growers' market', *The Guardian*, 17 May 2003.
- ²⁰ H. Barrett, B. Ilbery, A. Browne and T. Binns, 'Globalization and the changing networks of food supply'.
- ²¹ S. Freidberg, 'Cleaning up down south: supermarkets, ethical trade and African horticulture', *Social and cultural geography* 4 (2003), pp. 353–68.

- ²² Marsden, Flynn and Harrison, *Consuming interests*; Marsden, 'Creating space for food: the distinctiveness of recent agrarian development'.
- ²³ In their role as 'gatekeepers' of the British food supply the top retailers have banned from their shelves the products of certain rich countries, such as the United States' genetically modified foods and hormone-treated beef. But they have been much more concerned to enforce farm labor standards in Kenya than in, say, Florida or Spain.
- ²⁴ B. Parry, 'Cultures of knowledge: investigating intellectual property rights and relations in the pacific', *Antipode* 34 (2002), pp. 679–706.
- ²⁵ R.H. Drayton, *Nature's government: science, imperial Britain, and the 'Improvement' of the world* (New Haven, Yale University Press, 2000), p. 4.
- ²⁶ *Ibid.*, p. 27.
- ²⁷ A. te Heesen, 'Accounting for the natural world: double-entry bookkeeping in the field', in L.L. Schiebinger and C. Swan, eds, *Colonial botany: science, commerce, and politics in the early modern world* (Philadelphia, University of Pennsylvania Press, 2005).
- ²⁸ Drayton, *Nature's government: science, imperial Britain, and the 'Improvement' of the World*, p. 45.
- ²⁹ M.A. Osborne, *Nature, the exotic, and the science of French colonialism* (Bloomington, Indiana University Press, 1994); C. Bonneuil, *Des Savants pour l'empire: la structuration des recherches coloniales au temps de 'la mise en valeur des colonies francaises' 1917–1945* (Paris, Editions d'ORSTOM, 1991); J. Browne, 'Biogeography and empire', in N. Jardine, J.A. Secord and E.C. Spary, eds, *Cultures of natural history* (Cambridge and New York, Cambridge University Press, 1996), pp. 305–21.
- ³⁰ D. Hughes, 'Hydrology of hope: farm dams, conservation and whiteness in Zimbabwe', *American ethnologist* 33 (2006), pp. 269–86; H. Campbell, 'The rise and rise of EurepGAP: European (re)invention of colonial food relations?', *International journal of sociology of food and agriculture* 13 (2005), pp. 1–19.
- ³¹ D. Diderot, J.L.R. d. Alembert and P. Mouchon, *Encyclopédie; ou Dictionnaire raisonné des sciences, des arts et des métiers* (Paris, Briasson [etc.], 1751); P.F. Drucker, *Post-capitalist society* (New York, HarperBusiness, 1993).
- ³² On the Greek understandings of *mētis* and *episteme* (sometimes also referred to as *technē*), see M.C. Nussbaum, *The fragility of goodness: luck and ethics in Greek tragedy and philosophy* (Cambridge and New York, Cambridge University Press, 2001); S.A. Marglin, 'Farmers, seedsmen, and scientists: systems of agriculture and systems of knowledge', in F. Apffel-Marglin and S.A. Marglin, eds, *Decolonizing knowledge: from development to dialogue* (New York, Oxford University Press, 1996), pp. 185–248.
- ³³ C.A. Bayly, *Empire and information: intelligence gathering and social communication in India, 1780–1870* (Cambridge and New York, Cambridge University Press, 1996); E. Beasley, *Empire as the triumph of theory: imperialism, information and the Colonial Society of 1868* (New York, Routledge, 2005).
- ³⁴ Drayton, *Nature's government: science, imperial Britain, and the 'Improvement' of the World*; D.R. Headrick, *The tools of empire: technology and European imperialism in the nineteenth century* (New York, Oxford University Press, 1981); M. Adas, *Machines as the measure of men: science, technology, and ideologies of Western dominance* (Ithaca, Cornell University Press, 1989).
- ³⁵ Scott, 'Seeing like a state', p. 4.
- ³⁶ M. Foucault, *Discipline and punish: the birth of the prison* (New York, Vintage Books, 1979); M. Foucault, G. Burchell, C. Gordon and P. Miller, *The Foucault effect: studies in governmentality* (London, Harvester Wheatsheaf, 1991).

- ³⁷ Osborne, *Nature, the exotic, and the science of French colonialism*; L. Pyenson, *Civilizing mission: exact sciences and French overseas expansion, 1830–1940* (Baltimore, Johns Hopkins University Press, 1993); A.L. Conklin, *A mission to civilize: the republican idea of empire in France and West Africa, 1895–1930* (Stanford, CA, Stanford University Press, 1997); T. Mitchell, *Rule of experts: Egypt, techno-politics, modernity* (Berkeley, University of California Press, 2002).
- ³⁸ J.S. Crush, *Power of development* (London and New York, Routledge, 1995).
- ³⁹ A. Pearce, *Seeds of plenty, seeds of want: social and economic implications of the green revolution*, 1980); D. Fitzgerald, 'Exporting American agriculture: the Rockefeller Foundation in Mexico, 1943–1953', *Social studies of science* 16 (1986), pp. 457–83; A. Gupta, *Postcolonial developments: agriculture in the making of modern India* (Durham, NC, Duke University Press, 1998); G. Hyden, *Beyond Ujamaa in Tanzania: underdevelopment and an uncaptured peasantry* (Berkeley, University of California Press, 1980).
- ⁴⁰ Marglin, 'Farmers, seedsmen, and scientists: systems of agriculture and systems of knowledge'.
- ⁴¹ P. McMichael, *Development and social change: a global perspective* (Thousand Oaks, CA, Pine Forge Press, 2004).
- ⁴² J.M. Cohen, S.B. Peterson and Harvard Institute for International Development, *Administrative decentralization: a new framework for improved governance, accountability, and performance* (Cambridge, MA, Harvard Institute for International Development Harvard University, 1997).
- ⁴³ M. Power, *The audit society: rituals of verification* (Oxford, Clarendon Press, 1997); R. Harper, *Inside the IMF: an ethnography of documents, technology and organisational action* (London, Academic Press, 1998); M. Strathern, 'The tyranny of transparency', *British educational research journal* 26 (2000), pp. 309–21; M. Strathern, ed., *Audit cultures: anthropological studies in accountability, ethics, and the academy* (New York, Routledge, 2000).
- ⁴⁴ M. Power, *The audit explosion* (London, Demos, 1994); M. Strathern, 'Bulletproofing: a tale from the U.K.', paper presented at 'Documents: artifacts of modern knowledge', Center for Law, Culture and Social Thought, Northwestern University 1999; A.R. Tenner and I.J. DeToro, *Total quality management: three steps to continuous improvement* (Reading, MA, Addison-Wesley, 1992). The parallels between contemporary managerial conceptions of 'improvement' and much older notions (discussed by Drayton, among others) deserve more analysis than this article permits.
- ⁴⁵ H. Tsoukas, 'The tyranny of light: the temptations and the paradoxes of the information society', *Futures* 29 (1997), pp. 827–43, p. 833.
- ⁴⁶ Tsoukas, 'Tyranny', p. 835.
- ⁴⁷ A. Hughes, 'Responsible retailers? Ethical trade and the strategic re-regulation of cross-continental food supply chains', in N. Fold and B. Pritchard, eds, *Cross-continental agri-food chains: structures, actors and dynamics in the global food system* (New York, Routledge, 2005).
- ⁴⁸ Strathern, 'Bulletproofing: a tale from the U.K.'.
- ⁴⁹ D.J. Dodge, *Agricultural policy and performance in Zambia: history, prospects, and proposals for change* (Berkeley, Institute of International Studies, University of California, 1977); K.P. Vickery, *Black and white in southern Zambia: the Tonga plateau economy and British imperialism, 1890–1939* (Westport, CO, Greenwood Press, 1986).
- ⁵⁰ M. Hardt and A. Negri, *Empire* (Cambridge, MA, Harvard University Press, 2000). On NGOs' use of the media to push for supermarket reform, see S. Freidberg, 'The ethical complex of corporate food power', *Environment and planning D: Society and space* 21 (2004).

- ⁵¹ G. Chemla, *Les ventres de Paris: les Halles, la Villette, Rungis: l'histoire du plus grand marché du monde* (Grenoble, Glénat, 1994).
- ⁵² S. Gatti, R. Green and M. Rodriguez-Zuniga, 'Contraintes réglementaires et logiques commerciales: le cas de France, de l'Italie et de l'Espagne', paper presented at 'Grande Distribution Alimentaire', Montpellier, France 1997.
- ⁵³ A. Seth and G. Randall, *The grocers: the rise and rise of the supermarket chains* (London, Kogan Page, 1999).
- ⁵⁴ G. Larmet, *L'Organisation des pratiques d'approvisionnement alimentaire* (Paris, Institut National de la Recherche Agronomique, 1999); C. Ducrocq, *Distribution alimentaire: enjeux stratégiques et perspectives 1994–1998* (Paris, Les Echos, 1996).
- ⁵⁵ A similar notion underlies the French system of geographic appellation labels, but that system presumes that, at least within France, the state has the expertise to decide whether food producers in a particular locality deserves to have their goods distinguished as *produits du terroir*; E. Barham, 'Translating terroir: the global challenge of French AOC labeling', *Journal of rural studies* 19 (2003), pp. 127–38.
- ⁵⁶ Interestingly, none of the French retailers belong to EurepGAP.
- ⁵⁷ EuropGap general regulations. EurepGAP's audit methods are themselves compliant with ISO Guide 65 ('General requirements for bodies operating product certification systems').
- ⁵⁸ All EurepGAP documents are available online at <http://www.eurep.org>
- ⁵⁹ H. Campbell, 'The rise and rise of EurepGAP: European (re)invention of colonial food relations?', *International journal of sociology of food and agriculture* 13 (2005), pp. 1–19.
- ⁶⁰ Foucault, *Discipline and punish*, p. 207.
- ⁶¹ Known as the Supplier Electronic Data Exchange (SEDEX), it's less an exchange than a one-way conduit. The information posted by participating suppliers 'can be accessed through the use of a password by any retailer with whom they have a trading relationship'; Hughes, 'Responsible retailers?'
- ⁶² Foucault, *Discipline and punish*, p. 185.
- ⁶³ D. O'Rourke, 'Monitoring the monitors: a critique of third-party labour monitoring', in R.O. Jenkins, R. Pearson and G. Seyfang, eds, *Corporate responsibility and labour rights: codes of conduct in the global economy* (London; Sterling, VA, Earthscan, 2002), pp. xvi, 232; Hughes, 'Multi-stakeholder approaches to ethical trade: towards a reorganization of U.K. retailers' global supply chains'.
- ⁶⁴ Freidberg, 'Cleaning up down South: supermarkets, ethical trade and African horticulture'; A. Du Toit, 'Ethical trading: a force for improvement, or corporate whitewash?', *ODI resource perspectives* (2001), pp. 1–4; Strathern, ed., *Audit cultures: anthropological studies in accountability, ethics, and the academy*.
- ⁶⁵ Speech delivered at the annual EurepGAP Conference, Madrid, 10–12 September 2003.
- ⁶⁶ R.O. Jenkins, R. Pearson and G. Seyfang, eds, *Corporate responsibility and labour rights: codes of conduct in the global economy*.
- ⁶⁷ Actor-network analyses show how such skills are needed to forge and maintain networks, commercial and otherwise; S. Whatmore and L. Thorne, 'Nourishing networks: alternative geographies of food', in D. Goodman and M. Watts, eds, *Globalising food: agrarian questions and global restructuring* (New York, Routledge, 1997), pp. 287–304; J. Law, 'On methods of long-distance control: vessels, navigation and the Portuguese route to India', *Sociological review monograph* 32 (1986), pp. 234–63.
- ⁶⁸ According to one British fresh produce importer, corresponding in 2004, the UK supermarkets' standards had become so arduous and costly that many suppliers were 'doing their sums . . . and finding the game is not worth playing.'

- ⁶⁹ E. Dunn, 'Trojan pig: paradoxes of food safety regulation', *Environment and planning A* 35 (2003), pp. 1493–1511.
- ⁷⁰ H. Saburi, 'Axe falls on two senior Agriflora directors', *Financial gazette*, 3 June 2004.
- ⁷¹ K. Chambwa, 'International standards were used in auditing Agriflora', *The Post* (Zambia) (Lusaka), 28 July 2004.
- ⁷² Office of Fair Trading, *The supermarkets code of practice* (London, Office of Fair Trading, 2004).
- ⁷³ B. Vorley and T. Fox, *Stakeholder accountability in the UK supermarket sector: final report of the 'Race to the Top' project* (London, International Institute for Environment and Development, 2004).
- ⁷⁴ An elaboration of this NGO viewpoint can be found in D. Eagleton, *Power hungry: six reasons to regulate global food corporations* (London, ActionAid, 2005).
- ⁷⁵ D. Neven and T. Reardon, 'The rise of Kenyan supermarkets and evolution of their horticulture product procurement systems: implications for agricultural diversification and smallholder market access programs', *Development policy review* 22 (2004), pp. 669–99; T. Reardon, P. Timmer, C. Barret and J. Berdegué, 'The rise of supermarkets in Africa, Asia and Latin America', *American journal of agricultural economics* 85 (2002), pp. 1140–6; L. Dries, T. Reardon and J. Swinnen, 'The rapid rise of supermarkets in Central and Eastern Europe: implications for the agrifood sector and rural development', *Development policy review* 22 (2004), pp. 525–56; B. Kathuri, 'New horticultural rules hurting smallholders', *The East African Standard* (Nairobi), 15 November 2004; J. Humphrey, 'Is commercial agriculture becoming too challenging for small farmers?', paper presented at 'Trading Morsels, Growing Hunger, Decimating Nature: Linking Food and Trade to Development and the Environment', Princeton Institute for International and Regional Studies, Princeton University, 24–26 February 2005.