


La Revue canadienne des
études sur l'alimentation



Canadian Food Studies

the journal of the Canadian Association for Food Studies
la revue de l'Association canadienne des études sur l'alimentation

A photograph of a person standing in a library or bookstore, surrounded by stacks of books. The person is wearing a dark vest over a white shirt and dark trousers. The books are stacked on shelves and on the floor, with some titles visible like 'THE KEY CONCEPTS OF FOOD', 'MEASURED MEALS', and 'HIVING'.

Vol 1 No 2 (2014)
BOOK REVIEWS
(and an event review!)

canadianfoodstudies.ca

c/o Department of Health Sciences
Lakehead University
955 Oliver Road
Thunder Bay (ON) P7B 5E1

ISSN: 2292-3071

IN THIS ISSUE

BOOK/ART/EVENT REVIEWS

Food Will Win the War: The Politics, Culture, and Science of Food on Canada's Home Front

Jennifer Brady

The Third Plate: Field Notes on the Future of Food

Sarah J Martin

Alternative Trade: Legacies for the Future by Gavin Fridell

Geoff Tansey

The Politics of the Pantry: Stories, food and social change

Jennifer Braun

Farmageddon: The True Cost of Cheap Meat

Rita Hansen Sterne

"Hedonistika-Montreal"

Pamela Honor Tudge

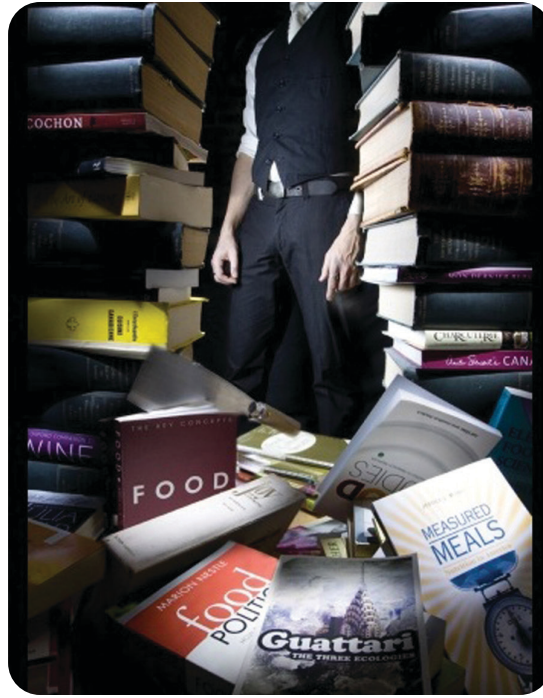
Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life

Bradley C Hiebert

The Ecological Hoofprint: The Global Burden of Industrial Agriculture

Haroon Akram-Lodhi





In response to a flurry of new books (and an art exhibition!) about food and food systems, this issue is entirely composed of reviews: *Food Will Win the War: The Politics, Culture, and Science of Food on Canada's Home Front* (Ian Mosby); *The Third Plate: Field Notes on the Future of Food* (Dan Barber); *Alternative Trade: Legacies for the Future* (Gavin Fridell); *The Politics of the Pantry: Stories, food and social change*

(Michael Mikulak); *Farmageddon: The True Cost of Cheap Meat* (Philip Lymbery & Isabel Oakeshott); *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life* (James Daschuk); *The Ecological Hoofprint: The Global Burden of Industrial Agriculture* (Tony Weis); and "Hedonistika-Montreal" (Montreal Museum of Contemporary Art).

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

**Food Will Win the War: The Politics, Culture, and Science
of Food on Canada's Home Front**

Ian Mosby

UBC Press, 2014: 268 pages

Review by Jennifer Brady (Queen's University)

When most of us think of Canadian history, particularly Canada's involvement in the Second World War, it is unlikely that food is what first comes to mind. However, Ian Mosby's new—and first—book *Food Will Win the War: The Politics, Culture, and Science of Food on Canada's Home Front* invites readers to consider the primacy of food in the war effort in Canada. Mosby's detailed and thoroughly researched account explores food as a material and symbolic resource that was instrumental in marshalling Canadians' support for the war. Mosby also shows how the social, political, and economic changes related to food shaped the everyday lives of Canadians—particularly Canadian women—throughout the Second World War. *Food Will Win the War* is an important volume that fills a significant gap in the small, but growing, literature on Canada's food history.

Mosby is currently a postdoctoral fellow in the L.R. Wilson Institute for Canadian History at McMaster University in Hamilton, Ontario. He completed his PhD in History at York University, in Toronto, Ontario. Mosby's other recent notable work includes a paper that received international attention and that reported on government sanctioned biomedical experimentation on Aboriginal adults and children throughout Northern Manitoba during the 1940s and 1950s (Mosby, 2013).

Mosby's book is based on his PhD dissertation and draws on extensive archival research to explore the ways in which food was mobilized by government, nutrition experts, and health professionals to rally Canadians' support for total war. His analysis also considers how concomitant shifts in ideas about food, nutrition, health, gender roles, private and public space, consumerism, citizenship, and expertise impacted Canadians' everyday experiences of procuring, preparing, and consuming food. The central argument of the book is not that food

“literally won the war,” but that food was central to shaping the emerging home front as well as a new and highly gendered ideal of the Canadian consumer citizen (6).

The first two chapters examine the ways and extent to which the government drew on food, and more specifically, new technologies of nutrition science to enlist Canadians—but women in particular—as educated, patriotic ‘Housoldiers’, for service on the home front. Chapters three and four look more closely at the changes in women’s domestic practices, which Mosby argues, were imagined through a discourse of sacrifice and patriotism and which were important more for their symbolic value in rallying support for the war effort. In the final chapter Mosby returns to the social and political changes brought with governmental interventions in Canadian food culture outlined in the first two chapters. In returning to the concerns presented in Chapters 1 and 2, Mosby situates his analysis in the broader context of the day to consider how nutrition science interpolated with wartime and early postwar debates about the social security programs that were established throughout the war.

This book would be of interest to scholars from a wide range of disciplinary and topical interests for research and teaching purposes. In addition to historians of food, war, or Canadian history, this volume is relevant to food studies scholars as well as those interested in sociological perspectives of the professions, expertise, and knowledge, critical nutrition studies, critical dietetics, women’s history, and the history of nutrition and Canadian food policy. Mosby’s accessible writing and the cogent narrative arc that develops throughout the chapters makes this a suitable volume for undergraduate readers or for those who are unfamiliar with the history of food, science, or nutrition in Canada, as well as established scholars with interests in the areas mentioned above.

Although the book has many strengths, the book falls short of fulfilling Mosby’s intention to look at Canadian women’s everyday lives “through the kitchen window” (15). Mosby notes that scholarship on Canadian women’s lives during the war has tended to focus on their roles in military or industrial work or other public roles. In contrast, one of Mosby’s primary goals is to elucidate the changes in women’s everyday lives and their experiences of food work brought by the social, political, and cultural exigencies of wartime. However, the book overall focuses heavily on the political structures that shaped women’s domestic roles and women’s entrance to public life by way of their involvement in community-based volunteer and advocacy work. Women’s personal, quotidian experiences of purchasing, preparing, eating, and feeding while coping with the social, ideological, political, and personal changes that took place throughout the war is largely left out of Mosby’s account, despite his intentions. Moreover, Mosby often makes reference to the influence of ‘nutrition experts’ but generally avoids distinguishing between the roles of the typically male scientists, researchers, and policy makers and the overwhelmingly female health professionals such as dietitians, home economists, social workers, and nurses in devising and implementing the policies and programs that led to governmental interventions and the wider political and social changes in Canada at this time.

Nevertheless, Mosby’s book makes an important contribution to the scholarship of food history in Canada and is an important resource for food studies scholars. *Food Will Win the War* sheds light not just on the food in Canada’s past, but provides important insights into the making of the contemporary Canadian foodscape.

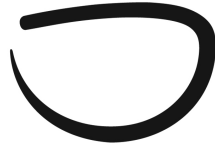
Jennifer Brady is a PhD Candidate in the School of Kinesiology and Health Studies at Queen's University. Her dissertation work takes a socio-historical perspective to explore the professionalization of dietetics as a feminized profession and its evolving relationships with

home economics, food, science, and feminism. More broadly her work spans critical feminist perspectives of gender, food, nutrition, fatness, and the body.

References

Mosby, I. (2013). Administering Colonial Science: Nutrition Research and Human Biomedical Experimentation in Aboriginal Communities and Residential Schools, 1942–1952. *Histoire sociale/Social History*, 46(91), 145-172.

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

The Third Plate: Field Notes on the Future of Food

Dan Barber

Penguin Press, 2014: 496 pages

Review by Sarah J. Martin (University of Waterloo)

Serving the Future of Food, One Plate at a Time

It is hard to avoid the question of the future of food these days. Filmmakers, scholars, activists and book authors are fretting over what is to be done. Joining the fray is Dan Barber, ‘chef activist’ at Blue Hill Restaurant at the Stone Barns Center for Food and Agriculture in Pocantico Hills, New York, and at Blue Hill New York City. His book, *The Third Plate* offers a culinary vision of the future where “the entirety of the landscape, and how it fits together” is served on a dinner plate (8). Barber has famously been a practitioner of the farm to table cooking, a cooking that is reliant on a host of farmers and chefs who work together to produce good food while also trying to make a living in two enterprises—farming and restaurants—that are famously money-losers.

By looking past the back door of his kitchen and into the fields, Barber rethinks what he serves to diners. He uses three dinner plates to work through where the industrial agriculture diet has come from and where it needs to go. The first plate is the restaurant meal of the past, a seven-ounce, corn-fed steak with steamed baby carrots. The second plate is the current idealized farm to table dinner, a local grass-fed steak with local, heirloom carrots grown organically. On the third plate—the future—a carrot ‘steak’ is served with a sauce of braised beef. Barber’s third plate is a thoughtfully crafted meal that is the essence of the sustainable landscape of the farms that serve his restaurant.

Barber is a terrific storyteller and he takes us on a series of field trips to landscapes where ‘nature’ does the work with the help of animal husbandry, farmers and fishers.¹ His wonder and

respect for the practitioners of the soil, sea and animals is infectious. He dreams of a future where ‘flavor drives genetics’, a future that he has seen and tasted on pilgrimage-like journeys to meet the people, animals and plants that ‘fit together’. For example, he shares the work, and wisdom of Klaas Martens, an organic grain farmer in Upstate New York, who moved from feeding animals to feeding people after experiencing pesticide poisoning. Barber also travels to Extremadura, Spain, where he introduces us to geese with ‘free will’, and their liberator, Eduardo Sousa. “To taste his foie gras is to kick-start a chain of understanding about geese, the ecology that supports them and the centuries-old culture that supports the whole system” (193-4).

The book is hopeful and ambitious, as are all spiritual books. Barber’s ambition is grounded in heroic parables, and is enlivened with quotes from American environmental philosophers—from Aldo Leopold to Wes Jackson—who envision a better future because, as Jackson states, “we are living in a fallen world” (176). In the end, the book is a call to move away from our fallen despoiled world of industrial food landscapes by walking, talking and reflecting with farmers. In turn, Barber aims to ‘narrate the message’ with the food on the plates he serves.

What is left off of Barber’s plates? Barber works in rarified landscapes: two high end restaurants, one in New York City and one at the Stone Barns Center for Food and Agriculture, which was established by a Rockefeller family donation (yes, the same Rockefellers who shaped US agriculture and promoted the Green Revolution abroad through their foundation). The depiction of heroic practitioners may help to engage one class of eaters, but it also leaves aside political contexts, and the complex interactions of state, capital and social relations that have facilitated industrial agriculture and ‘industrial diets’ (Winson, 2013). For example, Clapp (2014) reminds us that while we are fiddling with our carrot steak, food and agriculture are being shaped by new kinds of financial actors.

In my experience, the chefs of high-end restaurants have a narrow view of what is ‘good food’, even when practicing farm to table cooking. There are few Blue Hill restaurants in this world, and indeed not everyone wants Barber’s third plate. Eduardo Sousa rejected one of Barber’s dinner invitations and instead chose to tuck into the quintessential American food: a hamburger, fries and a coke in a diner across the street. Just as Barber ate the Extremadura landscape, Sousa ate the industrial agriculture landscape of the US. “The food Dan makes isn’t bad. But this is really *delicious*” (195). Fallen worlds have their pleasures.

Barber has pulled a series of stories together in order to paint a big picture of agricultural practices and what ends up on our plates. The work is engaging and a pleasure to read and I would recommend it with a few caveats. Of course no one book can offer the ‘future of food’ – there are many futures. What are the ways and mechanisms that will take us to a different future? Diverse experiences and practices can come together on plates, and there is no ‘best’ way. As Friedmann recently wrote in this journal (2014), there is not one path but many paths that come together to create foodsheds. Landscapes are important, but new ways, new cooks and new kinds of social relations—that are not exclusively elite—nourish what goes on our plates and into our bowls.

In the end, it is hard to fault Barber. There has always been nostalgia for the pastoral and rural idyll. He is a thoughtful, likable man on a mission who urges us to follow him to a sustainable, delicious future, all the while readily sharing his foibles and failures. However, it is important that we do not get too distracted by the beautiful small plates he serves up. The industrial diet has many resourceful supporters who are working hard to maintain the status quo.

Sarah J. Martin is a PhD candidate at the Balsillie School of International Affairs, University of Waterloo in Global Governance and Global Political Economy. Sarah's academic work is informed by her experiences as a cook and chef in a variety of settings from institutional cafeterias to high-end restaurants to remote logging camps.

References

- Clapp, J. (2014). Financialization, Distance and Global Food Politics. *Journal of Peasant Studies* 41 (1-2).
- Friedmann, H. (2014). Reflections on Foodsheds in Three Continents. *Canadian Food Studies / La Revue canadienne des études sur l'alimentation* 1(1): 4-9.
- Winson, Anthony. (2013). *The Industrial Diet: The Degradation of Food and the Struggle for Healthy Eating*. Vancouver: UBC Press.

¹ See Barber's talks at: https://www.ted.com/talks/dan_barber_s_surprising_foie_gras_parable and www.ted.com/talks/dan_barber_how_i_fell_in_love_with_a_fish

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

Alternative Trade – Legacies for the Future

Gavin Fridell

Fernwood Publishing, 2013: 176 pages

Review by Geoff Tansey

A long, long time ago, in a world where ‘free trade’ market fundamentalism was not the only economic religion, I helped start a journal called *Food Policy—economics, planning and politics of food and agriculture*. Well, actually, not that long ago, in the mid 1970s. It just seems a world away.

The journal’s sub-title betrays the fact that it was a different world. Governments had a role in planning for food and agriculture—what Fridell calls ‘the social regulation of agri-food commodities’. Issues to do with the most fundamental aspect of human well-being—the ability of everyone to eat a safe, secure, sufficient, nutritious diet—were not seen as something left to the mythical abstraction of ‘The Market’, but a matter of politics and power that shaped political economies and market structures.

The world had been on the brink of an intercontinental famine, and many had died in Africa from famine. Failed harvests and shifts in geo-politics had led to huge imports of grain by the then Soviet Union, prices soared, a world food conference was called and food issues were high on the political agenda. The price of oil had quadrupled in 1973 following OPEC’s action. Developing countries were calling for a New International Economic Order, but they lost. It was a world in which the topics of this book were an everyday fact of life, not a piece of, to some perhaps, rather weird history.

Gavin Fridell does us all a service in reminding us that—as the slogan has it—another world is possible. Indeed, existed. He begins by taking on the notion—or fantasy as he calls it—of ‘free trade’ as normal or an uncontested good or even a reality, rather than something usually of benefit only to the top dog. As the first director general of the World Trade Organisation—

Renato Ruggiero—noted, it is not a free trade organisation but a rules-based trading organisation. The question for the world is, does it have the right rules to deliver what, for whom? Fridell does note that the capitalist economy is entirely about state-imposed rules and regulations, crucially about private property rights—and today about abstractions such as ‘intellectual property’.

Fridell reviews three different alternative trade regimes—covering bananas, coffee and wheat—the latter through something familiar to most Canadian readers, the Canadian Wheat Board. He argues that three things define alternative trade—the use of state power to manage markets for broader social, economic and developmental ends; social regulation; and, a pro-poor agenda.

He does not argue that these different models are ideal but rather that they provide many lessons, both good and bad, “to learn from in charting and developing new and better alternatives to neoliberal capitalist globalization” (9). After a discussion of ‘free trade’ and alternative trade he looks at the rise and fall of the International Coffee Agreement, the Canadian Wheat Board, and the EU-Caribbean Banana Agreement. This leads to a brief discussion of a debate that took place among socialists in the 1980s—notably between Alex Nove, an early contributor to *Food Policy*, and Ernest Mandel—about the role of the market. He argues that the essential point for those interested in alternative trade is “not to assess the precise details of ‘market socialism versus planned socialism’ debate but, even more importantly, to recapture the *existence of the debate*” (128).

Such a debate must come to grips with three major issues according to Fridell—around the state, monopoly and social efficiency. On that latter score he argues that while ‘free trade’ can be economically efficient according to neoclassical economists’ own terms, it can also be highly “socially inefficient for society as a whole” (139). All three of the alternative regimes he discusses “captured greater value along the global value chain in the hand of farmers, both large and small” (140).

The benefits of learning from the old and developing new alternative trade models could be both from a broader distribution of wealth and better functioning states for the majority of people. To get there requires a diversity of practice, and understanding the lessons of past experiences. This book should help those seeking to make it happen.

Geoff Tansey works for fair, healthy and sustainable food systems as an independent writer and consultant. He is a member and a trustee of The Food Ethics Council. His books include [The Food System: a guide](#) (with Tony Worsley) and co-editorship of [The future control of food - A guide to international negotiations and rules on intellectual property, biodiversity and food security](#). He is currently setting up an open access, on-line ‘[virtual academy](#)’ of keynote talks around transforming our food systems. Get [Food and thriving people: Paradigm shifts for fair and sustainable food systems](#).

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

The Politics of the Pantry: Stories, food and social change

Michael Mikulak

McGill-Queen's University Press, 2013: 268 pages

Review by Jennifer Braun (University of Alberta)

There is no shortage of books, magazines, lifestyle shows, and academic texts that have something to say about what, where, how, and with whom we should eat. In his book *The Politics of the Pantry*, Michael Mikulak critically engages with this *storied food*, a genre of literature, film, and new media that attempts to reveal the “truth” behind the veil of food and the hidden worlds of agriculture. He does so in order to take up key issues and ideas related to food, global warming, and the future of the economy that has been examined in popular texts and mainstream media. His book is “an attempt to understand how we got here, where we are going, and how we can get somewhere else” (24). Throughout the book Mikulak weaves personal stories and anecdotes related to his journey with local food that informs and enlivens his academic theory and analysis, attempting to rupture the literary boundary between prose and academic inquiry. He knits together an optimism about the power of pantry politics with a more reflexive and realistic picture of the major stumbling blocks the alternative food movement often faces.

In the most theoretically dense first chapter, he provides a survey of environmentalism over the last four decades, specifically focusing on the tension between economic and non-economic representations of nature. The tension between these two value systems is viewed as a crucial site of struggle in the coming decades, as humanity attempts to restructure production and consumption along less socially and ecologically destructive paths. Using the examples of industrial organic agriculture, vertical farming, and ecological economics, Mikulak considers the different stories about “how we got here and where we are going” (23). Particularly interesting

is his discussion of the wide ranges of responses to the environmental crisis that these stories animate—ecological modernization, techno-utopian, and apocalyptic—and the relationship between capitalism, growth, and economic arguments.

Chapter two enquires into the stories that get told about food, popular accounts that attempt to ‘lift the veil’ on the industrial food system. This includes works by Michael Pollan, Barbara Kingsolver, Jamie Oliver, Robert Kenner, Carl Honore, and other popular authors and filmmakers. Interestingly, he breaks down the food literature genre into sub-genres—the commodity biography, nostalgic pastoralism, utopian pastoralism, and the foodshed memoir—to consider what each of them brings to an understanding of production and consumption, knowledge, and agency in relation to capitalism. Mikulak pays special attention to the role of food experiments and life writing, and the autobiographical nature of many of the texts (including his own), arguing that they can serve as a navigational tool that allows the authors to traverse the space of what he calls “the utopian leap” (23).

In the third and final chapter we see Mikulak work through his own embodied attempts to become a locavore in his foodshed located in Hamilton, Ontario. He does this in an effort to demonstrate how food can become both a subject and object of knowledge. This chapter is the most experimental as he tries to reconcile his own experiences while looking “squarely at some of the contradictions of scale and scope, class, gender, and access” (23) in the alternative food movement. One of the most important aspects of this embodiment and enchantment that he experiences—like some other food writers—is the ways in which it opens up time and space for alternative value practices and utopian thinking to germinate. Referring back to the different storied food examples from the previous chapter, along with his own, and their contribution to new ways of imagining and embodying alternative food practices, Mikulak expertly weaves together a story of tremendous hope that falls nothing short of inspiring—upon first reading. “Without hope for a better world, without the small moments of micro-utopian practice that build upon the pleasures of everyday life, the soil will not be ready for future harvest” (23).

To his credit, Mikulak undertakes a very difficult and tenuous task by trying to bridge elements of the popular imaginary on food and academic analysis, by showing how the two combine to contribute to a more robust, hopeful and sustainable future. He draws strong connections between responses to the environmental crisis articulated in chapter one, and their effect on popular writing and media on food articulated in chapter two. His writing has an almost enchanting quality to it; everything is written with an expressive and inspiring flare, lined with rich descriptions and articulate observations. It is not hard if you are a middle class, well-educated, and burgeoning “foodie” to be enthralled and inspired by this book. On the surface, it makes sense; it is a thoughtful and earnestly written narrative that conveys the tremendous value of storied food, personal experience, embodiment, and imagination in rewriting and re-envisioning a better future for food.

On the flip side, however, there are some substantial gaps that left his analysis somewhat wanting. Mikulak makes several references to the social justice side of alternative food as part of pantry politics. While he does an adequate job of naming mainstream critiques of the food

literature and alternative food movement on issues of race, class, gender, and scale, for example, his analysis never moves beyond that descriptive position. He skirts these issues without directly engaging with them and the implications they carry for thinking about the future of food. Similarly, in the third chapter, Mikulak claims to squarely address issues of scale, class, gender, race, and access in his own food experiments and in the larger food context, but in many ways does not really accomplish this goal in any substantive or compelling way. He acknowledges that they exist, but does not include an indication to the reader how they fit within the larger 'politics' of the politics of the pantry. These are political issues that require a new 'utopian imaginary' because they continue to haunt scholars, policy makers, and activists alike. This is not to say that he should have come up with some sort of prescriptive set of guidelines or policies to address the very gendered, classed, and raced nature of the alternative food movement. Rather, as part of the task of reimagining and traversing utopian terrains of alternative food, it would have been fitting to see more of a struggle and direct engagement with the very real barriers and impasses impeding the 'utopian ideal' to the food system that he so eloquently describes.

It is difficult to accurately pinpoint the audience for which this book is intended and well suited, an indication that it was probably meant for a diverse set of readers. In one stream, it leans more toward a lay person or popular readership, as it requires a substantial knowledge of pop culture figures in the food arena. However, it provides a substantial theoretical bent in its analysis, moving it more towards the academic crowd. This might be an excellent undergraduate text to introduce concepts like ecological modernization, green capitalism, greening of capitalism, and their relation to the food movement. It provides an excellent basic analysis and mainstream critique of food writing, which would also be well suited for an undergraduate setting. His book is an interesting and creative attempt to bridge some of the narratives of the popular food literature genre with a more thorough theoretical and analytical base, bringing into conversation two diverging sets of readership in an effort to imagine and inspire a different vision for the future of food.

Jennifer Braun is a PhD student in the Department of Sociology at the University of Alberta. Her current research interests include: the social construction of motherhood, childhood health, and childhood obesity in developed nations; and the role of rural farmwomen and hierarchies of power in the production and distribution of food (particularly in the Western Canadian prairie provinces). Her current supervisors are Dr. Mary Beckie and Dr. Ken Caine at the U of A. When she is not busying studying, Jen enjoys cooking delicious food, biking, swimming, and spending time with family.

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

Farmageddon: The True Cost of Cheap Meat

Philip Lymbery and Isabel Oakeshott

Penguin Canada, 2014: 448 pages

Review by Rita Hansen Sterne (University of Guelph)

Food systems include many issues interconnected through complex relationships. Some writers examine one part of the food system in depth but—from my perspective as a management student—a strength of *Farmageddon: The True Cost of Cheap Meat* is that it examines food systems by systematically connecting a broad set of issues in its analysis of the widespread adoption of the industrial farming model. This model, the authors argue, requires vast tracts of arable land, makes broad and lifelong use of antibiotics in farm animals to minimize disease and encourage rapid growth, and promotes an increasing use of grain for animal feed rather than for human consumption. Throughout the book, the authors share evidence in an effort to encourage consumers to reflect on the implications of the system we support when purchasing our meat cheaply. The authors have written this book from their experiences as animal welfare activists for a broad audience, but focus their attention on costs that have been unaccounted for in the industrial food system.

The book is divided into sections about the natural environment, public health, animal “muck” (effluent or waste), and land and sea resource scarcity. The authors pull together their arguments by discussing industrial farming with respect to genetically-modified food, the nature of power in the market system that controls most food globally, and by discussing food ingredients and food waste in a surprisingly short chapter. The book closes with a roadmap of how consumer power of those with compassion could make choices that would subvert the dominant model of animal farming, and the authors share advice about how to navigate labelling language and avoid purchasing factory farmed meat. The book is directed at US, EU and UK consumers, in particular, although the authors offer examples from other countries in the book.

Strengths of the book include the approachable writing style, the compelling stories told by the authors about their past experiences, and the authors' ability to connect complex issues so the reader understands the interconnectedness of many elements of a food system. One discussion that may leave readers with a question is in the final chapter when the authors discuss environmentally friendly farms. They ask if an environmentally friendly model could be scaled up—and provide the opinion that scaling up tenfold (336) is possible. This suggests that scale is desirable, despite earlier insistence that low animal welfare potential is a direct and integral part of larger scale systems (123). They elsewhere suggest that production of livestock at scale is problematic because it requires a large amount of land to feed and house a large number of animals on one site, requires significant quantities of water, produces large amounts of animal waste, and leads to the widespread use of antibiotics. They introduce a large gray area when they fail to define environmentally friendly scaling up with precision, relying instead on the observation “there’s big and there’s global” (336).

The authors suggest three principles to guide consumer decision-making to subvert the industrial model: putting people first, reducing food waste, and farming like tomorrow matters. However, what the authors mean by the words ‘like tomorrow matters’ is never completely clear, and the reader must make assumptions. It appears that the authors assume that industrial scale farmers are compelled to conduct their business without concern for the future and that all of these farmers have similar values. This principle could have been made more understandable to readers by directly referring to the concept of sustainability for future generations (Brundtland, 1987), and the need to keep a balance in our economic, social and natural settings when farming animals.

In their closing chapter, the authors remind readers that issues raised in the book echo those raised 50 years ago by *Silent Spring* (Carson, 1994). Why did we not learn lessons from the past? How could we not have understood what industrial farming models would mean to our health and to the physical environment? The authors also note Albert Schweitzer’s lament that humans have lost the ability to foresee or forestall and suggest that we need these skills to avoid a catastrophe. Some would argue it is doubtful that we ever had an ability to *foresee* the long term impact of our decisions; in fact, humans often fail miserably when making decisions, as the authors point out in various examples throughout the book (for example, Mao’s war on a grain-eating birds in China that decimated the sparrow population). Management scholars learn that, when faced with an overwhelmingly complex problem with implications that are not immediate or with a time shortage, the human brain tends to simplify problems, erroneously frame issues (Kahneman & Tversky, 1979), or take short-cuts and use decision making rules. These decision heuristics and biases—that are part of our brains—undoubtedly underpin our failure to forestall and our failure to foresee.

The authors, however, present hope for healthier animal farming from a surprising source. Based on conversations with business leaders, for-profit organizations are presented as actors that can affect change because they can move more quickly than governments and they have power in existing market structures. The authors quote a retiring farmer who argues that

farming should be seen as an “art and a responsibility” (229) . It is interesting to note the similarity of this comment to those who challenge traditional approaches to business management and compare managers to artists (Adler, 2006; Mintzberg, 2013) who practice a craft. By suggesting that we question our roles, be it in corporations, as animal activists, as consumers, or as farmers, the authors have reminded readers that we must solve complex problems as a creative team—even when we understand problems from different points of view.

Rita Hansen Sterne is a PhD (Mgmt) Candidate in the College of Management and Economics at the University of Guelph; her doctoral thesis will describe capabilities of Ontario food processors in highly regulated competitive environments. While she is a student of management, Rita's interest in food arises from her curiosity to understand food systems from multiple perspectives and from her belief that creative and meaningful collaboration is critical to meeting food systems challenges.

References

- Adler, N. J. (2006). The Arts and Leadership: Now That We Can Do Anything, What Will We Do? *Academy of Management Learning & Education*, 5(4), 486-499.
- Brundtland, G. H. (1987). World Commission on Environment and Development (WCED): Our Common Future. Oxford.
- Carson, R. (1994). *Silent Spring*. Boston: Houghton Mifflin.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263-291.
- Lymbery, P., & Oakeshott, I. (2014). *Farmageddon: The True Cost of Cheap Meat*. London: Bloomsbury.
- Mintzberg, H. (2013). *Simply Managing*. San Francisco: Berrett-Koehler Publishers, Inc.

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Exhibit Review

Hedonistika-Montreal

Natalie Doonan, Ken Gregory, Stefani Bardin, Simon Laroche and David Szanto. (2014). In International Digital Arts Biennial. Curators Simon Laroche & Jane Tingley. Montreal, Quebec: Musée D'art Contemporain De Montréal, May 23-30th 2014.

Review by Pamela Honor Tudge (Concordia University)

When food, art, and machines clash in a gallery you have *Hedonistika*. Part food and part robotic exhibition curators Simon Laroche and Jane Tingley tackle the connections between food and technology with the aesthetics of digital art. On offer was a 3D printer providing you with an edible *memento mori*, a screening of a human GI tract digesting processed food, and a robot that feeds willing visitors. The three installations were created across three teams composed of food scholars, artists, and roboticists.

Hedonistika-Montreal was presented at the Musée d'art contemporain (MAC) during the BIAN (International Digital Arts Festival). Hedonistika-Montréal was invited to build on the festival's theme Physical/ité. In this two-part theme 'physical and physicalité, the festival explored the increasingly complex connections between humans and machines with the practice of visualizing the invisible. Though food is at once a material and a bodily experience ripe for making visible, *Hedonistika* was the only BIAN exhibit to use food as a mode for interrogation, providing a unique space for expressing food issues and conveying the festival's theme.

The Bliss Point by Natalie Doonan, a food scholar and artist, and Ken Gregory, a robotics artist, focused on the production and consumption of sugar. The most conspicuous piece in this installation was the 'homemade' 3D printer operated by the two artists dressed in white lab coats. The printer constructed sweet and colorful faces, representing a 'candy factory'. At the candy factory, visitors' heads were scanned into a computer using facial recognition software and the 3D printer produced a replica of the scanned face in a sugar and food coloring mix. According to the two artists, the replicas were a *memento mori*, a symbolic reminder of our own mortality in the form of a sugary death mask—and perhaps sugar's contribution to this end. Alongside the 3D printer, exhibit cases—modeled after specimen displays in a 19th century

museum—presented physical pieces of sugar in its different forms alongside information on the history of sugar cane, highlighting the colonial context and health concerns around obesity and diabetes. The intent with the installation is to contrast our love of sugar as a source of pleasure against corporate manipulation that pushes sugar more and more into our bodies. The candy factory, with lab coats and machines lured me in immediately; the display cases took more effort to engage with despite the well-placed information. Like so many others in our society, I was more drawn to the pleasure side of sugar.



Picture 1: The Bliss Point, Photo by Jane Tingley

M2A: The Fantastic Voyage by artist Stefani Bardin and gastroenterologist Dr. Braden Kuo dealt with the difference between *processed* foods and *whole* foods. A monitor displayed images of the inside of a gastrointestinal tract through the use of a Pill Cam — a wireless device that, once swallowed, transmits a live video feed of the digestion process. In this case, a volunteer consumed store-bought Gatorade, ramen, and gummy bears and later a homemade version of each. At the exhibition, the monitor split the screen to contrast the recorded videos, showing the GI tract digesting processed foods versus whole foods. The implications of the two images is probably much more evident to a trained doctor or gastroenterologist—such as Dr. Kuo—yet even my naive eye could detect that there was a difference. Supporting the differences between the two digestive processes was the impressive display of specimen jars lined up the gallery wall. Each jar contained an ingredient. Obvious was the considerably longer line of jars containing the processed ingredients. From the gallery floor, peering up, I saw the jars were filled with many different brightly colored powdered substances. Contrasting with this line was

the whole food ingredients, with only a few jars and more recognizable ingredients. Although concerns around processed foods are not new, within a gallery space the exhibit offers something beyond information, a potent visual take-away.



Picture 2: M2A: The Fantastic Voyage, Photo by Jane Tingley

Orchestrer la perte/Perpetual Demotion by robotics artist **Simon Laroche** and food scholar and artist **David Szanto** features a shiny robot, spoons filled with different kinds of paste, and a human ‘slave’. A ‘slave’ as the artists label their human helper was an unnamed and silent woman, who’s function was to serve the robot spoons of paste for each new participant. The robot was attached to the wall and equipped to recognize your facial features, pick up a spoon and move the spoon of paste towards your mouth. The robot had a video camera to live stream or record the interaction from the robot’s perspective as it fed the brave gallery visitors. The pastes were administered with no choice and without any ingredient list. I was surprised at the opening night, how many people lined up to try the paste. My own attempt took a couple tries as my apprehension to what I was about to taste caused the robot to miss my mouth—not unlike a parent missing a child’s closed mouth. Finally, I gave in and tasted an unexplainable mix of sweet and salty with a little bit of textured food substance. The ingredient list was unknown to visitors—it was necessary to completely succumb to the robot to find out what was on offer. Hence, the installation’s name refers to the interaction as a form of human demotion—an unsettling loss of control to a non-human caregiver while receiving potentially nourishing food.

Picture 3: Orchestrer la perte/Perpetual Demotion, Photo by Lora Baiocco



Hedonistika-Montreal was one of those hybrid moments that food studies scholars need to take note of as we look for innovative ways to develop and communicate our work. From an art perspective, this exhibit moved beyond the visual to an experiential event—illuminating the prospective physical nature of technology and digital art. For food scholars and researchers the exhibit presented a refreshing way to untangle the messiness of food—placing food within technology and then pulling it all apart again.

Stay tuned as Hedonistika organizers take the festival to new locations with different teams; hence there is much more to come for this robotic, food, technology art mash-up. For more information check out: <http://bianmontreal.ca/en/calendar/hedonistika-montreal> and <http://www.hedonistika.com/>

Pamela Honor Tudge is currently at Concordia University in the Interdisciplinary program as a PhD student in Fine Arts. Her focus currently is on food movements and the built environment in Canada. Pamela holds an MA from UBC, where she completed a thesis that examined the use of media with small-scale farmers. She has worked and researched in food studies and environmental studies for over 12 years, focusing in climate change policy, local food systems, Indigenous food systems and DIY media and mapping.

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life

James Daschuk

University of Regina Press, 2013: 318 pages

Review by Bradley C. Hiebert (Queen's University)

At a time when Indigenous hunger and strife is gaining public attention in Canada, James Daschuk's book *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life* (2013) provides a necessary glimpse into the issue's deep-seated roots. Now a professor at University of Regina specializing historical Indigenous research, Daschuk has published a number of works regarding the health of First Nations peoples of the Canadian Plains (Daschuk, Hackett, & MacNeill, 2006; Daschuk, 2008, 2009). Compiled as part of his doctoral research, *Clearing the Plains* succinctly consolidates a breadth of ostensibly buried Canadian historical literature to reveal the true nature of Canada's Midwest settlement, while depicting monopolization's devastating effects on marginalized populations in the process. It outlines Indigenous food-related health outcomes caused by contact during inter-tribal territorial conflicts, relationships with early European traders and explorers, and the extensive relationship between Indigenous Peoples and Hudson Bay Company up to the late 1800s. The tuberculosis epidemics caused by such interactions between the 15th and 17th centuries are acknowledged as natural and unfortunate side effects of population expansion, which sets Daschuk up to highlight the barbaric roots of Indigenous tuberculosis during the late 1700s and 1800s. He reveals methods used by the Dominion of Canada throughout the 18th and 19th centuries to starve the First Nations peoples of the Prairies into chronic sickness and death, eroding their population to ensure compliance with Canada's westward expansion. During this period, starvation and chronic illness had become so prevalent in First Nations populations that physicians believed tuberculosis was hereditary among the Plains Cree. By continuously comparing Indigenous tuberculosis rates prior to, and during, the Indian Treaty Era, Daschuk brilliantly demonstrates food's historical significance as a weapon of attempted ethnocide and its lasting impact on Indigenous subjugation.

Daschuk describes how the Dominion used food to coerce tribes struggling with famine and tuberculosis into signing Indian Act treaties (114) and move onto Dominion-controlled Indian Reserves. Once on reserves, Canadian authorities withheld food from starving First Nations tribes, claiming they had to "earn" their meals through labour; a cost-saving practice that directly contradicted terms outlined in Indian Treaties. The meagre food First Nations peoples did receive was often tainted or expired (116), which compounded lingering tuberculosis issues. Attempts in the late 1800s to force on-reserve First Nations to subsistence farm allowed the government to fully isolate them from an emerging agrarian economy (160). They were barred from trading their food off reserve to preserve new settlers' economic opportunities and chances of success on the prairies, which further alienated the First Nations from the emerging culture and solidified their position as The Other in the Canadian Prairies.

Furthermore, *Clearing the Plains* highlights how the commodification of a determinant of health results in adverse outcomes for marginalized populations due to monopolization and greed within the dominant group. The prevalence of food contracts between the Canadian government and American wholesale distributors are described as 'big business', with distributors often dictating the price; government expenditures for food relief to treaty populations nearly quadrupled between 1880 and 1882 (128). However, corrupt government officials barred hungry and tuberculosis-infected First Nations families from accessing relief supplies and the majority of orders were stockpiled in warehouses until they spoiled. These power abuses by Canadian government officials exacerbated tuberculosis outbreaks and famine among treaty First Nations populations. In contrast to the plains tribes who had entered into treaties and subsequently rebelled in 1885 due to subjugation and mistreatment, the Dakota were self-sufficient and economically autonomous (125). Maintaining their autonomy allowed the Dakota to avoid famine and tuberculosis outbreaks by controlling their own food. Without the need to rely on government assistance—and corporate procurement contracts—they also avoided barbaric starvation practices legalized under the Indian Act. In essence, the Dakota were reminiscent of First Nations tribes pre-colonization: they supplied their own food, hunted and farmed according to tradition, and managed their own trade and economy. Therefore, contrasting the Dakota and treaty First Nations not only exposes the danger associated with entering Treaties, but also condemns the monopolization of food as a tool for cultural subjugation.

As Daschuk describes, media coverage of the First Nations' rebellion in 1885 ignored Indigenous deaths caused by government corruption and embellished white deaths as acts of Indian savagery (156). Skewed media portrayal was crucial to Other the First Nations and establish their supposed savageness; this was a widespread practice during Canada's settlement which exists more discreetly in the 21st century (Anderson & Robertson, 2011). By including media coverage of Indigenous starvation and disease, Daschuk allows the reader to easily compare centuries old issues to those of modern Canada. For example, in December 2012 Theresa Spence—a chief from Attawapiskat First Nation—staged a hunger protest to gain public awareness of the deplorable conditions her community experienced and the government's inaction to alleviate them. Her claims echoed one of Daschuk's main arguments, that food must not be used to manipulate First Nations populations and cast them as The Other.

One weakness of *Clearing the Plains* is the limited comparison to other Canadian interactions with Indigenous populations, which could have created a more complete image of Canada's history of racial subjugation. However, one of the book's strongest features is Daschuk's ability to compile archived documents into a form of narrative for the Canadian Prairies. As opposed to traditional historical texts composed of a litany of chronological facts, his

book is incredibly readable and at times the readers may find themselves forgetting they are reading a historical piece. This aspect will allow his book to be appreciated by any audience – although some prior knowledge of Canadian history would be beneficial. After reading *Clearing the Plains* it becomes evident to the reader that the Indigenous hunger issues reported in Canadian media in the 21st century are not new phenomena, and are deeply rooted in centuries of cultural subjugation, manipulation and attempted extermination.

Bradley C. Hiebert is a doctoral student in Health Information Sciences at The University of Western Ontario investigating health and healthy policy in rural Ontario. His Master's research focused on Indigenous food insecurity issues in the Arctic and their coverage by national media. More broadly he is interested in the intersection of healthy policies, dietary behaviour and discourse.

References

- Anderson, M. C., & Robertson, C. L. (2011). *Seeing red: A history of natives in Canadian newspapers*. Winnipeg, MB: University of Manitoba Press.
- Daschuk, J. (2008). An examination of common and contested ground: A human and environmental history of the Northwestern plains. In G. P. Marchildon (Ed.), *The Early Northwest: History of the Prairie West Series. Volume 1*. (pp. 35–47). Regina: Canadian Plains Research Center.
- Daschuk, J. (2009). A Dry Oasis: The northern great plains in late prehistory. *Prairie Forum*, 34.
- Daschuk, J. (2013). *Clearing the plains: Disease, politics of starvation, and the loss of aboriginal life*. Regina: University of Regina Press.
- Daschuk, J., Hackett, P., & MacNeill, S. D. (2006). Treaties and tuberculosis: First nations people in late 19th century western Canada, a political and economic transformation. *Canadian Bulletin of the History of Medicine*, 23, 307–330.

Canadian Food Studies

La Revue canadienne des
études sur l'alimentation

Book Review

**The Ecological Hoofprint: The Global Burden of
Industrial Agriculture**

Tony Weis

Zed Books, 2013: 188 pages

Review by A. Haroon Akram-Lodhi (Trent University)

When global food prices spiked upwards in 2007, the popular press explained the spike, in part, by rising demand for meat in rapidly-growing 'emerging markets' such as India and South Africa (Akram-Lodhi, 2012). Such an explanation was palpably wrong: people in rich countries consume more than three times as much meat, and more than four times as much dairy, as people in developing countries, with Americans consuming 121 kilograms of meat per person per year while South Asians and Africans consume, on average, 18 kilograms and 7 kilograms, respectively, per person per year (84). Thus, in 2010 countries with 12 per cent of the world's population consumed nearly one third of global meat consumption, while countries with a little under half the world population consumed 16 per cent of meat consumption. Moreover, in the now-classic *Diet for a Small Planet*, Francis Moore Lappé famously argued that meat production is a 'reverse protein factory': that, in 1982, "for every 16 pounds of grain and soy fed to beef cattle in the United States we only get 1 pound back in meat on our plates" (Lappé, 1991, p. 69). Those 16 pounds of grain had 21 times more calories and 8 times more protein, but only 3 times more fat, than a pound of ground beef. While other forms of livestock were relatively better in converting grain into meat, they were still inefficient ways of obtaining calories and protein, with pigs consuming 6 and chickens consuming 3 pounds of grain and soy respectively to produce 1 pound of meat. At the same time, it takes an average of 28 calories of fossil fuel energy to produce 1 calorie of meat protein for human consumption but only takes only 3.3 calories of fossil fuel energy to produce 1 calorie of protein from grain for human consumption (Pimentel & Pimentel, 2003). Thus, not only is the distribution of global meat consumption an exhibit *par excellence* of global inequality, but feeding grain to animals as a means of obtaining calories and protein is a very inefficient way of producing calories and protein.

The great merit of Tony Weis' excellent *The Ecological Hoofprint: The Global Burden of Industrial Agriculture* is that it offers a highly readable, tightly-argued structural analysis of the contemporary world food system, predicated as it is on both inequality and inefficiency. The introduction lays out the central argument of the book: that the historically unprecedented and rapidly-expanding 'meatification' of diets is not "natural, inevitable or benign" (4) but is integral to a "dominant system of agriculture across the temperate world" in which "the biological and physical foundations of agriculture are being rapidly undermined...in ways that hinge upon the unsustainable use of non-renewable resources" (8). Aggressively challenging Malthusian tropes, Chapter 1 situates the argument within the reorganization of ecosystems by humans that has occurred during the history of human activity on the planet—the so-called 'Anthropocene'—and the more recent crisis of both biodiversity and climate change that human activity has engendered. This is explained conceptually—but not exclusively—through an approach that synthesizes John Bellamy Foster (2002) and Jason W. Moore (2011), who both argue that the systemic market imperatives of an increasingly globalized capitalist world-ecology shape the appropriation and use of resources and organize nature in order to facilitate ongoing capital accumulation. Introducing the concept of the ecological footprint as a way of articulating social inequality with environmental degradation, Weis then transposes 'hooves onto feet' (10) as a means of centering the discussion upon industrial livestock production and consumption and its implications for inequality and ecology. Chapter 2 reviews the scale, growth and inequality of meat consumption, arguing that meatification has come to be viewed as integral to capitalist modernization and a milestone of development. Tracing the outward expansion of meatification from late medieval Europe through colonial frontiers to the United States' west, Weis centrally argues that "soaring livestock production and consumption...were driven...by the economic pressure to expand the scope for capital accumulation in agriculture and food" (71). Challenging nutritional claims about meat consumption, Weis instead shows how the disposal of food surpluses in the global centers of grain production led to an increased dependence on cheap grain imports in developing countries that reconfigured agriculture, eroded production for domestic markets, and fostered a neo-liberal agricultural export bias (Akram-Lodhi & Kay, 2009, p. 320) that led to a continued "race up the animal protein ladder" (81) as high mass consumption was equated with high meat consumption.

Weis then reviews the changing contemporary uneven geography of meat. Chapter 3 begins by examining tendencies in industrial agriculture towards mechanization, standardization and simplification, which in turn produce biophysical instabilities, which are in turn overridden by industrial inputs into agriculture, which in turn but reinforce the aforementioned tendencies of industrial agriculture. Weis' specific focus is on the grain and oilseed monocultures that linearly and inefficiently feed into industrial livestock, and which are captured in one of Weis' central contributions to contemporary food studies, the concept of the industrial grain-oilseed-livestock complex. The key point here is that industrial livestock, by simultaneously magnifying monocultures and centralizing factory farms and feedlots, generate heavy "resource budgets and pollution loads...[that] converge as part of a unitary complex of production" (128). The ecological hoofprint that results is confronted in Chapter 4, as the ecological consequences, health impacts, dehumanizing employment practices and "scale and nature of violence in this system" results in ongoing meatification threatening "the very biophysical basis of agriculture" (12), a threat that cannot be resolved by the science and technology that propels incessant growth and capital accumulation. There is, Weis argues, the need for a 'de-meatification imperative' (150) which would challenge the 'commodity fetishism' around meat, "which is widely perceived

as a desirable object while little or no thought is given to the nature of its production” (154), and which would result, minimally, in greatly reduced meat consumption and far greater attention being paid to the humane and ethical treatment of animals.

Tony Weis is already extremely well-known for his (2007) *The Global Food Economy: The Battle for the Future of Farming*. That was a very good book indeed; but if anything, *The Ecological Hoofprint* is even better. In a comparatively short, thoroughly-researched and easy to read book that will appeal to students, activists, academics and concerned citizens, Weis convincingly demonstrates that global meat consumption is qualitatively different in the 21st century: that it is an outcome of a process of the capitalization of agriculture in which the accumulation imperative has significantly contributed to deepening global inequality, without regard for the nutritional or ecological implications of increased meat production and consumption, while consciously and deliberately removing from sight the extreme cruelty and violence that lies at the heart of global industrial livestock production. As Bekoff (2007) has stressed, a reduction of meat consumption by 10 per cent would result in at least 12 million more tons of grain being available for human consumption, which could feed the 60 million people around the world that starve to death each and every year. Thus, in the 21st century, the act of meat consumption is now a highly politicized act, an act whose structural foundations are laid bare in Tony Weis' remarkable *The Ecological Hoofprint: The Global Burden of Industrial Agriculture*.

A. Haroon Akram-Lodhi is Professor and Chair in the Department of International Development Studies at Trent University in Peterborough, Canada and the Editor-in-Chief of the Canadian Journal of Development Studies.

References

- Akram-Lodhi, A.H. (2012). Contextualizing land grabbing: Contemporary land deals, the global subsistence crisis and the world food system. *Canadian Journal of Development Studies*, 33(2): 119–142.
- Akram-Lodhi, A.H. & Kay, C. (2009). Neoliberal globalization, the traits of rural accumulation and rural politics: The agrarian question in the twenty-first century. In A.H. Akram-Lodhi and C. Kay, (eds.) *Peasants and Globalization: Political Economy, Rural Transformation and the Agrarian Question*. New York: Routledge.
- Bekoff, M. (2007). *Animals matter: A biologist explains why we should treat animals with compassion and respect*. Boston: Shambhala Publications Inc.
- Foster, J.B. (2002). *Ecology against capitalism*. New York: Monthly Review Press.
- Lappé, F.M. (1991). *Diet for a small planet* (20th anniversary edition). New York: Ballantine Books.

Moore, J. W. (2011). Transcending the metabolic rift: A theory of crises in the capitalist world-ecology. *Journal of Peasant Studies*, 38(1): 1–46.

Pimentel, D. & Pimentel, M. (2003). Sustainability of meat-based and plant-based diets and the environment. *The American Journal of Clinical Nutrition*, 78(3): 6605–6635.

Weis, T. (2007). *The global food economy: The battle for the future of farming*. New York: Zed Press.

Canadian Food Studies



La Revue canadienne des
études sur l'alimentation

c/o Department of Health Sciences

Lakehead University

955 Oliver Road

Thunder Bay (ON) P7B 5E1

ISSN: 2292-3071

canadianfoodstudies.ca