

Wet Dreams: Ideology and the Debates Over Canadian Water Exports*

By Andrew Biro

GITTES: "Then why are you doing it? How much better can you eat? What can you buy that you can't already afford?"

CROSS: "The future, Mr. Gittes — the future."

-*Chinatown*

1. Introduction

Citing a Hollywood film from the 1970s may seem a strange way to begin an essay on Canadian water politics at the turn of the millennium. But Roman Polanski's film noir classic is, after all, about a conspiracy to manipulate water supply. And as Mike Davis notes, the film's story, about an artificially produced drought, engineered for the accumulation of wealth, land and power, provides a history of Los Angeles that is "more syncretic than fictional, [and where] the windfall profits of these operations welded the [city's] ruling class together and capitalized lineages of power...that remain in place today."¹ Polanski's film, in other words, documents the social production of water scarcity which paved the way for both the particular character of urban growth

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¹Mike Davis, *City of Quartz: Excavating the Future in Los Angeles* (New York: Verso, 1990), p. 114.

and the disciplining of labor (through “permanent class warfare”) that characterized Los Angeles’ ascent to global city.² *Chinatown* rehearses events that date back nearly a century, but just as Los Angeles has served as a prototypical post-Fordist or “sunbelt” economy,³ here too its past may provide insights into a possible global future.

It has become something of a commonplace to predict that conflicts over access to water resources will be one of the defining features of politics in the near future. In a frequently cited statement, no less a figure than then-Vice-President of the World Bank, Ismail Serageldin, predicted in the early 1990s that “the wars of the twenty-first century will be fought over water.”⁴ For reasons that will become clear as we proceed, whether in fact such a renewal of Malthusianism is justified is not a question that can be satisfactorily answered by a simple weighing of empirical evidence. What societies are willing to go to war for (or what individuals are willing to sacrifice their lives for), as well as what constitutes resource scarcity, are ultimately questions of social definition, implicating apparently objective questions of scientific fact (how much water is there? how much do we need?) in matrices of culture and hence ideology.

Both the imagining of a future world and the comprehension of nature are invariably *projections* of social values in one form or another. As the title of this essay is intended to suggest, discussions of the future management and distribution of water resources, however real their effects, ultimately cannot be extricated from the realm of fantasy. Of course, like all ideologies, the fantasies circulating around notions of “water scarcity” have a material basis. The point of the following analysis of debates over Canadian water exports is not so much to separate “reality” from “fantasy,” as to understand the symbiotic relations through which these two realms co-evolve. In very broad terms, then, this essay seeks to use water issues in Canada as a case study to get a handle on the rather more abstract (though clearly related) problems of nature and of ideology, to shed some light on the “structures of feeling”⁵ that provide the framework for contemporary human ecology.

²*Ibid.*, p. 113.

³Edward W. Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1989), p. 196.

⁴Marq de Villiers, *Water*, revised ed. (Toronto: Stoddart, 2000), p. 15.

⁵Raymond Williams, *Marxism and Literature* (Oxford: Oxford University Press, 1977), pp. 121-35.

2. Neo-Liberal Globalism and the Construction of Nature

Without going so far as to say that external nature only exists in our heads, it is crucial to recall that all understandings of nature are inevitably colored by the societies from which they emerge. An understanding of nature that brackets all social values, in other words, is an impossibility. With respect to water, we may think of a measure of water as a commodity to be bought or sold, part of a community's common treasury, or part of the hydrological cycle — an ecosystemic service that we (along with the rest of nature) make use of, rather than a good to be consumed once and for all.⁶ The physical properties of water itself have little or nothing to do with which of these views we take to be correct. The dominant presumption of water “scarcity” thus can be seen as rooted in particular social conditions and the ideologies that emerge from them, rather than from some value-neutral mathematical calculation.

Speaking of the manufacture of scarcity more generally, Andrew Ross writes:

Scarcity is a political tool, skillfully manipulated by the powerful whenever it suits their purpose. It is not a natural condition....Contrary to popular belief, capitalism's primary effect is not to create wealth; it creates scarcity, first and foremost. The period, far from over, in which the West pillaged the world's resources, was not a temporary respite from some natural condition of scarcity; it was a period that established and defined scarcity as a condition and effect of unequal social organization, maldistribution, and political injustice....You do not have to romanticize tribal life to recognize that basic survival needs — food, water, warmth, and adequate clothing — in many debt-stricken Third World countries are threatened daily in ways that were not apparent in precolonial times. The structural poverty and hunger that has accompanied postcolonial underdevelopment and monocultural farming is not the result of natural scarcity, not at a time when the world's food

⁶For a history of understandings of water, see Ivan Illich, *H2O and the Waters of Forgetfulness* (London: Marion Boyers, 1986).

production is still above the levels for supporting its population.⁷

With water, as with food, the problem lies not with an absolute shortage, but with patterns of human use and an inequality of distribution. Water shortages are produced by discursive and social, as well as material, conditions.⁸ And the commodification of water, as we shall see, only contributes to a misrecognition of socially produced scarcity: neo-liberal globalism is as much the *creator of* as it is the *solution to* the problem of water scarcity. In Canada, public pressure prevented the approval of a license for Nova Corporation to export water from Lake Superior to Asia in 1998. But scarcely a decade earlier — prior to the emergence of water as a hot investment opportunity — the perceived problem for the area in and around Lake Superior was a persistent surfeit of water.⁹

For many, even if it is not seen as a problem in the present, water scarcity looms in the (near) future. The world's population is increasing, and while water resources are renewable, they are also finite — water (if it is not hopelessly polluted) can be recycled, but new water cannot be created. What is more, we appear to be already very near our capacity to extract water from traditional sources. The dramatic slowdown in dam building (5,000 large dams worldwide in 1950; 36,000 in 1980; 42,000 in 2001)¹⁰ has occurred at least in part because “there are few rivers left worth damming.”¹¹ Similarly, while conclusive data remains elusive, dropping water tables suggest that many communities are at or near (if not already beyond) the limits of

⁷Andrew Ross, *The Chicago Gangster Theory of Life: Nature's Debt to Society* (London: Verso, 1994), p. 16.

⁸Karen J. Bakker, “Privatizing Water, Producing Scarcity: The Yorkshire Drought of 1995,” *Economic Geography*, 76, 1, January, 2000.

⁹Lisa Pittman, “Plugs to Pull: Proposals for Facing High Great Lakes Water Levels,” *UCLA Journal of Environmental Law and Policy*, 8, 1989. The problem of record high water levels in the Great Lakes was reported in such mainstream media sources as, *inter alia*, *New York Times*, November 30, 1986; *Time*, December 15, 1986; *Maclean's*, January 19, 1987; and *National Geographic*, July, 1987.

¹⁰de Villiers, *op. cit.*, p. 146; Sandra Postel, “Water, Population and Environment: Challenges for the 21st Century,” in Ward Chesworth, Michael R. Moss, and Vernon G. Thomas, eds., *Malthus and the Third Millennium* (Guelph, ON: Faculty of Environmental Sciences, University of Guelph, 2000), p. 41.

¹¹de Villiers, *op. cit.*, p. 146.

sustainable groundwater extraction.¹² The only remaining ways of significantly increasing available supply appear to be the sorts of engineering “fixes” whose costs (financial and ecological) are likely to render them unsustainable in the long term.¹³

On this view, however, the focus is resolutely on the supply side of the equation, with demand presumed to be inexorably rising both due to population increases and industrialization (water consumption has increased twice as fast as population growth over the 20th century).¹⁴ But “population” and “industrialization” are rather generalized terms, and deserve to be brought under some critical scrutiny. As with many other environmental issues, speaking of “population” pressures in general abstracts from significant differences in consumption patterns around the world, and in particular the stark division between rich and poor: according to the 1998 UN Human Development Report, the richest 20 percent of the world’s population accounts for 86 percent of global water consumption.¹⁵

As for “industrialization,” it is seen as also being the route to *decreased* water consumption, as further technological advances might allow for more hydrologically efficient production.¹⁶ These arguments for “hydrological modernization” stress that it can only occur if producers have an *incentive* to increase hydrological efficiency — if water is sold at market prices rather than subsidized or given away. But arguments for salvation through market-driven ecological modernization are frequently overly optimistic, for a number of reasons.

First, the focus on technical efficiency in production ignores the ways in which advanced capitalism is driven by an “overcon-

¹²*Ibid.*, pp. 47-9; Postel, *op. cit.*, p. 45.

¹³Engineering megaprojects might include the proposed GRAND (Great Recycling and Northern Development) Canal project, which proposed to dam James Bay, turn it into a freshwater lake, and pump the water more than 600 kilometers across the Canadian Shield to Lake Superior, or the North American Water and Power Alliance (NAWAPA) which proposed to turn the Rocky Mountain trench in British Columbia into a 500-mile (800 km) long reservoir. More prosaically, many consider desalination technology to be the only viable long-term solution for ensuring adequate water supply. But this is highly energy-intensive, and if implemented on a large scale, would likely be a major contributor to global climate change, potentially dramatically decreasing naturally available freshwater supplies.

¹⁴Riccardo Petrella, *The Water Manifesto: Arguments for a World Water Contract* (Halifax, NS: Fernwood, 2001), pp. 28-9.

¹⁵Cited in *ibid.*, p. 30.

¹⁶de Villiers, *op. cit.*, p. 373.

sumptionist” dynamic,¹⁷ often increasing overall resource use even while decreasing ecological costs per unit produced. Since the Fordist mass production revolution, the crucial economic problem faced by capitalist societies has been one of ensuring *demand* rather than supply, and the advertising techniques developed to overcome this problem have generally relied on stimulating unconscious desires rather than appeals based on rational argument. While arguments are made (not only by neo-liberals) that a regime of strict property rights will provide owners with an incentive to husband resources and a material interest in ensuring sustainability,¹⁸ these arguments generally deal neither with the problem that unsustainable hyper-extraction may generate significantly higher short-term returns, nor that property rights provide an incentive to ensure a market of willing, or even eager, consumers.

Furthermore, the belief in the curative powers of technology abstracts technological development from the broader social changes that it impels. More than simply comparing the hydrological efficiency of specific production methods and facilities, an accurate assessment of the hydrological consequences of the emergence of “post-industrial” society requires that the net be cast much more broadly. As with other environmental impacts, the gains of hydrologically efficient production facilities in the most modernized economies may be offset by shifts in global patterns of production, with governments elsewhere luring industry by subsidizing water prices.

Finally (and notwithstanding the investment of physical resources still required to build and support “post-industrial” economies — water for computer chip manufacturing in particular), there is little evidence to suggest that the development of a post-Fordist “new” economy involves substituting service and information for manufactured physical goods. In fact, an examination of the American case suggests the opposite: a continued rise in demand for the products of the old (Fordist, manufacturing) economy. Among other things, post-Fordism in the US

¹⁷Mike Davis, “The Political Economy of Late Imperial America,” *New Left Review*, 143, January/February, 1984.

¹⁸For neo-liberal arguments for marketizing water, see for example, Terry L. Anderson and Pamela Snyder, *Water Markets: Priming the Invisible Pump* (Washington: Cato Institute, 1997). For an endorsement of market mechanisms from an environmentalist perspective, see Terence Richard Lee, *Water Management in the 21st Century: The Allocation Imperative* (Northampton, MA: Edward Elgar 1999); and Michael E. Zimmerman, “A Strategic Direction for 21st Century Environmentalists: Free Market Environmentalism,” *Strategies: Journal of Theory, Culture & Politics* 13, 1, May, 2000.

has entailed a significant shift in population and in the country's economic center of gravity, away from the Northeastern and Midwestern areas that were the traditional industrial heartland, and to the South and Southwest. Not only is the American Southwest more arid, but the sprawling character of the newer urban regions (Houston, Denver, Las Vegas, Phoenix, Orlando) — developed almost entirely in the period after automobile mass production was instituted as a fact of American life — contrasts strikingly with the denser development of their older counterparts. Housing and employment sites are increasingly scattered across suburban and exurban regions rather than concentrated into a densely developed and mass transit accessible downtown core — a pattern of development in transport systems and modes of consumption that is increasingly being replicated in the global South.¹⁹ At the same time, post-Fordist “just-in-time” production strategies rely increasingly on truck rather than rail transport. Thus, in spite of its nomenclature, the post-Fordist economy is more rather than less reliant on the automobile,²⁰ whose production, we might add incidentally, requires 400,000 liters of water each.²¹

Part of the dominant structure of feeling (no doubt abetted by aggressive corporate “greenwashing” marketing strategies) is that in post-industrial society there is a greater concern for environmental issues. Certainly public attitudes profess a higher level of concern with “post-materialist” values,²² of which environmentalism is considered to be prototypical. There is far less indication, however, that everyday life is structured by an abiding concern to appreciate and live within ecological limits. The unabated population shift towards the most arid areas of the North American continent, mentioned above (to the point where, to cite a familiar statistic, California has become the world's 7th largest economy) constitutes only one example. What is perhaps less well-known, is that the state of California, with Hollywood and Silicon Valley functioning as emblematic capitals of the post-industrial economy, is also the world's 6th largest exporter of *agricultural* goods.²³ This in a state whose cities and towns receive their water

¹⁹Peter Freund and George Martin, “Driving South: The Globalization of Auto Consumption and Its Social Organization of Space,” *CNS*, 11, 4, December, 2000.

²⁰George Martin, “Grounding Social Ecology: Landscape, Settlement and Right of Way,” *CNS*, 13, 1, March, 2002, pp. 6-8.

²¹Petrella, *op. cit.*, p. 30.

²²Ronald Inglehart, *Culture Shift in Advanced Industrial Societies* (Princeton: Princeton University Press, 1990).

²³de Villiers, *op. cit.*, p. 328.

through “phenomenally expensive supply augmentation projects.”²⁴ Nor should we be particularly surprised to discover that under an economic regime that increasingly privatizes the realms of recreation and leisure, California is also home to over half a million swimming pools.²⁵

The luxuriousness of filling swimming pools in a desert at the rate of one for every 60 inhabitants aside, it is the perpetuation of large-scale water-intensive agriculture in the post-industrial heartland, a feat made possible only by the massive subsidization of water prices, that particularly galls those who favor marketization as a key to the rational use of water resources. Globally, agriculture accounts for about 70 percent of water use, while municipalities (including household uses) account for only about 10 percent. And while agricultural water rates are generally significantly lower than municipal rates, agricultural uses of water are potentially much more responsive than households to price changes.

One problem, however, as was suggested earlier, is that market mechanisms in general can work to promote *unsustainable* development as much as they work to encourage conservation.²⁶ As was suggested above, treating water as a commodity creates an incentive for owners of that commodity to stimulate demand. And while higher water prices might encourage more efficient agricultural production, pricing mechanisms do not necessarily favor water conservation; the structure of the pricing regime may favor supply-side or demand-side

²⁴Diana C. Gibbons, *The Economic Value of Water* (Washington: Resources for the Future, 1986), p. 100.

²⁵Petrella, *op. cit.*, p. 11.

²⁶The specific form of private property rights can also have a tremendous impact, particularly in the case of a “fugitive” resource like water. In a series of legal battles in the middle of the 20th century, the Arizona Supreme Court first opined that private ownership of underground water would entail “the inevitable exhaustion of all underground waters,” but nevertheless later ruled that: “Under both civil and common law, ground water belong[s] to the owner of the soil.” Faced with this legal regime of strong property rights, landowners are thus encouraged not so much to reduce water use as to sink wells deeper and deeper in order to tap more effectively underground water sources that may straddle above-ground property lines. See Theodore Steinberg, *Slide Mountain or the Folly of Owning Nature* (Berkeley: University of California Press, 1995), pp. 99-101.

management strategies, and may provide incentives either for water conservation or for water profligacy.²⁷

In spite of neo-liberal globalism's claims about the curative powers of economic efficiency — that “a rising tide raises all boats” — it hardly needs pointing out that the imposition of market structures in the service of economic efficiency can result in tremendous social dislocation. Free marketeers assert that this potential dislocation has caused entrenched special interests who use water inefficiently to use political leverage to ensure that a favorable regulatory regime (i.e., water subsidization) remains in place.²⁸ The problem of how to deal with the social dislocations produced by free market-generated efficiencies, allows us to contextualize neo-liberalism within the longer history of capitalism. While the Keynesian welfare state (and the “traditional hydraulic paradigm”) sought to use the state's capacity to provide some direction to national economic development (controlling or reducing the dislocations at the macro-level) and by developing a menu of more or less comprehensive social programs (buffering the effects of the dislocations at the micro-level), neo-liberal states tend to be characterized by the more assertive pursuit of marketization and its

²⁷Karen J. Bakker, *From Commons to Commodity* (Oxford: Oxford University Press, 2003 [forthcoming]).

²⁸Anthony Scott, “International Water Marketing: Nations, Agencies, or Individuals?” in Terry L. Anderson, ed., *Continental Water Marketing* (San Francisco: Pacific Research Institute for Public Policy, 1994), pp. 175-7. But these rent-seeking special interests are not always “old economy” holdovers: Sandra Postel notes that “Intel (at its chip manufacturing plant in Albuquerque, NM) uses millions of gallons of water a day in a very parched region. Intel buys water at reduced rates while consumers are being told to conserve” (cited in Jim Motavalli and Elaine Robbins, “The Coming Age of Water Scarcity [An Interview with Sandra Postel],” *E: The Environmental Magazine*, 9, 5, September/October, 1998). Meanwhile, John H. Sims notes the case of a wealthy Arizona farmer who refused to get involved in the rural-urban conflict over water that threatened his livelihood and the prospect of his remaining on his family's farm, because “it is the market working. The price paid for water should determine its use.” Sims goes on to note: “I cannot recreate the entire interview for you, but it is enough to say that the philosophy of the free market permeated his entire being” [John H. Sims, “Ideology: A Worried Analysis,” in Duane D. Baumann and Yacov Haimas, eds., *The Role of Social and Behavioral Sciences in Water Resources Planning and Management* (New York: American Society of Civil Engineers, 1988), p. 59].

efficiencies, and the insulation of decision-making processes from pressure by dislocated groups.²⁹

Globally, meanwhile, the marketization of water — ensuring its economically efficient allocation according to the profit-maximizing imperatives of water-trading companies — has tremendous implications for food security in the global South: the demands of economic efficiency push the diversion of water from staples agriculture (where 1,000 tons of water is required to produce one ton of grain) to industry or high value-added export crop production. As this occurs in countries like China and India, international grain prices may soar beyond the reach of poorer countries in sub-Saharan Africa and South Asia.³⁰ In this context, the standard “structural adjustment” (or Washington Consensus) prescription of increasing the economy’s export orientation and cutting state subsidies and social programs is likely to exacerbate inequalities in terms of the satisfaction of the most basic human needs, both within and between countries.

In a social environment in which market structures are dominant, however, these inequalities are likely to be seen as the logical consequence of adaptive failure to the (naturalized) global market. Rather than seeing the production of scarcity as the (socially constructed) problem, in an environment in which virtually everything is for sale, commodification is seen as the common sense (or, to put it more pointedly, *natural*) solution to the problem of (apparently natural) scarcity. Without a challenge to this context, the fact that water is already exported in bulk from North America (from Alaska, by a Canadian company) to China, not to deal with growing water shortages in parts of that country, but for low-wage bottling and subsequent re-export, seems entirely unproblematic.

3. Canadian Water: From Nature to Nation

Notwithstanding widely predicted impending catastrophe, some in Canadian politics have positively welcomed the prospect of global water shortage. Like those who have suggested that “global warming” might have the virtue of abolishing Canadian winters, some observers have argued that for Canadians (who, with 0.5 percent of the world’s population, control about 20 percent of the world’s freshwater

²⁹Leo Panitch, “The New Imperial State,” *New Left Review*, 2, March/April, 2000, pp. 8-16.

³⁰Postel, *op. cit.*, p. 47.

resources,³¹ and about 6 percent of global runoff),³² global water shortages represent more of an *opportunity* than a crisis. In this scenario, as global ecological crisis spins water into “blue gold,” Canada takes up its traditional position in the global economy as a staples exporter; and “excess” is converted effortlessly into profit as the thirsty masses rush to buy our disproportionate share of the world’s fresh water. In a mailing to constituents, for example, Member of Parliament (and member of the governing Liberal Party) Dennis Mills asserted that:

Water in the ‘90s represents the power and demand of oil in the ‘70s. It will become the hottest trading commodity and has the potential to place Canada in a position of trading superiority. Fortunes are made by those who control the flow of water.³³

Not the least fantastic element of this narrative is its implicit assumption that “Canada” exists as a singular entity with definable and coherent interests, rather than as a contradictory mix of regions, classes, and ecosystemic communities. The global dominance of neo-liberalism highlights the question of whether or to what extent the institutionalization of international “free trade” (and in this case, the North American Free Trade Agreement [NAFTA] in particular) causes nation-states to become more responsive to the interests of transnational capital rather than to the interests of their citizens; whether the beneficiaries of global water scarcity, in other words, will be the “average citizen” (if such a thing exists) of water-rich countries like Canada, or shareholders of the transnational corporations dealing in water.

Even if we accept the reality of Canada as a singular entity, we are still left with the task of coming to grips with the costs as well as the benefits of Canada becoming “the OPEC of water.”³⁴ Is a nation-state holding a disproportionate share of a globally scarce strategic resource — the “new oil” — simply provided an opportunity to accumulate wealth at the expense of other countries, or are there other factors besides supply and demand that come into play? The fantasy of the nation extracting effortless profit, which seems based on the assumptions of classical economics — of innumerable actors providing

³¹Aaron Freeman, “Blue Gold: The Political Economy of Water Trading in Canada,” *Multinational Monitor*, 20, 4, April, 1999.

³²de Villiers, *op. cit.*, pp. 276-77.

³³Quoted in Freeman, *op. cit.*

³⁴Business journalist Terence Corcoran, quoted in *ibid.*

an environment of “perfect competition” — here may run into the reality of global politics, where a limited number of states exercise more power than others. Recent events might suggest that the advantages of living in “the OPEC of water” are perhaps not so unequivocal as the stereotypical images of wealthy sheiks that abounded in the 1970s and 1980s suggested. Whether or not it turns out to be accurate, Serageldin’s prophecy about the wars of the 21st century at least has the virtue of reminding us that even a “rules-based trading order” — like all forms of order — is ultimately backed by coercion as well as consent.

If the accuracy of MP Dennis Mills’ predictions are open to question, he is nevertheless certainly correct about one thing: fortunes are indeed (and already) made by those who control the flow of water. The global water market in 2000 was estimated at US\$300 billion.³⁵ And as government services are increasingly privatized, what has been called the “last frontier in privatization around the world”³⁶ is a market that seems to be poised for further explosive growth. Why then (as in the opposition to exports from Lake Superior less than a decade after thinking there was too much water) are so many Canadians resistant to cash in on this market opportunity?

In a very successful series of ads for Labatt’s Blue beer from the late 1990s, the ad’s protagonist, situated in a variety of bucolic aquatic settings (on a dock, in a canoe, and so on), hints at the higher alcohol content of Canadian, as opposed to American, beer, concluding: “If I want water, I’ll ask for water!” Marketing agencies are clearly aware of the rich symbolic association between Canadian national identity and the availability of abundant fresh water, and it is perhaps this that accounts for the popular resistance among Canadians to allowing bulk water exports, in marked contrast to the willing export of various other natural resources. Losing access to abundant water is a threat to national identity, striking far more deeply than the collapse of fish stocks or the exhaustion of mineral reserves. To advocates of water exports, an export ban is almost wholly irrational, neglecting the facts that water resources are renewable, and that fresh water is hardly effectively hoarded, as

³⁵ Stephen Shrybman, “A Legal Opinion Concerning the Potential Impact of International Trade Disciplines on Proposals to Establish a Public-Private Partnership to Design, Build, and Operate a Water Filtration Plant in the Seymour Reservoir,” <www.cupe.org>, 2001, p. 9; citing a 2000 Industry Overview by Schwab Capital Markets and Trading Group.

³⁶Petrella, *op. cit.*, p. 64.

Canadian fresh water flows freely either across the border to the US or into the oceans at a rate of about 79,000 cubic meters per second.³⁷

While Abraham Rotstein has suggested that many Canadians “draw the line” at the export of fresh water because water was “the vital lifeline on the homestead” and the “homestead mentality” continues to exert a powerful, if not entirely conscious, force on the Canadian popular imagination,³⁸ resistance may in fact be impelled as much by an anxiety about the future as by the historical legacy of national identity. Given the current international political-economic environment, the demand for a ban on water exports can be seen as a reaction against the growing sense that Canada — or indeed, nation-states more generally — are less able to exert any sort of meaningful control over their future development. Loss of control over water is thus politically charged because it is a metonymic representation — the tip of the iceberg, so to speak — standing in for the entirety of neo-liberal globalization. While discussions have circulated for years,³⁹ the prospect of water exports has been received recently in Canada with a heightened sense of urgency, coinciding with the rise of the continental free trade regime — Canada’s “supra-Constitution”⁴⁰ — which has similarly functioned as a lightning rod for channeling popular protest.

Defenders of NAFTA argue that under current Canadian policy, water in its natural state is not a “good” (or commodity) and is therefore not subject to the provisions of NAFTA unless this policy is changed. It is up to Canadians, in other words, to decide whether we want our water to be a “good” for international trade, or a resource that is not for sale. Others have argued, however, that this reading of the agreement as

³⁷de Villiers, *op. cit.*, pp. 277-8. There are, of course, ecological impacts to harvesting this “squandered” resource, including the impact on aquatic life in freshwater and estuarine environments, as well as the effects of saltwater encroachment on freshwater ecologies and drinking water supplies. See Postel, *op. cit.*, p. 41; and Christine Elwell, “NAFTA Effects on Water: Testing for NAFTA Effects in the Great Lakes Basin,” *The Toledo Journal of Great Lakes’ Law, Society & Policy*, 3, 2, Spring, 2001, p. 163.

³⁸Abraham Rotstein, “A Clash of Symbols,” in Wendy Holm, ed., *Water and Free Trade: The Mulroney Government’s Agenda for Canada’s Most Precious Resource* (Toronto: James Lorimer & Company, 1988), pp. 142-44.

³⁹See Richard C. Bocking, *Canada’s Water: For Sale?* (Toronto: James Lewis & Samuel, 1972).

⁴⁰Stephen Clarkson, “The Semi-Periphery as Rule-Taker and Rule-Maker: Canada’s External Constitution under Global Trade Governance.” Paper presented at the Globalism Project conference, Mexico City, February 20-22, 2002.

protecting Canadian sovereignty on this matter is overly optimistic: while the government's position is that the section of the agreement dealing with "waters" refers only to water that has been bottled or otherwise processed for sale, others have pointed out that the Agreement's definition of "goods" is "domestic products as these are understood in the GATT [General Agreement on Trade and Tariffs]" and that GATT includes provisions for treating water in its natural state as a tradable good.⁴¹ Thus, the CEO of one American water company declared that: "Because of NAFTA, we are stakeholders in the national water policy of Canada."⁴² And while defenders of NAFTA point to a tripartite joint declaration stating that NAFTA in itself creates no rights to natural water resources unless it has become a good or commercial product (and that GATT implies no requirement to commodify water), critics argue that because this declaration is not included in the Agreement itself, dispute resolution panels need not take account of it.

If bulk water is treated as a commodity, then it cannot be sold to domestic Canadian buyers at a lower price than what is charged to Americans or Mexicans, or, in more extreme scenarios, can no longer be decommodified and treated as a politically managed public good (as it has been under the "traditional hydraulic paradigm"). How these requirements might play out in practice, however, is difficult to assess, since water is a highly unusual sort of good — its mass and low value per unit volume means that transportation costs are frequently an inordinately high proportion of total costs, while its fugitive character means that in some cases it can transport itself (via gravity) cost-free, or can be made to do so with an initial infrastructure investment. What constitutes an unfair subsidy, or what is an appropriate pricing mechanism, are thus even more complex questions in this case than in many others, and are highly charged given that abstract statements of principle are never completely divorced from the real-life situations to which the principles are to be applied.

What most observers can agree on, however, is that while NAFTA in itself cannot force Canadians to begin exporting water in bulk, its provisions do ensure that once bulk water exports are started, stopping them becomes significantly more difficult. Following GATT provisions, NAFTA allows governments to impose trade restrictions for health, ecological or conservationist reasons or "to relieve critical

⁴¹Patricia M. Marchak, "Environment and Resource Protection: Does NAFTA Make a Difference?" *Organization & Environment*, 11, 2, June, 1998, p. 148.

⁴²Quoted in Freeman, *op. cit.*

shortages.”⁴³ But unlike GATT, NAFTA also imposes on its signatory governments a “proportionality requirement. If a restriction justified under one of the identified GATT exceptions cuts back shipments of a good for export, shipments to domestic users must also be reduced so that the proportion of export shipments to total shipments that has prevailed over the preceding thirty-six months is maintained.”⁴⁴ Once started, water exports to the US or Mexico could only be restricted by imposing similar restrictions on Canadian consumers.

The prospect of domestic restrictions, however, points to an important potential schism in the diverse groups mobilizing to oppose the perceived ceding of control over Canadian water. From an environmentalist perspective, there could appear to be little wrong with an agreement that would enforce restrictions on Canadian water consumption in the context of global or continental scarcity — a local reflection of a more generalized trend of strategic alliance between conservation-minded ecologists and efficiency-minded economists. While slightly lower than American levels, per capita water consumption in Canada is still among the highest in the world. Given the extent to which fresh water resources cross the Canada-US border, from this perspective the application of NAFTA rules to water exports might be seen as having the virtue of strengthening the case for watershed management across political boundaries.

But the issue of Canadian water exports is crucially complicated by the fact that under Canadian federalism it is *provincial* governments which are responsible for managing water resources (though the federal government has jurisdiction over export policy). In other words, the boundaries that separate the provinces within Canada are as important as the political boundaries that separate Canada from the US. And to understand what might impel provincial governments to consider exporting water, what needs to be reckoned with is the *uneven* character of Canadian economic development.

The most recent resurgence of the issue of water exports occurred as a great deal of national media coverage was afforded to the musings of

⁴³It should also be noted that the standard to qualify for these exceptions appears to be quite high: the first trade ban that was successfully upheld on public health grounds was the French ban on Canadian asbestos in 2000 (a decision the Canadian government is appealing); see Elwell, *op. cit.*, p. 176.

⁴⁴Jon R. Johnson, “Canadian Water and Free Trade,” in Terry L. Anderson, ed., *Continental Water Marketing* (San Francisco: Pacific Research Institute for Public Policy, 1994), p. 59.

the Premier of Newfoundland and Labrador, Roger Grimes, who early in 2001 declared himself in favor of water exports from his province, and very publicly entertained a proposal to scoop and ship 13 billion gallons of water annually from Lake Gisborne.⁴⁵ While that proposal has been shelved after a government-commissioned study suggested it was not economically feasible, the underlying federal-provincial jurisdictional issues remain, and have perhaps achieved a heightened level of urgency with the election of the Gordon Campbell's neo-liberal (Liberal) government in British Columbia — a province with far more fresh water resources, a resource sector in economic decline, and greater geographic proximity to the American Southwest. While national opposition to the Lake Gisborne proposal was focused on the consequences for the security of (the rest of) Canada's water supply — the fear that the decision of one provincial government to allow bulk water exports would trigger NAFTA provisions for water resources (defining water as a tradable “good”) across the country⁴⁶ — less attention was paid to the support such a proposal might receive in what has historically been Canada's economically most marginalized province.

In its inattention to the different scales across which its arguments are articulated, this form of ecological-economic alliance, with its discursive emphasis on restraint in the face of scarcity, begins to reveal itself as potentially authoritarian in character.⁴⁷ A call for regional restraint in the name of “national interests” is likely to be regarded locally in much the same way that many Canadians would greet Californian claims to a growing share of continental water resources. And just as a feasible alternative mode of assuring a living needs to be provided to Newfoundlanders willing to harvest a locally “underutilized”

⁴⁵Martin Mittelstaedt, “Don't go with the flow,” *Globe & Mail*, March 29, 2001, p. A13.

⁴⁶It should be noted that NAFTA's text does not state this explicitly, and indeed that the “national treatment” chapter (Chapter 3) seems to state just the opposite: that when dealing with subnational levels of government, “national treatment” provisions apply only to the treatment afforded by that particular subnational government (Section 301.2). A similar clause is found in the infamous chapter on investor rights (Chapter 11). How the Agreement will be interpreted in specific disputes, and to what extent this apparent defense of provincial or state policy-making autonomy will be upheld, is impossible to know in advance.

⁴⁷Fredric Jameson, *The Seeds of Time* (New York: Columbia University Press, 1994).

resource, irrespective of opposition from Central Canada,⁴⁸ so Canadian assertions of national water abundance need to be carefully articulated with perceptions of scarcity elsewhere. Water management — whether for export and private profit or not — is an enterprise that is inherently and deeply politicized.

Moreover, notwithstanding nationalist objections, Canada already exports a great deal of its water as processed or semi-processed commodities, including, among other things, bottled water, and of course that other liquid most closely associated with Canadian national identity: beer.⁴⁹ All of which returns us to the issue with which this section began; namely, what is so special about the export of bulk water? As both the marketing strategies of beer companies and large-scale citizens' organizations like the Council of Canadians suggest, the answer seems to lie in a deep-seated affective association between abundant fresh water and Canadian national identity. Resistance to neo-liberalism is impelled by concerns of *national* identity, suggesting that regardless of how globalization restructures or diminishes nation-states' capacities to resist the logic of global financial markets, because of its capacity to generate affective loyalties that can override the rationality of unfettered individual self-interest, the nation-state remains a crucial level of political struggle, at least in the short- and medium-term.

In a highly suggestive discussion of the role of ideology in water conflicts in Phoenix, John H. Sims notes that:

Now it is important to realize that, with a few notable exceptions, representatives of neither side had facts or figures to back them. And on both sides those that had facts and figures knew only those that supported their own position.

The fervor with which these opposing beliefs were expressed made it clear that it would be futile for one group to attempt to win over the other. These positions on water conservation were but part of

⁴⁸ We can recall that the federal government's National Energy Policy, which sought to assure lower oil and gas prices during a global energy crisis, provoked a populist response in Alberta (Canada's oil- and gas-rich Western province) with the rallying cry: "Let the Eastern bastards freeze in the dark!"

⁴⁹ Canadian beer exports in 2000 were over 385 million liters; water exports (including bottled water [unsweetened], mineral and aerated waters, and ice and snow) for that year were nearly 470 million liters. See Statistics Canada, *Exports Merchandise Trade 2000* (Ottawa, 2001).

some larger constellation of beliefs and attitudes and values that constituted, I think I do not exaggerate, a part of their selves, of who they were.⁵⁰

Similarly, in a telling remark, J. A. Allan notes that “virtual water” (grain) imports,

provide a political solution at the same time as solving an economic problem. Water is politically strategic because the people of the [Middle Eastern and North African] region have had sufficient water, despite occasional droughts, to meet their needs for all of recorded history. *The MENA nations believe there will be sufficient water in the future. For a leader to contradict these deeply held beliefs would be tantamount to admitting unfitness to govern.*⁵¹

Opinions about water scarcity or abundance, in other words, stem not from an objective, value-neutral assessment of the situation, but from deeply held beliefs that constitute an important part of individual and communal identity and that are not subject to modification simply on the basis of new factual information or rational argument.

If the questions surrounding the issue of bulk water exports are not entirely susceptible to “objective” analysis, this is because, as was suggested at the outset, our understanding of our natural environment is embedded in a particular matrix of social relations. The question of how our water should be apportioned, therefore, is one that not only demands asking, but also that needs to be linked to broader social processes and the extra-rational attachments that these command. All of which is to say that questions about the treatment of water must ultimately be seen as questions about macro-social organization, or human ecology, more broadly.

4. Blue Gold or Red-Green: Towards an Alternative Regime of Water Management

In response to the public outcry over Nova Corporation’s proposal to export water in bulk from Lake Superior to Asia, the Canadian and American governments submitted a reference to the International Joint Commission (a joint body responsible for managing the Great Lakes under the provisions of the 1909 Boundary Waters Treaty). The IJC

⁵⁰Sims, *op. cit.*, p. 62.

⁵¹J.A. Allan, “Virtual Water: A Strategic Resource,” *Ground Water*, 36, 4, July-August, 1998, pp. 545-46; emphasis added.

report stated that since less than one per cent of the Great Lakes' water volume is renewed annually, extremely high standards should be met before permitting any additional extra-basin water removals.⁵² As important as the IJC recommendations are in terms of recognizing the importance of protecting ecosystemic integrity, some questions remain about both the ways in which such an approach of "economizing ecology" can be implemented and the political sustainability of an approach focused on a repressive notion of demand management.

It is not entirely clear that a free market approach, even within the context of relatively strong environmental regulation, provides the necessary incentives for people to adjust patterns of behavior in line with diminishing ecological expectations. As Colin Ward points out, the experience of water privatization in Britain in fact suggests the opposite: comparing attitudes during water shortages in 1976 and 1995 (i.e., before and after privatization), he notes that during the earlier water shortage, there was more willingness to reduce consumption since water was seen as a "public good": a successful government advertising campaign linked conservation with notions of civic duty and community-mindedness. A similar campaign was much less successful in the later case, however: after a massive wave of privatization of government services (including water services), appeals to civic duty fell on deaf ears. And price increases were ultimately found to be less effective tools for reducing water use than notions of community or ecological responsibility.⁵³ While notions of community or ecosystemic responsibility are certainly "rational" from a certain perspective, by the individualistic logic of market rationality, they should be incapable of forestalling the "tragedy of the commons." That water conservation in fact could only be effectively achieved on the basis of appeals to something other than individual self-interest, however, might speak to an important lacuna — the need for a broader sense of rationality and "self-interest" — in the ideology of neo-liberalism.

⁵²Elwell, *op. cit.*, p. 155.

⁵³Colin Ward, *Reflected in Water: A Crisis of Social Responsibility* (London and Washington: Cassell, 1997), pp. 94-95. A study of water use patterns in Southern California similarly finds that "educational interventions that focus on the long-term consequences of water use" are more effective in reducing water use than appeals based on the economic benefits of conservation. See Suzanne C. Thompson and Kirsten Stoutemyer, "Water Use as a Commons Dilemma: The Effects of Education that Focuses on Long-Term Consequences and Individual Action," *Environment and Behavior*, 23, 3, May, 1991.

Similarly, political management strategies need to move beyond the use of conventional public policy tools. Donald A. Wilhite has noted that in spite of the fact that the number of American states with drought response plans has increased significantly, “these plans are still largely reactive, treating drought in an emergency response mode.”⁵⁴ If one of the lessons of contemporary urban ecology, however, is that even meteorological events are socially mediated,⁵⁵ then an adequate strategy for dealing with drought, or water supply more generally, needs to move beyond seeing political intervention as a last resort, and into a more proactive strategy of political engagement and capacity-building.

In their study of a broad variety of water disputes, John M. Donahue and Barbara Rose Johnston assert that there are three basic forms of hydrological-social organization: market organization, where water is treated as a commodity; state-centric or “tributary” organization, where water resources are bureaucratically centrally managed; and forms of social organization where “community concern” (and concern for local water sustainability) cuts across various social cleavages.⁵⁶ In market systems such as neo-liberalism, sustainability can be undermined by considerations of profit. Under state-centric systems, including Keynesian-style water management regimes, sustainability can be undermined by considerations of state or bureaucratic logics. While the process of “modernization” has generally been one in which community management has been replaced by market structures and/or state management, Donahue and Johnston suggest that it is only with this form of social organization (which is apparently being eclipsed under modernization) that sustainable management of water resources in particular is a real possibility.

Ward similarly concludes that rather than a regime of strong property rights or distant centralized management, “local, popular control is the surest way of avoiding the tragedy of the commons.”⁵⁷ But the Newfoundland case suggests that claims for “local, popular control” cannot be received uncritically. The perception that the further

⁵⁴Donald A. Wilhite, “State Actions to Mitigate Drought: Lessons Learned,” *Journal of the American Water Resources Association*, 33, 5, October, 1997, p. 962.

⁵⁵Eric Klinenberg, “Denaturalizing Disaster: A Social Autopsy of the 1995 Chicago Heat Wave,” *Theory and Society*, 28, 2, April, 1999.

⁵⁶John M. Donahue and Barbara Rose Johnston, eds., *Water, Culture, & Power: Local Struggles in a Global Context* (Washington, DC: Island Press, 1998), pp. 339-40.

⁵⁷Ward, *op. cit.*, p. 20.

exploitation of “blue gold” could receive significant political support here serves as a reminder that local communities are embedded in a broader socio-economic environment (one of uneven capitalist development) which may impel them along an ecologically unsustainable path for the sake of shorter-term economic or political survival.

What is required for an ecologically and politically sustainable future, then, is a regime of local control articulated within structures that facilitate “thinking globally,” or more precisely, understanding water management at a number of different scales.⁵⁸ What is required, in other words, is a regime of “local, popular control” that recognizes that “the local” is not a fixed category, but one that is — like “nature” itself — socially conditioned, and whose ambit and relationship with larger scales is constantly subject to (re-) negotiation.

What does seem to be more fixed, however, at least for the moment, is the nation-state, as the level through which ideological discourses, practices and struggles of material consequence operate. At the level of nation-state, then, support for the reassertion of water management as a political problem — and some form of democratic community control as the solution — would require a nationalist discourse that articulates issues of ecological sustainability not solely with the conservation of *scarce* resources, but with a conception of human ecology founded on notions of “post-scarcity,” seeing “natural limits” as understandings of nature refracted through a particular constellation of social relations.

The Council of Canadians’ recent mailing on water exports is in an envelope with a picture of a rushing stream, accompanied by the text: “It’s one of Canada’s most precious gifts — and they’re about to sell it off.”⁵⁹ The message relies on an understanding of water as something that is not a commodity, of the possibility of a community governed by a system of “exchange” whose logic is one of abundance and generosity rather than scarcity and instrumental rationality. Neo-liberalism, on the other hand, promises the possibility of national wealth without effort, and of exploitation without political or ecological consequences. The point is not to determine which of the

⁵⁸Petrella thus argues for a “world water contract” based on “the principles of solidarity and sustainability” and involving direct democratic local management of water resources within the framework of a global constitution for “world water legislation” (Petrella, *op. cit.*, pp. 85-113).

⁵⁹Council of Canadians, “They’re coming to take our water...” (letter dated May 28, 2001).

two visions of the future is based on a fantasy — both are. Rather, it is to see them as such: to recognize that social life itself may be defined as the collective activity of working towards the realization of one fantasy or another.

