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Grounding Waste: Towards a Sociology of Waste Networks

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Grounding Waste: Towards a Sociology of Waste Networks.

This article contributes towards building a sociology of waste. It advances a network analysis framework to understand the position and role of the various actors involved in waste governance in Ireland, North and South. It is the state at the EU and national levels that has sought to deal with waste within the competing sustainability and competitiveness paradigms. However, this article also argues for the critical importance of 'glocal' action around waste management (incinerators in particular) in developing a sociology of waste. The issue of waste is seen in parallel terms to that of money as a new global fluid, which, nevertheless, needs to be governed. A major argument of the article is that we need to take a grounded globalisation approach to build insights into networks of waste and networked political processes of waste governance.

<u>Introduction</u>

Two seemingly un-related events occurred in Autumn 2002. On 16th/17th September two nuclear freighters came up the Irish Sea bound for Sellafield carrying a deadly cargo of plutonium mixed oxide fuel (MOX) from Japan. It was being sent back to Sellafield due to false safety records but the nuclear industry saw this as a great opportunity to expand into a new line of toxic waste management. A very different fluid also hit the global news on the 20th/21st of September, when an unprecedented burst of trading in the City of London led to a £50 billion value added to the stock market. As reported at the time 'Most of the activity took place in a frantic two-minute period which stunned city veterans and pushed trading systems close to collapse (<u>Guardian</u>, 21st September 2002:1). Indeed one bank lost £100 million in that two-minute frenzy. Money and waste are part of global networks that are material, technical, social and discursive. They both pose the issue of regulation in a global economy where the dominant discourse is deregulatory and in favour of 'free market' operations. However, one is alluring and the other is repulsive, so therefore far less visible sociologically.

In the recent and very successful novel <u>Underworld</u>, Don Delillo has a character argue that all civilization has evolved in response to the need to manage waste. However, in social theory waste can be seen as a 'lost continent', a long way behind production and consumption in terms of analysis and understanding. It is only recently that we see the beginnings of a sociology of waste (see O'Brien, 1999, Yearley, S. 1995) or a political economy of waste (Murray, 1999). O'Brien rightly argues that contemporary

sociology as a discipline, even when dealing with production and consumption at the level of everyday life, rarely deals with, theorises or acknowledges waste.

"It is as if, for the discipline of sociology in general, and for sociological theory in particular, nobody ever throws anything away or ever carries out the bin-bags for a 'waste management authority' to deal with. It is as if, when you go to a shop, restaurant, club or place of work, you work, consume or take your leisure without ever producing rubbish or detritus of any kind. Sociology treats 'waste' as if it were literally immaterial, as if it existed in a world apart from the one we inhabit in our daily, routine lives. (O'Brien,1999: 62).

This in the so-called area of 'sociology of everyday life', but even in the sociology of the environment, another fast growing substantive area, where one would expect to see a link made between global consumerism and global waste and wasting there is very little theoretical analysis done. Two major recent works in this substantive area (Becker and Jahn, 1999 and Spaargaren, G. et al, 2000) fail to address waste at all. A sociology of waste, I would argue, is urgently needed as it is key to understanding the relationship between social change and environmental change, that is, if one thinks of the earth as in any way a limited resource. It is easily as necessary as, and complimentary to, those sociologies of production and consumption that have so far led the field.

To return to the two parallel events referred to above, involving money and waste, we can analyse them theoretically by introducing the distinction between 'global networks' and 'global fluids' carried out by John Urry (2002). A network is a set of

inter-connected nodes, a dynamic and flexible open structure. The global economy is thus characterised by 'global commodity chains' (Gereffi, 1994). The environmental/waste issue, while it can be seen to be subject to commodity chains is perhaps best conceptualised as a 'global fluid'. Those are, according to Urry, 'flows or waves of people, information, objects, images, risk and networks across regions in heterogeneous, uneven, unpredictable and often unplanned shapes' (2002: 5). Money is one such flow but so also is waste: the first is visible, productive and well researched; the latter is usually invisible (mostly hidden), deemed unproductive and certainly not well researched.

Having recently collaborated on an all-Ireland empirical study of waste management (see Fagan and O'Hearn et al, 2001) I now propose to reflect on the subject in a less policy-oriented way, to move towards framing this type of research in more sociological terms. This article adds its voice to O Brien's in calling for a sociology of the 'rubbish society' with its concurrent 'rubbish values' and argues that in using waste as an entry point, we can begin to understand the sociological complexities of the above mentioned relationship between social change and the environment. It focuses specifically on the geo-political situation of regulation and management of waste in Ireland as one possible site from which to begin to build insights into networks of wasting and the networked political processes of waste governance. Since local studies have been traditionally ethnographic and global studies have been disembodied to a large extent, we need to bring the two together in what I would call a 'grounded globalisation' approach (cf Burawoy, 2000).

A Network Paradigm

Global networks provide a way of framing waste through the sociological lens of global circulations (Latour) or global flows (Appadurai). A general network approach or logic is one potential framework through which to develop a sociology of waste at a general level, and at a specific level, to understand the governance of the waste economy in Ireland. In examining such a glocal phenomenon as the governance of the waste economy in the geographical context and the political complexity of all-Ireland, the limitations of network theory - that it has not seriously tackled complexity and locality while chasing patterns of circulations – can be countered.

The concept of networks represents a shift in sociological interest from the old agency/structure and macro/micro binaries to a poststructuralist terrain. It has also been influential in the natural sciences (see Prigogine, 2000). In this scenario structure becomes a verb (Law, 1992: 6) and the social a circulating entity (Latour,1997: 3). The macro/micro sociological poles are bypassed and the circulating entity of the social is seen as a process of interactive effects. Interactive effects are composed of both material and human forms. Thus in an analysis of the waste economy and of the governance of waste, a network approach allows the incorporation of a relational materialism (Law, 1992:6). Within this framework rubbish itself such as stinking landfills and the waste bin in your kitchen is networked (alive in more ways than one) with interactive effects. In other words, society is a 'heterogeneous network' (Law, 1992: 2) composed of both people and material things. Machines, people, all contribute to the process of patterning the social or creating the 'social order'. A network methodology forces the network to become the

key unit of analysis wherein the actors are identified and their relations and the structural effects of these relations uncovered.

Actor-Network theory suggests that we should be 'exploring social effects, whatever their material form, if we want to answer the 'how' questions about structure, power and agency' (Law, 1992: 6). The use of actor-network theory as an analytical tool makes it possible to frame waste itself as a material outcome of social relations. Here we see environmental change as social effect ('man-made'). Commodity capitalism and the consumer society continually seek to elide the waste they create and bury its unsavoury connotations. However, much as you can actually see the contents of the bin in your kitchen become active after a certain point in time, much as you can see grass run into silage through the flowing out of that stink fluid, so too is global waste in its very materiality active and mobile. Whether it has been named toxic, nuclear, domestic or agricultural, it creates environmental change. Whether dumped in the land, burned in an incinerator, or buried at sea, it is and remains a fluid effect. Actor-network analysis can be used then as a methodological tool of critical sociology, the mission of which has traditionally been to lift the socially constructed blindfolds. When it comes to 'lifting the lid' on the social construction of global consumerism, I can think of nowhere better to begin than to unmask the waste bin (See Wastewatch@ http://www.wastewatch.org.uk/) and the networks that constitute it. In the case of the waste bin, what appears to be the most local is also the most global, that is, it must also be understood in global terms.

A general networks approach to waste is helpful in a number of its applications. First, the notion of 'global networks' and 'global flows' is flexible enough to allow

the contextualisation of waste as both global and local. Second, Actor-Network analysis provides a methodology for approaching the analysis of Irish waste management strategy through interactions of the key players and material conditions, providing us with the tools to examine a specific site of waste activity. Law 1992: 7) describes organisation as 'an achievement, a process, a consequence, a set of resistances overcome, a precarious effect' (Law, 1992: 7) and waste strategy could be usefully examined in these terms. The application of actor-network theory to waste strategy then can analyse the actor/actions and demystify the patterning or social ordering, can show us the key players in waste management and how strategy is realised. If we distinguish between the use of network as an analytical tool, and the network as a form of governance as advocated by Powel and Smith-Doerr (1994) we can approach the specifics of Irish waste management as an issue of governance in the networked society.

A critical sociology addressing itself to waste generation and management sees it as a precarious outcome of a set of networked actions of networked actors and demonstrates whom these are and how this has come to be. It ultimately would address itself to the analysis and demystification of actors and outcomes and would show how there could be other outcomes avoiding the pitfalls of objectification. Much as critical sociology at the peak of its modernist reign had anti -race, class and gender oppression as its external referent (Harvey, 1990), the critical sociology I am advocating would have the sustainability of the environment as an external referent through which we can measure social change and environmental change as progressive or not. Some waste production and some strategies for dealing with this waste once generated can be evaluated as either progressive or not. Waste generation

and strategies are specific outcomes of political discursive processes, which are not sedimented, but rather open-ended. They are political in that they are the result of a struggle for material and discursive space by various actors. These outcomes are fluid in every sense of the word, in that they are able to alter shape, constantly change and fluctuate given different actions and different power differentials between the actors.

Global Fluids and Governance

Waste can be conceptualised as a globally circulating fluid, its production and management governed well beyond the nation state. A recent Economic and Social Research Council study in the UK on globalisation and the environment sees environmental flows as particularly global. 'This is particularly true for flows related to the environment: greenhouse gases, ozone threatening gases and toxic wastes move from more developed to less developed countries; raw materials and commodities, produced a huge environmental costs flow from less developed to more developed countries' (Urry, 1999). In the 1980's, the ecological debate shifted from the national to the global terrain. The 'limits to growth' were focused on, production had to be 'sustainable' and consumption had to be cut back. The Chernobyl disaster of 1986 brought home in a dramatic way that ecology was a trans-national issue. The Rio 'Earth Summit' of 1982 may have produced the international declaration but it was Chernobyl (and Seveso) that produced a real social understanding of the biosphere as a single integrated whole. Then, as Robin Murray, puts it:

As environmental concerns came to the fore in the 1990's, all roads led to waste. From centuries of obscurity the waste industry found itself at the hub of environmental argument' (Murray, 1999: 20).

Ironically, as the wave of international neo-liberal economics was peaking the governmental response to the environmental threat, and waste in particular, was to increase and strengthen environmental and waste regulations. Waste emerged from obscurity to threaten the symmetry of the dominant discourse.

In a different but related way money has broken down the limits of linear time, has speeded its movement up and is posing severe regulatory dilemmas. Waste has broken down the limits of natural earth, and its risk factors are multiplying. Wasting is likewise posing regulatory dramas and its flows are recognised as well of out of control. In Europe the Environmental Agency presents the chaotic scenario:

'The expected waste trends during the outlook period [up to 2005] suggest that existing policies, although providing some degree of success, will not be sufficient to stabilise waste arising, meet policy objectives, or progress towards sustainability'. (European Environmental Agency, 1999, p.215)

In the waste categories more familiar to the domestic consumer such as paper, cardboard, glass and plastic the proposed recycling sustainable efforts do not offer a solution. Many countries have adopted increased recycling but according to the EEA the development 'has been only a partial success, because the total amount of waste

paper and waste glass (container glass) generation has also increased in the same period (EEA, 1999: 3). The sheer material quantity of waste in circulation is extraordinary. European statistics for 1999 show 2000 million tonnes of waste being generated per year and that the amount has increased by 10 per cent each of the previous six years. The European Environmental Agency estimates that all waste streams will continue to increase steadily (EEA, 1999:203).

Contemporary patterns of waste flows are historically unprecedented. Trade in toxic wastes occurs at the transnational level, with toxic wastes changing hands between the northern world and the southern world in profitable and usually environmentally hazardous ways (Greenpeace, 1993). The emergence of any form of regulation is very new in that before the seventies the free market criteria of 'produce what you want so long as you can make a profit', prevailed unquestioned. Prior to the early 1970's, most OECD countries did not even have an analytical or legal framework for distinguishing between different types of waste. In Foucaultian terms without definition, without naming, without statistical information, its regulation was simply socially impossible. Waste scandals such as the Love Canal incident in the USA and the BT Chemie scandals in Sweden brought about the definition of certain wastes as hazardous (Held, 1999: 407) and so emerged the possibilities for its regulation. Governance moves were made at the global level to create a common global list of agreed hazardous wastes, and interestingly it has in fact been the regulation of these that has been a 'driving force' behind establishing profitability of the international trade in hazardous waste (Held 1999: 408). The regulation of waste is approached from many other spheres of governance. The global spheres deal particularly with hazardous and toxic wastes. At a European level then the nation states are now

required to manage waste under specific European guidelines, which must be adhered to under pain of severe financial penalties. It is this naming and differentiation between wastes and the shift towards its regulation that likewise has established the profitability of streams other than toxic, a market for waste.

The material quantity of the waste circulating in Ireland is equally astonishing to those blinded to the social process of wasting. Like all European countries the quantity is increasing all the time, however, in the Republic of Ireland there is an above average growth rate in its production. Between 1995 and 1998, waste flows in Ireland increased by a phenomenal 89 percent. This risky fluid currently overwhelmingly circulates to landfill sites (the most risky environmental option according to the waste management hierarchy adopted by the EU and Irish and UK governments) where it is grounded (EPA, 2000). 91 percent of municipal waste and 85 percent of industrial waste is 'disposed' of in this way (EPA, 2000). However, being grounded, of course, does not block its continuous circulation as environmentalist scientists and community residents beside landfill sites testify. Hazardous wastes are shipped out of the country to other European sites.

While we can see waste as a global fluid, with risk and profitability associated with its movement, so too can we conceptualise it as being locally networked at the most micro level. If we start at the local site of the individual and their waste bin, we can see that each person sitting here in Ireland is 'producing' more than the European average of one kilogramme of municipal waste per day. The EPA (2002) estimates that every citizen of the state in the Republic is producing an average of 600kg of

waste a year. In doing so we are actively engaged in relating to a social process and social relations of wasting through our pattern of consumption. In being interpellated as consumers, we purchase what has been produced in the format it is being produced in. We have some choice in this area as some ways of consuming, and some forms of consumption are environmentally better than others, but by and large consumerism is organised along lines more concerned with profitability than with a sustainable environment. This may be changing and things are fluid but can the individual consumer be interpellated as an environmentally concerned consumer and can some or all markets respond to this trend? We are left with the fact that on average the contents of the waste bin are becoming greater, there are more of them, and there are things in them that are worse for the environment that ever before. While the individual may not be producing the hair spray canister, the plastic tractor or the twenty-one so-called 'disposable' nappies (surely a blinding misnomer for something that simply cannot be got rid of and takes longer to decompose than the old cloth nappies) they are playing a role in its wasting. In other words, the consumption pattern of 'her indoors' or less frequently 'him indoors' result in the waste bin, albeit that it could be a very different waste bin if the forces of production were regulated into producing commodities that were truly of less negative impact on the environment.

The organisation of the waste bin once filled is that it is 'put out', to be dealt with at regional and national level, where its malign geographic footprint becomes more visible on the Irish environment – its management at this point becomes/is part of a governing network. Who are the actors, the key players and what are the key 'drivers' embedded in these governing networks? In taking a 'grounded and

processual' approach (Radcliffe, 2001) to the development of Irish waste management strategy as a social effect we have begun to uncover these (Fagan and O'Hearn et al, 2001). While waste is a material outcome of globalised consumerism and 'development', who are the key players in its management? Who governs, regulates and strategises waste flows?

In the study we carried out (Fagan and O'Hearn et al, 2001) there was very little doubt as to who the key actors were of a range of possible actors. EU governance was considered to be the key driver. There is very little doubt that this is indeed the case. The European Union Act of 1972 gave 'direct effect' to European acts over domestic laws and constitutional provisions in the Republic and in Northern Ireland. The ratification of the Single European Act (1986), the Treaty of Maastricht (1992) and the Treaty of Amsterdam (1997) further ensured the supremacy of EU law over domestic law. EU legislation includes directives on dangerous substances, waste oils, groundwater, urban waste water, licensing regulations, the disposal of toxic waste, sewage sludge in agriculture, emissions from waste incineration plants, the disposal of animal waste, and batteries containing dangerous fluids. The extent of the national input is that at European level they inform the discussion given that the EU is a network made up of nation states. Then when the directives are in place the nation state, in their own jurisdiction, have some leeway with the when of implementation. While directives do set out a stated time period for implementation, it is essentially up to individual Member States to decide how the individual directive is to be given effect. Directives, therefore, are not directly or immediately applicable to domestic law. However, failure to implement a directive within the given period of time can result in a Member State being penalised by the European Court of Justice. Early EU

directives were of particular relevance to the formation of Irish and UK government policies on waste management including Council Directive 75/442/EEC – July 1975, which states that Member States must encourage steps that prevent and minimise waste flows. These include recycling and the extraction of raw materials and energy for re-use of waste (Article 3). It also notes that Member States must ensure that waste is disposed of 'without endangering human health and without harming the environment, and in particular: - without risk to water, soil, and plants and animals, without causing a nuisance through noise or odours, without adversely affecting the countryside or places of special interest'. (Article 4) Thus the 'green' quality of the regulations is firmly in place.

This directive was later reinforced to ensure that the Community as a whole and Member States individually must aim towards self-sufficiency in waste disposal (Article 5, Council Directive 91/156/EEC (March 1991) amendment to Directive 75/442/EEC). Furthermore, the EU wanted the establishment of 'a competent authority' in order to plan, authorise and supervise waste disposal operations (Article 5). This plan was to include the type and quantity of waste, suitable disposal sites, costs, and 'appropriate measures to encourage rationalisation, of the collection, sorting and treatment of waste' (Article 6). The authority was also charged with issuing permits to those who store or tip waste on behalf of a third party (Article 8), and was to ensure that the conditions of the permit are fulfilled thereafter. As a sanction against default, waste costs would be in accordance with the 'polluter pays' principle (Article 11).

So the EU is a key player in that it has set about the regulation of waste. The EU legislation impacts on the development of strategy at the national level (on the local implementation 'deficit' in Ireland see Quinlivan, 2002). EU policy emerges from a network of actors and competing agendas. In the regulation of waste we can clearly see the agenda informed by sustainable environment concerns. This legislation clearly reflects networked green politics, but at the European level the contradiction between the concepts of development (market-driven in its capitalist form) and sustainable (the earth as limited resource) are also played out.

Waste and the Network State

There is now a wide-ranging debate on the nature of the contemporary state, which is directly relevant to the analysis of the state's role in waste management strategy. For Philip Cerny we now have a 'competition state' driving globalisation on and eroding the 'inside-outside' the nation-state distinction (Cerny, 2000:30). The state is transformed, but its much-vaunted death proclaimed in early globalisation studies has not occurred. Carnoy and Castells (2000) also show how far we have come from the classic 1970's statement of Marxist state theory by Nicos Poulantzas. They argue that the state can now best be described as a 'network state', just one player among others when it comes to state control of knowledge and information. Globalisation, time space-compression and the information society have created a new 'Network State': 'made of shared institutions, and enacted by bargaining and interactive iteration all along the chain of decision making' (Carnoy and Castells, 2000:14) from the supranational to local government and NGO's. According to them decision-making

and representation take place all along the chain, not necessarily in the hierarchical pre-scripted order. The new state 'functions as a network in which all nodes interact, and are equally necessary for the performance of the state's functions' (Carnoy and Castells, 2000: 14).

Carnoy and Castells assert that all nodes are 'equally necessary' but the development of waste management strategy would suggest that some nodes are certainly 'more equal than others'. With the EU able to enforce sanctions on the nation state and the national governments needing to radically change the waste flows, the drawing up and implementing of strategy quickly becomes an issue of governance in the networked society. As Stoker puts it 'governance recognises the blurring of boundaries and responsibilities for tackling social and economic issues' (Stoker, 1998:21). Both in terms of strategic decision-making and of service delivery there is a widespread turn away from the 'Westminister model' of government to a more networked model of governance more inline with the complex networked societies we live in. In terms of waste management strategy then government by central decree would be an impossibility. Governments thus attempt to move to a strategy based on a more consensual model based on multi-agency partnerships. Self-governing networks in relation to waste management would, from this perspective, be much favoured. The 'capacity to get things done' does not simply rest on the power of government to command and this will be done only in a last instance scenario. It rests on developing new mechanisms to steer and guide. Waste governance will not be resolved at its most radical level of sustainability without widespread social and political consensus. For most governments in order to reach the targets it is necessary to bring key players such as 'private enterprise' into some form of partnership. They can achieve this with

a 'stick' if necessary, as they are the body responsible for regulating waste production, but in line with governance the preferred option would be to achieve this with a 'carrot' approach. The current Minister for the Environment, Mr. Cullen, consulting with businesses looks for initiatives coming from the private sector to reducing waste going to landfill but declares 'Where initiatives are not forthcoming, I will not hesitate to regulate' (p2, Irish Times, October 9th, 2002).

The development of waste management strategy at the national level does point to the state as networked. It is in fact the transnational politics of EU policy that has forced the nation state to carry out policies in this case. There was widespread consensus, across the spectrum of waste management 'actors' that 'Waste management began to be driven more and more by the EU. The EU demanded that we manage our landfills better, they demanded an end to pollution' (Fagan and O'Hearn et al, 2000:42). It is also evident that the policy built at European level was fed into by the nation state, but also influenced by a transnational environmentalist movement. In our study the environmentalists, the environmental scientists, the environmentally minded politicians were extremely happy with the EU directives. They were considered to contain an 'alternative world view on sustainable development' which had come from the 'drive of civil society' NGO's concerned with environmental issues (Fagan and O' Hearn et al 2000: 10). So there is no doubt that the state functions more like a node in a network, charged with implementing the directives at national and local level, rather than as a centralised 'headquarters'.

Policy at EU level on waste is partially driven by civil society in the form of the environmental movement, but that policy implementation is opposed at the local level by the same elements of civil society with many of the same environmental concerns that drove policy in the first place. The all-Ireland waste study points to the state acting to 'filter' out those elements of the EU policy that are more threatening to powerful interest groups. State strategies such as 'individualisation' where domestic householder's waste was been emphasised over and above agricultural and industrial waste and marketisation where they try to make the final waste product 'profitable' were seen to have been employed. They were present in the discourse of all of the players in the waste management strategy, even in that of those most radical environmentalists who would wish to emphasise sustainability over profitability (Fagan and O' Hearn et al.2000: 41-42). When it comes to the implementation of these directives at national level, the tension played out is most certainly between questions of sustainability (which regions and localities seem to be pushing more than the state) and questions of profitability (spoken for by industry and increasingly spoken for by the state). The question of financing the infrastructure for dealing with waste at national level appears to be the most urgent side of the equation at national level in order to meet EU Directives on targets.

Observing the development of a waste management strategy in Ireland, North and South, allows us to look at the scope and power of the state in a period of globalisation, transnational and intergovernmental governance. If we look at the NI and the Republic's strategy on waste we can see that both are driven by European policy. In both jurisdictions there were almost no regulations in place in advance of European intervention. In the Northern jurisdiction according to an environmentalist

'we are only off the starting block' (Fagan and O' Hearn et al, 2000: 10). According to an Environmental Protection Agency respondent in the South, the practicalities on the ground were:

> 'We have done very little in the waste area through the 1970's and 1980's, and it wasn't until the 1990's that any kind of focus started on waste. And because we didn't start when we should have, we are twenty-five years behind others'. (Fagan and O' Hearn et al, 2000:13)

In other words, before the states were networked into a European system they were simply not governing waste, they were 'disposing' of it in landfill sites.

The policy in the North and South differed in terms of participatory democracy, a necessity for good governance and the development of political and social consensus on strategy. The Northern environmentalists were certainly happier with the form the governance took in their jurisdiction. The consultation was widespread and environmentalists felt there had been full opportunity to have their point of view represented in the strategy (Fagan and O' Hearn et al. 2000:16). On the other hand the Southern environmentalists and local communities threatened by incineration plans were deeply critical of the 'façade' of consultation that had occurred. They argued that a large element of the plan was based on regional incinerators developed by a company of engineers for the government :

> 'That goes out to the public for their 'consultation', back come all these comments. The engineering firm who have produced 90 per cent of the plans,

defends the plan against comments, and we get nowhere' (Fagan and O' Hearn et al. 2001: 18).

As a result of this, we see local communities against incineration, joined by environmentalists and environmental scientist and environmentally minded politicians, opposing plans.

What we see in the Republic is the waste management strategy thrown into political crisis throughout 2000-2001 and the regional plans being successfully blocked by local communities. This marked a high point in the power of the political action of locals embedded in a geographical community and a low point for the nation state. The state, however, in the Republic reacted. The Minister at the time, Mr. Noel Dempsey, removed the local councillor from the decision making process (who had been subject to public will), and replaced her/him with the county manager, a government employee. So here, in response to challenge from 'below', a central decree -government as opposed to governance of regional communities- was enacted to achieve the localising or embedding of waste management. This is not to say that the state moved entirely back to government and rejected consensus politics and failed to involve itself in multi-agency partnership, but rather that they removed the locality from involvement in the decision-making process. The new Minister, Martin Cullen, stated that the planning process on waste management was 'over-democratised' and that he did not believe it was 'adding anything to it by having so many layers involved' (Irish Times, August 12th, 2002:1). So the 'fast-tracking' of waste management plans have been implemented, where An Board Pleanála has become a 'one-stop shop' for assessing all plans for new waste management facilities.

Objectors can raise their objections at An Board Pleanála hearings rather than at the local authority level. The Minister insists he is not removing any groups or individual rights to express their views – 'Its sacrosanct, but I don't see a need for these views to be expressed at so many different levels' (Irish Times, August, 12th, 2000:1).

There is a need for an estimated investment of one billion over the next 3-5 years to implement the waste development plan (Forfas, 2001: vi) and the National Development Plan envisages this coming from the private sector. Clearly, the Republic of Ireland faces a gruelling task to organise for targets set at a five-fold increase in recycling to be met and to find the money for the infrastructure but the plan is for the private sector to answer the call. Obviously, this sector then is a necessary 'node' in the governance of waste management, and of major significance to the outcome, not a dispensable partner like the local community.

Waste and Glocal Action

Waste is a global fluid and therefore a global issue, but it is also clearly a local issue, so that we can legitimately use the fashionable term 'glocal'. According to Dirlik 'Glocal' expresses cogently what Latour has in mind by the hybridity of the global and the local. What it forces us to think about is a double process at work in shaping the world: the localization of the global, and the globalization of the local, neither, as Latour warns us, 'to be confounded by the product' (Dirlik, 1999:p156). That is to say that waste is at one and the same time global and local if we wish to characterise it in such terms. It is created in someone's locality and dumped or burned in a locality,

yet it also flows around globally. The political economy of waste is embedded in multiple locales.

 The issue of the global and the local is not a straightforward one. When it comes to analysing political action around waste management strategy from the point of view of networked political action, we can see a complicated dynamic in play. For some progressive (and not so progressive!) social or political movements the global is, in and of itself, compared to an uncomplicatedly 'good' local level.   The global is seen as the terrain of capital while the local is the terrain of the people. Yet, as Doreen Massey explains 'setting up the question as local versus global is to accede to spatial fetishism…. Imagining that space has a political meaning…to assume that the local is always better….This is to side-step the real problem' (Massey, 2000:8).

I argue that local action is in fact glocal action precisely where it is networked political action. Political networks, for me, are like the Gramscian concept of civil society in that they both enable and disable citizen participation and power. I read Castells in this vein when he argues that: 'dominant activities in our societies are made of networks: Global financial markets…science and technology…the Internet as a universal, interactive communication network…[But] I would also add that increasingly, counter domination operates through networks as well…'(Castells, 2000:110). We may recall that for Gramsci civil society was the realm in which the social order was grounded ('state = political society + civil society') but also where a new order could be found through a process of social transformation. In terms of waste, the waste industry is clearly a global corporate network of considerable power and dynamism. The state is also part of a network through the European Union.

Political parties and campaigners active in the waste and environmental issues are also part of networks. But the question remains, do they all have equal capacities to be agents of social change?

First, the all-Ireland study suggests a particular multi-faceted dynamic of actors, of the shifting importance of one over the other, which can only be interpreted through the lens of a loose network analysis. Local communities were important players in the dynamic without question, but there were ebbs and flows in their political power. When waste hit the Irish scene as an issue it was on the basis of local concerns around landfills in the early eighties. This was an uphill struggle and the local concerns got very slow acknowledgment from the state. The EU directives resolved the conflict between communities and local and government authorities on 'waste disposal', not the national government. Where before you could open a landfill site just by getting permission from the county council itself, now they had to be licensed by a new Agency established to meet European directives. So local communities opposition to landfill was being strengthened because of the EU legislation and the green argument was being strengthened and built on at local community level. However, with the waste management strategy, the environmental activists felt that the 'government turned to incineration on the advice of one single engineering company' and 'incineration was put into all the regional plans' but 'not up front' (Fagan and O' Hearn et al, 2001:12). One can see that incineration is the contested terrain in this case as not one government policy or regional plan mentions the word 'incineration'. The word used repeatedly and pointedly is 'thermal treatment plant'. Like in all conflicts the discourse itself marks the terrain and the use of word 'incineration' as opposed to 'thermal treatment plants' normally marks the political division.

Second, we see a clear incidence of this action being glocal -it was networked to global community action. In one anti-incineration campaign we observed the Internet was used from the very start to gain access to technical information and to build support from other similar groups. From as far away as Australia and from as close as Northern Ireland expertise, both technical and campaign-wise flowed in. There seemed little doubt that the participants' view of the world was transformed by this experience, and while the campaign was embedded in a locale it was clearly networked to the global environmental condition. Networking on environmental issues has become faster and more immediate due to 'network society'. Environmentalism, in the era of globalisation, supports and stimulates direct horizontal contacts between campaigners through the use of cyberpolitics and cybermedia. Evidence on the ground testified to Carnoy and Castell's argument that:

> knowledge formation and power over knowledge in the global economy
> is moving out of control of the nation state, because innovation is
> globalised, because discourse on knowledge is outside the state's control,
> and because information is much more accessible than it was before
> thanks to technology and communications. (2001:11)

In speaking to actors involved in waste management there was considerable worry about the influence of commercial interests, specifically waste companies coming into the globalised waste market.   In both jurisdictions the key worry from the environmentalists and local community activists was the role of 'big business', ie. incineration companies, in the implementation of the plan. They argued that there had

been aggressive attempts by incinerator companies to lobby the government (Fagan and O'Hearn, 2000:17) and to lead strategy. As one put it '…the incineration industry, it is a bit of a dying industry and so they are looking for new avenues, they are looking for new places to go to build them, so they're looking to Eastern Europe and Ireland' (Fagan and O' Hearn et al, 2001: 16). This concurs with O'Brien's interpretation of the waste industry where he argues:

> 'This is a market whose rational economic actors are begging, cajoling, threatening and coercing the states of Europe to intervene politically into the circulation of wastes precisely because the 'spontaneous' emergence of markets does not generate the values they want out of the rubbish heap' (O'Brien, 1999:292).

It was felt that while the United States and Japan were trying to get away from incineration, Europe was lagging behind because there were 'vested interests' to be protected. The incineration companies were 'well known' as multinationals, but they would 'set up subsidiary companies' in Ireland. The environmentalists were paralleling the previous problem in the nation states of local authorities acquiring and mismanaging landfill sites ie. the so-called 'planning' of 'dumping', with the newer response of building incinerators . 'Okay so we can't dump everything anymore, so lets just burn it' was the analysis. They believed that in both cases the government was 'being wooed by or was wooing' large international companies and taking little responsibility for negative impacts on localised communities.

The transnational linkages that inform national social movements and state-based issue actors demonstrates that subjects and spaces are formed in the interstices of

complex political spaces that transcend national boundaries and state institutions (see Cohen and Rai, 2000). The negative view of incineration held by local communities, environmental campaigners and the environmental scientists was one informed by global flows of knowledge, political and technological, through mobile campaigners and cyberpolitics. The Southern government had turned to the 'experts', the engineers for a technological fix to the waste issue. An assumption was that they were the technocrats who held the key to the embedded knowledge and information of waste management. The surprising nature of the local action's response was that it managed to link up, with a push of a button on the keyboard, to the cyberpolitics of international protest against waste, that is, that there was a time-space intensification that aided the 'local' response to a surprising extent. The local action response was networked to a virtual community that could serve to disembed that technological waste information and democratise it beyond the 'professional' discourse.

Most interesting then, above the fact that the new electronic media made possible a new kind of environmentalist, networked, flexible, media-orientated action, is the interplay in the Irish situation between the politics of cyberspace and the politics of place. It is the dynamic interplay of these politics that makes them potentially most effective. As Escobar describes it, cyberpolitics can be effective if it fulfils two conditions: awareness of the dominant worlds (1999:32) (in this case the world of consumerism) and an ongoing tacking back and forth between cyberpolitics and political activism in the place where the activist resides.

Lest we get over-enthusiastic here, let me clarify. In terms of the networks and the transformation theme running through this article, the democratisation of knowledge,

which occurred through the electronic networking, facilitated a degree of social transformation. I would however strike a note of caution though against any 'Zapatista'(http://www.eco.utexas.edu/Homepages/Faculty/Cleaver/zapsincyber.html) interpretation of these glocal networked campaigns around waste management issues. Access to international best practice and campaigning resources is not the same as a new mode of revolution on a terrain as yet not colonised by capital as some see the Internet. There is, however, a small but growing body of evidence that electronic networks can be used to foster collective action. I am not referring here to electronic communication within an already existing transnational network of women, workers and environmentalists. Rather, I refer to these place-bound communities that Castells and others seem to see as somehow static and lost in a whirlwind of globalisation. Thus Christopher Mele (1999) reports on the use of the Internet to build effective collective action in a low-income public housing development in North Carolina. Mele refers to how 'The flexibility of the Internet proved useful in developing a surrogate electronic community and network and breaking down the isolation of Jervay and its residents' (Mele, 1999:305). Something similar can be seen in the Irish anti-incineration campaigns. There is evidence that global forces and global connections, in this case may have inspired 'social movements to seize control over their immediate but also their more distant worlds, challenging the mythology of an inexorable, runaway world' (Burawoy, 2000: 29). However, we need to bear in mind the enduring power of more traditional mediums such as newspapers and especially television where the general population was effectively being convinced that indeed, there is no alternative to incineration.

Conclusion

We can contrast the politics of the sociological approach taken in our study with the politics of a report on waste management emerging in the same year from Forfás, the National Policy and Advisory Board for Enterprise, Trade, Science, Technology and Innovation set up to advise the Minister for Enterprise, Trade and Employment on matters relating to the development of industry in the state. Key Waste Management Issues in Ireland, 2001 (The Republic of Ireland) is the outcome of a Forfás task force set up to tackle the issue of waste management. This sets waste management clearly in the context of industrial development where waste facilities are seen as 'a factor towards the end' of maintaining competitiveness in the State's industrial policy (Harney, 2001 in Forfás). The report, according to the Tanaiste, is 'timely and welcome as a *reasoned* contribution to the current debate' [my italics] (Harney, 2001). But it does not take a sociologist to point out that waste management is a contested terrain in Ireland today -it is quite unavoidable if you read the paper or listen to the news- but it appears that it does take a sociologist to point out that waste is also a product of the social relations of global consumerism.

Throughout 2000-02 the national newspapers occasionally, and the local newspapers constantly, have covered the confrontations that developed as a result of attempts to implement waste management regional plans. In fact, my own interest developed when, having opted for a 'country life', the local newspaper 'The Meath Chronicle' consistently drew attention to the extent of the 'locals' response to proposed plans for incinerators. 'Locals' response in this case appeared to me to be exceedingly more than 'local'. They were newly imbided with global social movements discourse on the environment, and deeply embedded in, and sometimes represented by, globally

networked expert environmental advice. The politics of the local regional plans for waste management appeared thus as a new 'glocal' politics, grounded in regions distant geographically from the core of Europe, but yet relating closely to trans-national political processes. In the Republic, given that the terrain was not just contested but had become a 'burning issue' as one politician put it to us wittingly or unwittingly, to even write on the issue was itself seen as a source of contestation.

Our approach was to talk to representatives from all interested parties, enter into discourse with them and report on what each saw as the key issues, the nature of the 'crisis', and the drivers of waste plans. All parties initially welcomed this, but towards the end those who commissioned the research decided not to publish it, and from other powerful and well-funded quarters tactics were used to block the publishing of certain things certain representatives had said and to considerably delay publication. By contrast, a national environmentalist meeting was interrupted by the Chair to 'thank the people who did this study' and said that it had given them 'great heart'!

The intention of the study had been to enter into the contested terrain of waste in Ireland in order to understand and faithfully record the viewpoints of the contesting parties, and to analyse them from a social science perspective focusing on its social construction and the issue of governance since waste is indeed to be seen as an embodiment of social relations of consumerism. As we can see from the above so too is the research process. However, precisely because research processes are embodied in social relations, a reflexive, interpretative and critical analysis of 'glocalised' social processes has never been more necessary. Modernist sociology was divided between

those who favoured the structural macro picture and those who focused on social actions, its interpretation and the micro picture. What is offered in a grounded globalisation approach takes us a good way beyond this limited and limiting modernist formulation. A network analysis framework offers one way of bringing the best of interpretative sociology to bear if interactive effects are investigated for the meaning held by the actors engaged in them. Applied to 'glocalised wasting' in Ireland it allows us to ground our understanding of structure, power and agency through an understanding of the management of waste, itself a social/material effect of global consumer social relations. I have here taken a general networks approach in which society is seen as a process of interactive effects composed of both material and human forms. If we take this together with Don Delillo's insight that all civilization has evolved in response to the need to manage waste, the crisis in waste management points to fairly negative conclusions on our society's progress on sustainable development. Given the symbiotic relationship between the social and the environmental, a major challenge for humane governance is to identify the means by which to implement sustainable development practically and concretely. A major challenge for social theory at this particular moment in the history of the governance of waste, when powerful corporate actors who produce and 'dispose' of waste are strengthening their role, is to ensure that the discourses of all the players are heard, that all the nodes in the networks are uncovered, and that all are contextualised within a broader framework than economic profitability.

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