



A preliminary analysis of the 'recovery machine' in post-earthquake Christchurch: opportunities and restrictions to development.

Nicholas Allan KIRK

Department of Environmental Management, Lincoln University, New Zealand

1. INTRODUCTION

After 160 years of colonial settlement, Christchurch has recently experienced a sequence of devastating earthquakes and seen the need for a widespread de- and re-construction of the central city, as well as, many of the surrounding neighbourhoods and peri-urban satellite settlements. This paper will offer a view of the opportunities and restrictions to the post-earthquake re-development of Christchurch as informed by 'growth machine' theory. A case study investigating an illegal dump in central Christchurch will be used to assess the applicability of growth machine theory to the current disaster response.

2. DISASTER RESEARCH

Disaster research has been traditionally bereft of theoretical nous, primarily because research on 'natural' hazards or disasters was often undertaken by civil or military organisations that were explicitly focused on concrete realities rather than theory (Tierney, 2010). More recently however, geographical and sociologically informed disaster research has flourished (for example, see Peacock *et al.* (1997); Bolin and Stanford (1998); Gotham and Greenberg (2008); Freudenberg *et al.* (2010)). Following this trend, in 1989, Kathleen Tierney used the 'growth machine' hypothesis (elaborated in detail below) developed in the previous decade by Harvey Molotch (1976) to explain why local politicians discouraged earthquake mitigation measures, such as earthquake retro-fit ordinances, improved building standards, and more stringent land-use planning, in her local California community. Using Tierney's (1989) research as a

guide, I propose that the extension of the 'growth machine' (or as Tierney (see also Pais and Elliott,

2008) referred to it, 'the recovery machine') theory into analysing disasters – such as earthquakes, floods and cyclones – offers a geographical explanation of these disasters that recognize the structural factors that local governance and economic systems play in the response and recovery.

3. GROWTH MACHINE THEORY

Growth machine theory stems from the research of Molotch (1976) and his collaboration with Logan (1987). Molotch argued against scholars who viewed local governance as the outcome of open democratic debate (for example, pluralists like Dahl (1961), and Polsby (1960)). Rather, Molotch argued that "a city, and more generally, any locality, is conceived as the areal expression of the interest of some land-based elite. Such an elite is seen to profit through the increasing intensification of land use of the area in which its members hold a common interest (Molotch, 1976: 309)". The easiest and most efficient way to promote intensification of land use is through economic growth, which often expresses itself in an increasing and more prosperous population. If local elites are able to attract new industries to the area – corporate headquarters, government offices, educational and research facilities, for example – this can lead to an expansion of retail and service industries in the locality (Domhoff, 1986: 57-58). This sequence, according to growth machine theorists, is driven by existing land-owners and local authorities, who themselves are in competition with other localities who could

subsequently attract the same industries. The 'growth machine' helps explain spatial and social environments because, according to Molotch (1976: 309), "conditions of community life are largely a consequence of the social, economic, and political forces embodied in this growth machine".

Five key factors determine the magnitude and effectiveness of the growth machine in an urban area. The first, as already drawn upon, is that individual land-owners and groupings of land owners will lobby local government to extract gains. At a national level, local government or a coalescence of regional and local governments may lobby central government for specific benefits; for example, business leaders may promote specific geographical placing of a convention centre so that the surrounding area can benefit from the subsequent trade and economic stimulus. Secondly, in order to gain benefits from authorities, localities are mindful of promoting conditions which serve economic growth. This good 'business climate' could be fostered by low taxation or rating on properties; flexible labour laws; or the existence of local vocational facilities which provide well trained employees at no cost to the industry.

Third, the negative externalities of growth must be borne by the citizens of these authorities, rather than the new businesses who may be responsible for this stress on local infrastructure. If a new industry begins to pollute the local air, anti-smog plans should be paid for by the citizens, and not business.

Fourth, those more likely to become involved with local politics and decision making are those with a greater financial stake in the decisions made. For example, businessmen and women, property owners and investors in local financial institutions often run successfully for local government. This creates a clear linkage between the real-estate interests who privately benefit from economic growth in a locality and the public decisions made by the local authorities for the good of all citizens.

Lastly, Molotch (1976: 313) concludes by stating that these factors all aim "to make the extreme statement that this organized effort to affect the outcome of growth distribution is the essence of

local government as a dynamic political force. It is not the only function of government, but it is the key one and, ironically, the one most ignored".

4. GROWTH MACHINE THEORY AND THE 'RECOVERY MACHINE'

How does the growth machine theory of local politics relate to disaster recovery, and in particular, recovery in Christchurch city and the surrounding localities? Tierney argues that mitigation measures to lessen or off-set the impact of disasters are rejected by actors promoting the growth machine (land owners, real estate investors, local authorities, supportive citizens) during times of relative stability, especially if these mitigation measures are viewed as costly economic externalities. She argues (1989: 377) that "growth pressures...set the stage for future disasters and help to undermine mitigation", because, in her view, economic elites and pro-development groups are "typically key actors in opposing hazard mitigation measures when they are proposed", and that, for example, "unreinforced masonry buildings ha[ve] been a major factor impeding the adoption of programs to abate the hazards associated with those structures, which bring a very high rate of return for investors (Tierney 1989: 378)".

Mitigation, however, is just one stage of disaster management. Drabek (1986a as quoted in Tierney, 1989: 267) separates disaster management into four stages: mitigation, preparedness, response and recovery. Tierney's research focuses on the reluctance to adopt mitigation schemes before natural disasters, especially in areas which are known to be prone to certain events (for example, California and earthquakes). Authors such as Pais and Elliot (2008: 1415) have extended 'growth machine' analysis, arguing that "following...disasters, pro-growth coalitions take advantage of new sources of material and symbolic capital to promote further demographic growth". They refer to this as the 'recovery machine', and in this preliminary analysis, I hope to extend use of this concept to provide evidence that the 'growth machine' is a permanent fixture throughout the four phases of disaster management. Furthermore, analysis of the 'growth machine' during the recovery phase will offer insights into the ways that local

business and government interests recover from devastating disasters.

5. CASE STUDY: SKELLY HOLDINGS AND THE SYDENHAM DUMP

How does the growth machine theory of local politics relate to disaster recovery, and in particular, recovery in Christchurch city and the surrounding localities? Tierney argues that mitigation measures to lessen or off-set the impact of disasters are rejected by actors promoting the growth machine (land owners, real estate investors, local authorities, supportive citizens) during times of relative stability, especially if these mitigation measures are viewed as costly economic externalities. She argues (1989: 377) that “growth pressures...set the stage for future disasters and help to undermine mitigation”, because, in her view, economic elites and pro-development groups are “typically key actors in opposing hazard mitigation measures when they are proposed”, and that, for example, “unreinforced masonry buildings ha[ve] been a major factor impeding the adoption of programs to abate the hazards associated with those structures, which bring a very high rate of return for investors (Tierney 1989: 378)”.

Mitigation, however, is just one stage of disaster management. Drabek (1986a as quoted in Tierney, 1989: 267) separates disaster management into four stages: mitigation, preparedness, response and recovery. Tierney’s research focuses on the reluctance to adopt mitigation schemes before natural disasters, especially in areas which are known to be prone to certain events (for example, California and earthquakes). Authors such as Pais and Elliot (2008: 1415) have extended ‘growth machine’ analysis, arguing that “following...disasters, pro-growth coalitions take advantage of new sources of material and symbolic capital to promote further demographic growth”. They refer to this as the ‘recovery machine’, and in this preliminary analysis, I hope to extend use of this concept to provide evidence that the ‘growth machine’ is a permanent fixture throughout the four phases of disaster management. Furthermore, analysis of the ‘growth machine’ during the recovery phase will offer insights into the ways that local

business and government interests recover from devastating disasters.

6. DISCUSSION AND CONCLUSION

The case of Skelly Holdings central Christchurch demolition dump illustrates the morbid symptoms that can occur when a city recovers from a disaster. The removal of precautionary checks and balances to promote speedy recovery from disasters, as supported by existing and specially created local authorities, are directly responsible for these occurrences. If the dynamics of local body politics is, however, as Molotch (1976: 313) claims, driven by the organized effort of a local elite to promote re-growth, should this outcome be surprising?

Of the five factors of Molotch’s growth machine hypothesis, I believe three are illuminated by this case study. These are authorities promoting good economic conditions; the negative externalities of growth borne by the public; and that the promotion of growth is the essence of local government decision making. The first of these factors, I believe, is illustrated by ECan’s Brett Aldridge, who was quoted as saying they (ECan) were trying to help demolition companies operate “rather than weighing in with enforcement action as a first step (Sachdeva, 2011)”, despite the fact that the period for the abatement notice on open-air dumping had already ceased. Rather than have an illegally operating company shut down, or at least pay a substantial fine, the authorities decided a hands-off approach would be best, therefore, keeping Skelly’s employees paid (in the short term) and allowing demolition companies to dump and continue operation there. The negative externalities of these decisions – air pollution from a dump containing potentially dangerous asbestos – was borne by the local businesses and residents who were embedded in the area before the dump’s existence, and who still operate after its abandonment.

Two factors relating to the growth machine could not be substantiated by this case study – the degree to which Skelly Holdings or other demolition companies ‘lobbied’ local authorities for lax boundaries, and the extent to which decisions were made or influenced by politically powerful vested interests. Elite theories of

politics often suffer from criticism relating to its lack of empirical validity – for instance, it may be possible to identify who held power over decisions regarding the dump - however, it is far more difficult to identify a consensus or unity amongst an 'elite' regarding this case (Horowitz, 1981: 376-377). Taking this a step further, Dahl argues that "I do not see how anyone can suppose that he has established the dominance of a specific group in a community or nation without basing his analysis on a careful examination of a series of concrete decisions".

The last factor - that the promotion of economic growth is the essence of local government decision making, and thus, is the *essence* or quintessential factor behind the lax enforcement of boundaries - is, I believe, evident in this case study. A dump was consented to a new company run by an overseas citizen with no experience in the demolition and dumping of possibly dangerous goods. Despite flouting resource consents in the most obvious way, the company was allowed to persist, as enforcement of regulation was seen as being 'not the first step'.

The growth machine theory may not offer a water-tight explanation of political decisions in an urban centre recovering from disaster, but it does offer a guide and a critical lens to view decisions in a manner which highlights the importance of capital and investment. Expansion of growth machine theory into other aspects of the earthquake recovery, such as the central city development plan, may offer further helpful insight.

**Nick Kirk is a PhD Candidate at Lincoln University, New Zealand. His research focuses on fresh-water governance and political power in Canterbury. He has previously published articles on climate change mitigation, fisheries policy and Māori fresh-water management.*

7. REFERENCES

- Bolin, R., & Stanford, L. (1998). *The Northridge Earthquake*. London: Routledge.
- Bolin, R., & Stanford, L. (1998). *The Northridge Earthquake*. London: Routledge.
- Dahl, R. (1958). A Critique of the Ruling Elite Model. *The American Political Science Review*, 52(2), 463-469.
- Dahl, R. (1961). *Who Governs? Democracy and Power in an American City*. New Haven: Yale University Press.
- Domhoff, G. W. (1986). *The Growth Machine and the Power Elite: A Challenge to Pluralists and Marxists Alike*. In R. J. Waste (Ed.), *Community Power: Directions for Future Research* (pp. 53-77). United States of America: Sage Publications.
- Freudenberg, W., Grambling, R., Laska, S., & Erkson, K. (2010). *Catastrophe in the Making: The Engineering of Katrina and the Disasters of Tomorrow*. Washington D.C.: Island Press.
- Gorman, P. (2012). Asbestos plan 'reneges' on promise, Accessed 31/8/12, <http://www.stuff.co.nz/the-press/news/6928626/Asbestos-plan-reneges-on-promise>>.
- Gotham, K., Greenberg, M. (2008). From 9/11 to 8/29: Post-Disaster Recovery and Rebuilding in New York and New Orleans, *Social Forces* 87(2): 1039-1062.
- Horowitz, I. L. (1981). C. Wright Mills's Power Elite: A Twenty-Five-Year Retrospective. *The Antioch Review*, 39(3), 373-382.
- Molotch, H. (1976). The City as a Growth Machine: Toward a Political Economy of Place. *American Journal of Sociology*, 82(2), 309-332.
- Molotch, H. (2010). Canal to Hell: Elite Strategies as Blunder and Mayhem. *Contemporary Sociology*, 39(6), 657-659.
- Logan, J. R., & Molotch, H. (1987). *Urban Fortunes: The Political Economy of Place*. Berkeley: University of California Press.
- Pais, J., & Elliott, J. (2008). Places as Recovery Machines: Vulnerability and Neighborhood Change After Major Hurricanes, *Social Forces* 86 (4): 1415-1453.
- Peacock, W. G., Morrow, B. H., & Gladwin, H. (Eds.). (1997). *Hurricane Andrew: Ethnicity, gender and the sociology of disasters*. London: Routledge.
- Polsby, N. W. (1960). How to Study Community Power: The Pluralist Alternative. *Journal of Politics*, 22(1960), 474-484.
- The Press. (2012). Skelly Rubble cleared, Accessed 31/8/12, <http://www.stuff.co.nz/the-press/news/6842172/Skelly-rubble-cleared>

- Sachdeva, S. (2011). *Environment Canterbury Wants Rubble Eyesore Gone*, Accessed 31/8/12, <http://www.stuff.co.nz/the-press/news/christchurch-earthquake-2011/6072972/ECan-wants-rubble-eyesore-gone>
- Tierney, K. (1989). *Improving theory and research on hazard mitigation: Political Economy and Organizational Perspectives*. *International Journal of Mass Emergencies and Disasters*, 7(1989), 367-396.
- Tierney, K. (2010). *Growth Machine Politics and the Social Production of Risk*. *Contemporary Sociology*, 39(6), 660-663.
- Van Benyen, M. (2012a). *Dust from Dumps sparks ECan action*, Accessed 31/8/12, <http://www.stuff.co.nz/the-press/news/christchurch-earthquake-2011/6237966/Dust-from-dumps-sparks-ECan-action>
- Van Benyen, M (2012b). *Overstayer set to let illegal dumps behind*, Accessed 31/8/12, <http://www.stuff.co.nz/business/6807670/Overstayer-set-to-leave-illegal-dumps-behind>
- Van Benyen, M. (2012c). *Demolition Dumping gets nod from ECan*, Accessed 31/8/12, <http://www.stuff.co.nz/the-press/news/6814560/Demolition-dumping-gets-nod-from-ECan>
- Van Benyen, M. (2012d). *Overstayer leaves a costly mess*, Accessed 31/8/12, <http://www.stuff.co.nz/the-press/news/7063176/Overstayer-leaves-a-costly-mess>
- Van Benyen, M. (2012e). *Official action on abandoned dump queried*, Accessed 31/8/12, <http://www.stuff.co.nz/national/7113238/Official-action-on-abandoned-dump-queried>