Negotiating Development Control: using Actor-Network Theory to explore the creation of residential building policy

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Abstract: This paper mobilises Actor-Network Theory (ANT) to produce a more detailed discussion of institutional interaction in planning negotiations. In this reading formal and informal institutions are theorised as actors and intermediaries enrolled for the purpose of securing planning policy. Thus, policy negotiation is a process of network translation where competing actors mobilise other actors and intermediaries to secure a policy closer to the objectives of their constituent networks. This paper explores the institutional relations and non-human actors that mediate the construction of a local council planning control centred on building quality and environmental condition – Development Control Plan 100 – Quality Housing (DCP100) – in the Wyong Shire, one of the fastest growing areas in Sydney, Australia.

INTRODUCTION

Urban research has increasingly emphasised the role of both formal and informal institutions in mediating planning and development opportunities (Guy and Henneberry, 2000; Adams and Hastings, 2001; Ball, 2003). In particular, attention has been paid to the role of informal relations in the construction and negotiation of planning policy and residential property (Hillier, 2000; 2002). This paper builds on this research by mobilising Actor-Network Theory (ANT) to produce a more detailed discussion of institutional interaction. Although ANT has a relative short history within urban policy analysis (Murdoch and Marsden, 1995; Amin and Thrift, 2002), it offers the capacity to explore the detail of actor interaction. This paper argues that formal and informal institutions be theorised as actors and intermediaries enrolled for the purpose of securing planning policy. In this reading policy negotiation is a process of network translation where competing actors mobilise other actors and intermediaries to secure a policy closer to the objectives of their constituent networks. Here it is vital to move beyond the formal and informal

institutions mobilised for the purpose of securing development and planning to recognise the more diverse array of actors drawn into policy negotiations. Thus, while the recognition of informal institutions has added a new layer of detail to discussions of planning and development, equal attention should now be directed at the plethora of non-human actors – such as endangered species and scientific equipment – which mediate plan creation and development approval. This paper explores the institutional relations and (some of the) non-human actors that mediate the construction of a local council planning control centred on building quality and environmental condition – *Development Control Plan 100 – Quality Housing (DCP100)* – in the Wyong Shire, one of the fastest growing areas in Sydney, Australia.

The paper is divided into four sections. The first section positions ANT as a theoretical approach with the capacity to inform research on policy negotiation. The second section provides an overview of recent discussions of planning that emphasise the role of institutions. After a brief discussion of planning and policy frameworks in Australia (and New South Wales in particular), the third section provides an analysis of the negotiation process associated with development of *DCP100.* Special attention is paid to the manner in which the agency of builders, industry representatives, council officers and elected officials is the product of a wider network of associations. The final section offers some conclusions on the role of institutions and non-human actors in the negotiation of planning policy and the value of ANT as a theoretical premise used to trace these interactions.

ACTOR-NETWORK THEORISATIONS OF PLANNING

Actor-Network Theory moves beyond traditional structuralist, spatially-fixed, and human-centred interpretations of networks by recognising the role of non-human actors in the construction of life and offers a topological view of the world where actors, rather than being on different scales, are more or less connected (Murdoch, 1997). By mobilising the notions of heterogeneous

association and translation, ANT offers a more complex interpretation of agency as actors operate only through the enrolling of a multiplicity of divergent others. The ability to translate these divergent actors becomes central to power relations, which mediate all networks, including networks of planning and property development. ANT offers a research agenda which is based not on a stable theory of the actor, but rather on an assumption of the 'radical indeteterminacy' of the actor (Callon, 1999, p. 181). Under the ANT rubric, all phenomena are the effects of heterogeneous networks, where the complexity of interaction and agency is inevitably beyond the vision of actors themselves. ANT calls for the interpretation of hybrid networks and places emphasis on the multiple agency of hybridity – the mobilisation of the animate, mechanical and discursive modalities of being within and between differently-configured possibilities of individuality (Whatmore, 1997). Actors are therefore heterogeneous engineers, because they are always in the process of being made through a multiplicity of different materials that are enrolled and mobilised to form the very relations and connections that make up the network (Smith, 2003).

Enrolling is the process by which actors constitute other network actors in their own agency. In this sense human agents are never located in bodies alone, but rather each actor is a patterned network of relations. All actors draw things together, albeit in particular ways and styles (Law, 2000b). The capacity to enrol others is vital to the development and negotiation of *DCP100.* Essential to the process of enrolling is the notion of an intermediary. According to Callon (1991, p. 134) an intermediary is 'anything passing between actors which defines the relationship between them'. Importantly, Callon (1991) identifies four primary types of intermediaries: literary inscriptions (books, articles, patents, etc.); technical artefacts (machines and other non-human artefacts); human beings (in particular their skills and knowledge) and money (as an institutional means of exchange). Callon (1991) suggests that the complexity of the intermediary itself is irrelevant, as long as it remains constant as it circulates and creates networked associations.

This paper explores how intermediaries are circulated through planning networks in Wyong. Thus, actors define one another in interaction, through the intermediaries they put into circulation, and by the others they enrol and translate for (Callon, 1991). Planning policy is, therefore, the outcome of circulated intermediaries that materialise in efforts to frame development. Importantly, Callon (1991) also suggests that the definition of actor and intermediary is far from static, given that at any time one may enrol others for the purpose of securing a network translation, while at other times one may also be enrolled and expected to circulate through networks in support of another's translation.

Translation is used to describe the ways in which agency is ascribed and negotiated (O'Neill and Whatmore, 2000). Translation is an attempt to dissolve the classic dualism of natural and social, as the properties of all enrolled entities are derived from their relative position within a network (Murdoch, 1997). Therefore, no actor has essential qualities. Rather the object is to explore how the ordering of actors (devices, agents, institutions or organisations) generates the possibility that one thing (an actor) may stand for another (a network) (Law, 1992). The issue of authorship is central to the notion of translation. It involves a complex series of negotiations where expressed identities are fought over, roles are ascribed and power relations are fixed. However, simultaneously, initial actor identities are challenged and redefined by the network builders as new sets of relations are established (Murdoch, 1997). These network builders become the translators or spokespersons for the entities that constitute them (Callon, 1986a; 1986b) as they come to express their desires, thoughts, interests and mechanisms of operation. Recognising the multiple translations of development is paramount in the analysis of *DCP100*.

The notion of the translator places the issue of power firmly at the centre of the research agenda. Thus, power is not a matter of inevitable strength, nor are those who are powerful necessarily those who hold power (Allen, 2004). Rather, in an ANT framework, the powerful are

those who enrol, convince and enlist others into networks on terms that allow the enrolling actor to represent others (Murdoch, 1995). In this sense power is not something endowed by nature, but rather something that is achieved as an actor speaks or acts on behalf of others (Callon and Latour, 1981). Latour (1988) positions power as potent only if an actor speaks for others, if it can make those it silenced speak when called upon to demonstrate its strength, and if it can get those who challenge it to confess that it is speaking truthfully on behalf of its constituents. ANT offers a means by which we can explore in more detail the processes of plan creation, residential development and negotiation, as it allows us to move beyond traditional readings of planning to recognise the complexity of diverse actor interaction. Before discussing the complexity of *DCP100*, the following section outlines recent institutional theorisations of planning.

PERCEPTIONS OF PLANNING

Healey (1995) argues that the purpose of planning is to produce plans (as formal institutional constraints) that provide a store of rules to guide a stream of regulatory and investment decisions. Planning directs how actors influence, negotiate, and renegotiate rules, procedures, discourses and power relations (Hillier, 2000). The capacity of state-centred planning frameworks to direct private market operation has been criticised by private market actors and neoliberal policy circles alike (Gleeson and Low, 2000). While planning has been identified by some as restricting the operation of the market, alternative arguments have been made to suggest that planning gives a degree of certainty to the market and plays a vital role in the *construction* of the market (Healey, 1997; Tang et al., 2000). This interpretation follows a similar line to those proposed by poststructural readings of the market emerging from the fields of economic sociology and economic geography (Fligstein, 2001; Larner, 2003), and it also hints at the constitutive relationship between state and market, and the fact that neither the state nor the market are hermetically sealed (Peck, 2000). As such, the planning system plays a pivotal role

in determining the location of new residential housing by providing the main avenues through which policy makers can influence development (Adams and Watkins, 2002) and where developers can influence policy. Although traditionally positioned as a set of formal arrangements that direct interaction and market operation, an increasing number of studies have highlighted the complex institutional environment that surrounds plans, their development and implementation, with informal associations progressively being placed on the research agenda (Hillier, 2000; Tichelar and Watts, 2000; Adams and Hastings, 2001; Lowndes, 2001).

While traditional readings of planning in urban development rest firmly in the realms of modernist thinking (Ennis, 1997), more recent interpretations see planning as neither the pursuit of universal truth and ideal form, nor the sole impediment to market efficiency and allocation, but rather a hybrid which constructs spatially and temporally specific development (Healey, 1997; Adams and Watkins, 2002). Mobilising ANT facilitates the tracing of the complex and unique interactions of interested actors. While the interpretation of the planner as the all-knowledgeable guardian of society no longer holds much sway, it is important to note that the idea of the planner as an expert remains vitally important to the enrolment, negotiation and expression of urban development (Ennis, 1997; Adams and Watkins, 2002). It is argued by Healey (1991) that the majority of planners remain confident in their expertise, untroubled by doubts about the nature of their knowledge, certain that those values and objectives they pursue are in the public interest. Healey (1991) also identifies three roles of state planners: first, they must envision possible futures of development projects, including their physical, institutional and cultural contexts; second, they must manage and prepare arguments both for the development (thus seen to be supporting development interests) and for the modification of the proposal (therefore setting the stage for comments from others); and, third, they must present and negotiate their own formal analysis of the project proposal and alternatives to it. In the case of *DCP100* all three roles of council planners are examined, as, first, council develops a draft strategy framing

development (a vision for future development), second, it engages a series of others to support and strengthen its authority claim, and, third, it mobilises the planning vision and supporting actors in a manner capable of resisting challenge from private actors.

Thus, planning becomes the site at which the development gain/costs are negotiated (Claydon and Smith, 1997; Keivani et al., 2001). This negotiation of policy, however, is far from simple as the list of interested actors is vast, with analysis based on state and market, or planner and developer dichotomies greatly underestimating the importance and complexity of political context (Healey et al., 1995). It is this negotiation of costs and benefits, and the institutional arrangements and associated actors enrolled in theses negotiations, which are traced in this paper. Claydon (1996) defines negotiation as the process whereby parties attempt to reach agreement. This is differentiated from bargaining (where benefits are traded) and compromise (the acceptance of sub-optimal agreements), which may be part of the negotiation process (Claydon and Smith, 1997). Here actors, be they developers, local environmental groups, or local governments, employ consultants and lawyers to promote and protect their claims in the negotiation of projects and policy preparation exercises (Healey, 1997). This typology of negotiation simplifies the complex and shifting nature of these translations, as negotiation, bargaining and compromise all represent different network configurations as the enrolment of actors and intermediaries shift in efforts to secure a network (development or policy) outcome. In such an institutional setting plan making becomes an advocacy process centred on competing claims of authenticity and authority. Through an ANT framework the objectives and enrolments of each of the disparate actors can be traced and recognised in the creation of policy. Thus, while planners may retain some of the institutional characteristics as experts, they also need to be able to negotiate with other actors who are also equally constructed as experts in their institutional field (Ennis, 1997; Ball, 2002). In the case of *DCP100*, negotiation was conducted between private sector interests (local builders and industry representatives) and

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public sector officials (council officers). However, this simplistic typology downplays the complexity of actor identity and influence in the negotiation environment, and the plethora of actors (institutional or not) that are drawn into the policy negotiation arena. Indeed the recognition of the complex identity and objectives of public and private actors and the complex enrolment strategies used to strengthen negotiation claims highlight the role of ANT as a frame for analysing planning negotiations.

While planning of some form is present in virtually all locations of residential development, there is little doubt that the nature of local politics and planning processes can differ significantly across locations, which leads to great variety in the nature of processes even within policy sectors (Allmendinger, 1996). The plan, therefore, becomes a site of political struggles which continue after implementation, as interpretations of rules and discourses are challenged and transformed. In their study of greenfield development, Adams et al. (2002) suggest that local planning policies are the most important component of the rules and regulations influencing development. Although identified as the most important level of government in terms of urban planning and development (Adams et al., 2002), within Australian planning policy the local government is seen to play a minor formal role (Beer et al., 2007), due primarily to the fact that it is not recognised in either the Constitution or the Commonwealth-State Housing Agreement. Nevertheless, local government has traditionally played a major role in the planning, consumption and management of housing through zoning and strategic planning, building regulation policies, rating policies, rate rebates and the management of some housing stock (Burke, 1999). Although operating within the formal institutional hierarchy of the state planning apparatus, local government plays a vital role in planning within its own municipality, focusing on the smaller issues beyond the interest of large planning authorities. The following section explores how the processes of enrolment and translation provide a more detailed picture of the

development of planning policy in the Wyong Shire, focusing on the development of *DCP100 –*
Quality Housing.

DEVELOPMENT CONTROL PLAN 100 – QUALITY HOUSING

This section explores the nature of formal and informal network relations and the role of a select

number of non-human actors that facilitated the negotiation and implementation of *Development*

Control Plan 100 – Quality Housing at Wyong Shire. The Wyong Shire is part of a growing inter-

urban corridor between Sydney and Newcastle (Figure 1) and is expected to house an

additional 55,000 households to the year 2031 (NSWDoP, 2006). The purpose of this section is

to highlight the role of formal and informal institutional relations as actors/intermediaries in the

creation of housing policy, yet frame these interactions as part of a more diverse topological

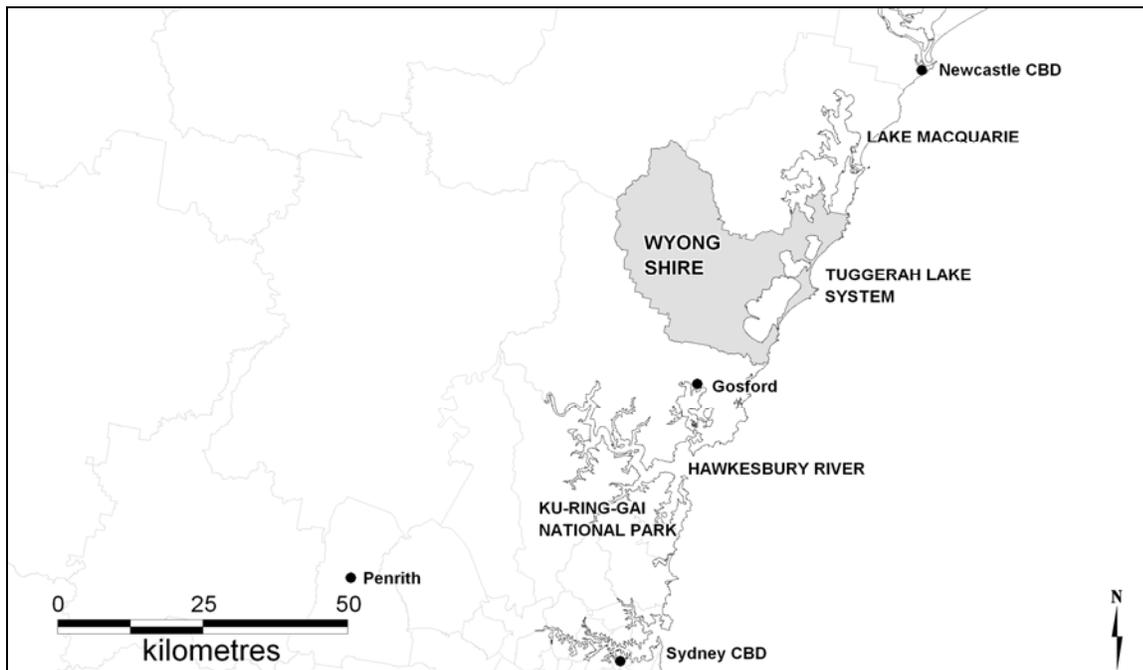network of institutional, discursive, human and non-human actors.

Figure 1 Location of Wyong Shire

Despite the fact that local government has planning and approval responsibilities within its

boundaries, in the case of New South Wales these are subject to State government approval,

primarily through the adoption of a Local Environmental Plan (LEP). LEPs pursue small-scale planning objectives, such as those concerned with subdivision standards and the promotion of innovative forms of development, ensuring development is achieved in accordance with the relevant State or metropolitan strategy. Under the LEP, local councils also produce Development Control Plans (DCPs). DCPs attempt to provide specific, more comprehensive guidelines for certain types or sites of development. DCPs represent the most focused formal expression of development constraints. *DCP100* was a one of a number of planning policies developed by Wyong Shire Council in the early 2000s. *DCP100* was developed by council in an effort to maintain the environmental quality of the region, align with the objectives of Ecological Sustainable Development (ESD) and respond to concerns over increasing population and development pressure in the area (WSC, 2003). *DCP100* sort to mediate the construction of houses within locations currently zoned as residential under the existing LEP. However, despite its impact on residential development, *DCP100* experienced little public opposition. The relative innocuous public identity of *DCP100* can be attributed to three main factors. First, it operated on land already zoned for residential purposes, therefore decreasing the potential for conflict based on environmental concerns over new land zonings. Second, the emphasis on environmental conservation and aesthetic building provisions received broad support from the wider community. Third, it did not impact on current landowners' profit-seeking strategies in areas already zoned residential. Nevertheless, concerns were expressed by builders in the area who were required to alter their building styles to align with more stringent building controls. It was these concerns which facilitated the lobbying of elected officials and the enrolment of an industry representative and multiple non-human actors in efforts to destabilise the policy translation.

At its most broad, *DCP100* attempted to add an increased emphasis on the environmental components of residential development (water tanks, eves, solar access and vegetation

protection) and improving the aesthetics of new housing (lot set-back, cut-and-fill requirements and street scaping) (WSC, 2003). *DCP100* was positioned by council as a means through which increased formal frames could be placed on housing, decreasing the qualitative or informal negotiations over the quality and applicability of development:

> *DCP100* has some strict rules. They were all becoming qualitative in nature, there was room for plenty of argument. Now I don't have to say that a house is ugly, we just say that it doesn't meet the standards. (Council Officer)

At its most superficial *DCP100* represents a formal institutional translation of development by senior council officers who wish to maintain power to direct private development interests. In this sense a formalised policy can be seen as a means through which senior council staff attempted to ensure their own vision of development in Wyong (Healey, 1997; McGuirk, 2001). However, the identification of *DCP100* as a formal frame for residential building neglects to identify the informal processes associated with its development and implementation, as well as the challenges to its authority by development related actors prior to its adoption. Rather, the final policy, while formal in nature, was the product of strategic enrolment by competing actors.

The *(Draft) DCP100* was released by council in early 2002. This first version essentially represented a council vision of development, paying little attention to the desires, queries or complaints of private actors. However, the original policy translation was identified as unacceptable by building actors, as it was seen to impede their capacity to secure profits through the need to alter building styles. Thus, interaction over *DCP100* was facilitated by the desire of state and private actors to achieve the divergent objectives of environmental conservation and efficient building respectively:

It was a whole DCP change to the process of having an application accessed. It was very broad and related to all detached dwellings in Wyong, which is a growth area and one of the major contributors to new housing in the broader Sydney region. (Industry Representative)

From a builder's perspective *DCP100* represents a significant change to the existing formal structure directing housing, changing the enrolment and translation process required by builders (i.e. the style of the building) (Callon, 1986a; 1986b). It was argued by builders that their efforts to comply with the new council planning regime were to the detriment of new home purchasers as it would raise costs. Further, it is important to note the discursive role that Wyong plays in the broader development of greater Sydney is enrolled by builders to challenge the policy framework. Here affordability and Sydney's land supply issues become discursive intermediaries mobilised by private interests to challenge the planning translation of the local council. The realigned policy framework was a major issue given that the majority of builders were large firms which operate across land release locations (local government areas), making it difficult to respond to council specific regulations – *DCP100* would require significant changes to builders' standardised translation (their project home) (Ball, 2003; Dowling, 2005). Despite the size or experience of building actors, they were unwilling to alter their standardised product to conform to new building regulations:

There is the new DCP[100] and you have never heard [builders] do anything but whinge about it. (Developer)

All firms tend to have their product fairly set. If the council has their own particular controls for dwelling houses, then they just have to adapt to that. They don't like to change and many argue that it impacts on their ability to make money. (Council Officer)

Given the array of locations in which these building actors operate they have few (especially informal) associations with actors directing policy (i.e. council staff). This lack of informal associations is especially relevant, given that in recent readings of residential development it is local knowledge, rather than formal institutional rules, which are seen to offer the ability to recognise and effectively engage relevant actors in a manner conducive to development objectives (Healey, 1997; Hillier, 2000). In this institution-centred interpretation of networks, trust and reciprocity are positioned as the entities that reduce transaction costs, rather than formal contractual provision (Podolny and Page, 1998). However, this is not to say builders are unaware of new policy interventions established within those areas in which they operate, rather that they have little impact (via informal means) on their creation:

> We can argue the point and say that the stipulations they are bringing in are not necessary, but at the end of the day we are the bottom rung of the ladder; nobody really listens to us. (Builder)

Given lack of informal associations within council and the inability of individual builders to challenge formal policy translations, an industry representative was enrolled to challenge the *DCP100* translation on their behalf. Here an industry representative, as a heterogeneous association of multiple local and interested actors, is positioned as a powerful actor with the authority to translate for the multiplicity of building actors in a single comprehensive translation. The industry representative provides a translation of all building actors in Wyong rather than only concerned individuals (Law, 1992; 1999; Murdoch, 1998). While the industry representative does not present the most advantageous translation of building options for each individual builder (i.e. argue on the basis of individual sites or building designs), it is, according to builders, in the best position to engage council actors and challenge building related policy. In the case of

Australian residential building the relevant industry representative is the Housing Industry Association (HIA). Here the HIA comes to represent a heterogeneous association of a significant number of building related actors across Australia:

> You find most builders, rather than be individual, are usually represented by the HIA. So collectively they go to the HIA and then they negotiate on the industry's behalf. (Developer)

Unlike individual builders, the HIA is seen to engage state actors, through mobilising informal lines of association rather than formal lines of appeal. Here informal associations become intermediaries, which are mobilised by the HIA (i.e. they can be mobilised in an effort to alter policy), yet remain unavailable to individual building actors. Importantly, the capacity of the HIA to mobilise informal institutional arrangements for the purpose of challenging the *DCP100* translation was one of the primary reasons it was enrolled by local builders in the first place:

> The HIA would probably say that they've got a pretty good rapport and working relationship with council. (Council Officer)

> The relationship with council is reasonably personal. We get to know the staff at a council level. But we might need to take it to a political level if we don't get what we want. So we might need to engage meetings with councillors, particularly if you are not getting anywhere at the staff level. Typically the relationship with the councillors is a healthy one. (Industry Representative)

Importantly, the HIA positions the hierarchical structure of the council as an institutional arrangement that can also be enrolled for the purpose of negotiating acceptable policy. In the

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case of *DCP100* the HIA initiated (informal) interaction at the political level (engaging councillors in the first place) only later engaging junior staff in enrolments and translations over the specificities of the policy. The tendency of the HIA to operate in a top-down fashion through accessing political actors is, in part, due to its inability to operate at all sites of development and, thus, develop the required knowledge and informal relationships in each council area to mobilise a bottom-up strategy – i.e. engage directly with the council staff responsible for planning translations prior to their development:

> We would have most of our early discussions with the councillors. We would mainly liaise with the General Manager, the mayor and the deputy mayor. So we don't need to know the politics of the council, we prefer to fight the issue on the issue alone and hope to convince the council of the merits of our argument. The political side of it is left to the mayor or whoever. (Industry Representative)

The ability to access councillors as initial points of contact through a top-down approach potentially increases the chance of success as the hierarchical nature of council is enrolled at the early stages of the project. In addition, the active circumvention of (local) political issues is a product of both the recognition that the lack of knowledge in such matters may disadvantage negotiation and that, through a top-down strategy, political matters will be taken care of by senior staff with objectives akin to the HIA (Ruhil et al., 1999; McNeill, 2001). Further, the emphasis placed on merits advocates an approach which enrols a variety of actors to present the value and worth of any translation. Of particular importance is the enrolling of market concerns and expert testimony as actors/intermediaries that mediate policy negotiation. Thus, as the actor representing the building industry, the HIA is more willing (and able) to mobilise the formal hierarchy of council, as well as informal relations with actors in positions of authority and

engage expert testimony in efforts to develop a formal policy translation more conducive to the strategic objectives of its constituent actors (i.e. local builders) (Latham, 2002; Smith, 2003).

Importantly, the HIA is recognised by council as the body with the capacity to translate on behalf of a divergent set of private/building actors in Wyong (Murdoch, 1997; Latham, 2002). However, despite suggestions by council staff that building actors were consulted at the early stages of the *(Draft) DCP100*'s development, this early enrolment/engagement was deemed unsatisfactory by both builders and the HIA given that their issues (such as water tanks and cut-and-fill requirements) received, according to them, little credence in the final policy translation. Rather, the majority of negotiation between state and private actors occurred after building actors challenged the initial policy translation as presented in the *(Draft) DCP100*. This second stage of interaction between council and building actors was a product of overt petitioning by the HIA of the (elected) council:

> We requested, on behalf of the builders, if we could address the council. We highlighted some of the concerns with the policy. Out of that meeting it was resolved that they should defer the introduction of their new policy until they had the opportunity to sit down with the HIA and its members. (Industry Representative)

> We finished the draft DCP and we went up to council and they said 'whoa, we have been lobbied by the HIA. Obviously you have not consulted with them, so we want you to do some consultancy just with them and talk about the Quality Housing DCP. (Council Officer)

Thus, the interaction between the HIA and council officers was a product of a challenge to the initial policy translation through the formal (hierarchically-structured) authority of elected councillors, accessed via informal means.

Although translating the needs of local builders, the HIA is unaware of the individual topological associations that influence, impact and shape specific building actor-networks in Wyong, including the historical, policy and institutional make-up of the region. This difficulty is due to both the size of the HIA and the inability to engage in all new policy translations across all sites of development and the weak position of builders as a whole and, thus, their infrequent inclusion in policy actor-networks (Dowling, 2005):

> Ideally we prefer to get in there before decisions are made, but there is a range of decisions that get made across my portfolio [planning] on a daily basis. It is impossible to get in there before every decision made by the Commonwealth Government in some respects, the State Government, and all the various councils. (Industry Representative)

> We tend to pick up on the ones that our members are most aware of and concerned about. They tend to call us in on those cases. Our involvement in *DCP100* is primarily through our members being made aware of the policy they were proposing to introduce, and the fact they were really unable to have an influence on that document. (Industry Representative)

The HIA, therefore, becomes involved in specific policy actor-networks only at the request/enrolment of localised building actors who have a greater understanding of the specific topological actors (e.g. policy interventions and development pressures) in their own network yet lack the (formal or informal) institutional authority to access policy negotiations. Here the

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involvement of the HIA in the *DCP100* actor-network represents a circle of translation as both

the HIA and local builders argue against the initial policy translation through the agency of the

other – the HIA is a powerful actor because it translates on behalf of local builders, while local

builders enrol the HIA to challenge the planning conditions identified under *DCP100* (Callon,

1986a; 1986b; Murdoch, 1997; 1998) (Figure 2). It is through mobilising the HIA that local

builders can enter the policy actor-network and hope to alter its translation in line with their own

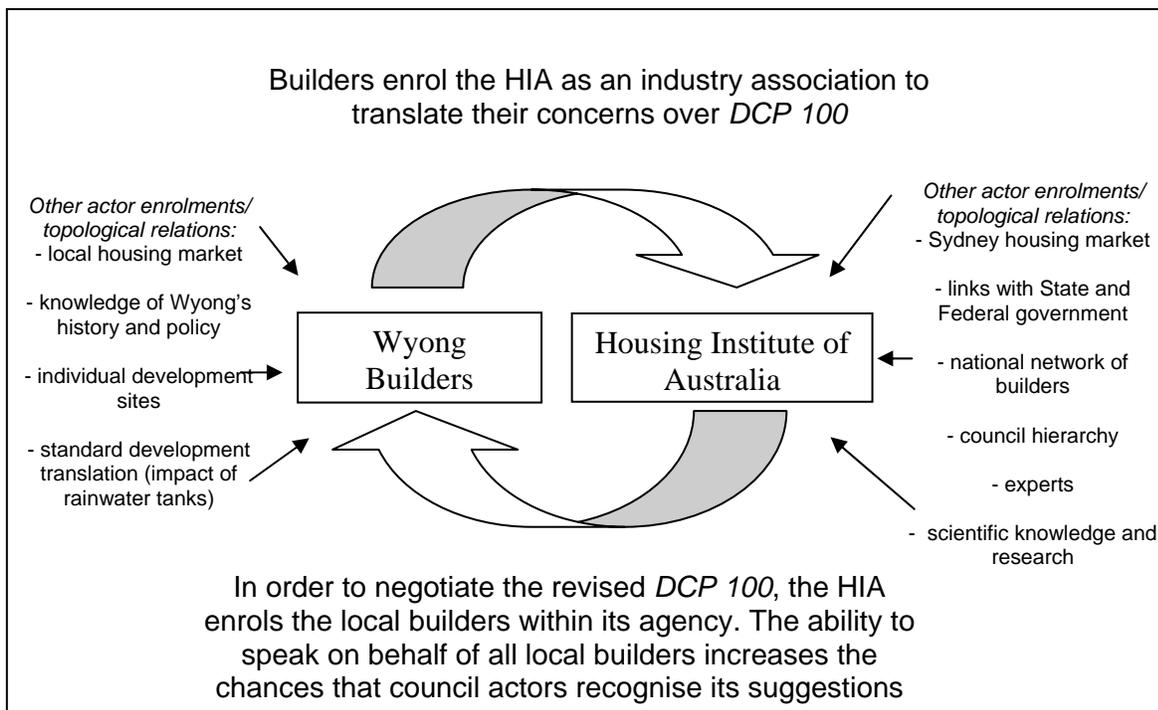goals (in this case, less restrictions on building).

Builders enrol the HIA as an industry association to translate their concerns over *DCP 100*

Other actor enrolments/ topological relations:
- local housing market

- knowledge of Wyong's history and policy

- individual development sites

- standard development translation (impact of rainwater tanks)

Wyong Builders

Housing Institute of Australia

Other actor enrolments/ topological relations:
- Sydney housing market

- links with State and Federal government

- national network of builders

- council hierarchy

- experts

- scientific knowledge and research

In order to negotiate the revised *DCP 100*, the HIA enrols the local builders within its agency. The ability to speak on behalf of all local builders increases the chances that council actors recognise its suggestions

Figure 2 Circle of translation for *DCP100* – Wyong builders and the Housing Institute of Australia

In this environment the political nature of *DCP100* is paramount, as the initial translation of

council staff was vetoed by political actors (councillors) in direct response to the lobbying of a

powerful political organisation operating on a State and federal policy agenda. Further, the need

to engage with the HIA in a series of negotiations was due to the inability of council staff to: first,

convince council that the earlier interactions/enrolments could represent the desires of the

builders in the region; second, convince the councillors or the builders that the initial policy would not impact negatively on the market; and, finally, present the environmental benefits (e.g. water tanks) as outweighing short-term market centred concerns. In short, the *(Draft) DCP100* was a failed translation.

While builders positioned *DCP100* as a policy translation that would result in decreased demand and increased costs for home purchasers, council officers position *DCP100* as an innovative, well-researched institutional framework (WSC, 2002b), one whose implementation was delayed, to the detriment of Wyong:

> *DCP100* is quite an innovative effort. One of the reasons that it lasted so long was that our councillors were lobbied by the building industry. We had already undertaken a formal review process with the industry but they didn't like the results that came out of it, so we were again asked to go back, this time specifically to the HIA. (Council Officer)

Importantly, the relative authority of the HIA to translate building concerns is reconfirmed by centralised council actors (elected councillors) who specifically request the HIA's involvement. This is important for two reasons: first, at this stage the HIA was already involved and interacting with councillors and senior staff through a top-down institutional strategy; and (partly as a result), second, the HIA is identified by council as the actor with the ability to negotiate and translate on behalf of multiple building related actors (Murdoch, 1997; Whatmore, 1997). Thus, the HIA had been successful in presenting itself to (elected) council as the actor with the capacity to translate on behalf of local builders – negotiated outcomes with the HIA were, therefore, seen to have the capacity to speak on behalf of all builders in Wyong.

As part of the second round of council/builder interaction, a series of formal negotiations were initiated:

> We got together with council in a series of meetings where we had a table, they were on one side we were on the other, and went through each of the provisions in the DCP. At the end of the day that was a fairly good outcome, they were able to see where we were coming [from] and we could see what they were trying to achieve. The policy that was adopted was a much more reasonable policy to work with; I think the council would agree with that. (Industry Representative)

Perhaps unsurprisingly, negotiations were positioned as somewhat adversarial where each actor pursued its own objectives. Nevertheless, both the council and the HIA saw the process as one where their objectives could be reconciled and a joint translation of building policy constructed (albeit not one where the requirements of either side are fully met) (Callon, 1986a; Law, 2000a). Thus, *DCP100* represents a more authoritative policy framework than the draft version given that it now represents a translation of both council and builders. It is important to note that while the revised *DCP100* may be viewed as a more reasonable policy framework, it represents a negotiated translation where each side gave some ground but ultimately still disagreed with components of the final policy in an effort to achieve an overall policy outcome more amenable to their own objectives (Murdoch and Marsden, 1995; Bassett et al., 2002). While council stood firm on a number of conditions, in an effort to avoid ongoing conflict and the enrolment of formal intervention (such as court action), they were required to alter some of the requirements outlined in the draft policy proposal:

We stood firm on the water tanks. But one of the things we did change was cut-and-fill. You have to give a bit in these things. In the end I think it was better all round. (Council Officer)

Here council was willing to forego an ideal translation of building in terms of cut-and-fill in an effort to secure water tank provision – one of the most fervently fought-over conditions:

The main issue was that we were going to require water tanks, now through that negotiation process we ended up changing the requirements for cut-and-fill. They didn't change the water tanks. (Council Officer)

This stability of rainwater tank requirements within the policy was due to the inability of the HIA to effectively enrol environmental issues in its counter translation of building in Wyong. As the central exemplar of the conflict between council objectives of ESD and private concerns of market operation, rainwater tanks provided a central point of negation, in turn, facilitating the enrolment of more a diverse and divergent array of actors:

We have just bought in a water tank policy [as part of *DCP100*], and there was a lot of backwards and forwards on that with the HIA. That was based on cost. They argued that it would destroy building at Wyong. (Council Officer)

Under *DCP100* all new homes are to be built with rainwater tanks of at least 5,000 litres. The enrolment of water tanks by council was an effort to increase the environmental sustainability of new dwellings and reduce their impact on council's resources (WSC, 2003). Alternatively, builders argued that the mandatory inclusion of water tanks would significantly increase the price of new residential dwellings:

Water tanks are a substantial cost. When you are buying a house you don't have a spare five or seven thousand [Australian] dollars to put in a water tank. (Industry Representative)

It is hard to say to a client 'your house is going to cost you [AU]$340,000' and then the client goes 'well how come if I build it [elsewhere] it is only going to cost me [AU]$300,000?' We have to tell them that it is because of the council stipulations. (Builder)

Issues of housing affordability aside, as part of the challenge to *DCP100* the HIA questioned the extent to which such policy interventions can improve the environmental impact of housing, suggesting a lack of quality research into the value of water tanks to environmental conservation:

There is a lot of discussion on water tanks that hasn't been had yet, so the verdict is still out. Wyong is probably a leader in jumping on the water tank solution, but they possibly could have held off for a while and engaged in some research and discussion. (Industry Representative)

Here the relative value of water tanks is questioned by building interests by suggesting that a coherent and comprehensive translation of their value and purpose remains to be developed. Further it is suggested that a more coherent translation of the value of water tanks could only be developed through the enrolment of research and related actors which, according to the HIA, were absent from the *DCP100* actor-network. As part of the renegotiation of *DCP100* scientific expert knowledge, equipment and research become actors/intermediaries enrolled in efforts to

construct a translation conducive to the overarching network objectives of the HIA – reduced building constraints. It is suggested by the HIA that, for the purposes of achieving its strategic goal (one that does not include water tanks), scientific research should be initiated at the beginning rather than midway through the process. Here the HIA advocates the development of a secure and coherent 'black box' of planning policy (Callon and Latour, 1981). However, it should be noted that in the case of *DCP100* the call by the HIA for the exclusion of water tanks rests on the belief that they have little impact on water conservation – a claim equally unfounded in the absence of scientific research.

The *(Draft) DCP100* was, therefore, fallible due to its incapacity to translate the environmental capacity of water tanks, leaving it open to challenge from the HIA. As part of the second stage of policy negotiation scientific research was enrolled by council in an effort to support the value of water tanks and strengthen their negotiations with the HIA. However, this enrolment is seen to be a product of the HIA's involvement in the process rather than an attempt to develop a coherent translation on council's behalf:

> Council's policy did end up being researched, but that was after we had been involved in the process. But still I don't think they are taking into account the full cost and benefits. (Industry Representative)

Under the revised translation, experts (a series of university based scientists) were enrolled in an effort to validate and grant authority to the *DCP100* actor world. Nevertheless, while experts may be increasingly enrolled to translate various components of the *DCP100* actor-network, the definition of 'benefits' represents a discursive position mediated by the overall strategic logic of the competing actor-networks. Thus, in contrast to the cost concerns forwarded by the HIA and builders, council advocates the environmental advantages of the policy:

> Water tanks are a good example where council has pushed it, and although everyone is saying 'no don't do it. It is going to increase costs and everything'. We said on the environmental reasons we need them, therefore, we are going to require them. (Council Officer)

Council presents an opposing ideological spin on the cost and benefits of *DCP100* by downplaying economic costs and championing the environmental outcomes of the policy. In this reading the market-centred concerns of the HIA are positioned as lacking vision and failing to understand the future of development regulation. However, it also re-positions formal institutional arrangements in directing policy translations, with council, as the centralised state actor, requiring water tanks on the basis of environmental concerns, with little negotiation (or, indeed, justification) entered into. Further, council positioned itself as actively undertaking pre-emptive policy translations in efforts to secure relevant local planning frameworks. According to council, *DCP100* is a policy that reflects the topological specificity of Wyong, rather than the result of the adoption of an impending universal State policy:

> We recognise that all this stuff is going to come in [across the entire State] anyway, so we might as well get it right for Wyong now, rather than wait for the State Government to come in and take control. (Council Officer)

Here council suggest that similar conditions will become standard across development locations and that local policy instruments that recognise environmental concerns will retain their authority as increasing emphasis is placed on these arenas from a State level (WSC, 2002a). *DCP100* is positioned by council as a local policy instrument that provides some regional autonomy in the light of impending State regulations that will require the inclusion of environmental concerns

(such as water conservation) but which pay little attention to the topological specificity of these locations (such as the development pressure Wyong is currently experiencing).

CONCLUSION

DCP100 was adopted by Wyong Shire Council in January 2003. Although positioned by council as the product of extensive research and negotiation the *(Draft) DCP100* was challenged by private actors. This challenge was mediated through the HIA in formal and informal approaches to elected councillors in efforts to force a new round of negotiations. The presence of the HIA in the *DCP100* network is vital for a number of reasons. First, given the institutionally weak position of builders, the HIA was enrolled to translate on behalf of the all builders operating in Wyong. This enrolment by local builders, in turn, granted the HIA the authority to act on their behalf in the negotiation of the policy. Second, given its size and political nature, the HIA is able to engage senior council staff (through both formal and informal means) in a manner conducive to the needs of local builders. The relatively powerful position of the HIA was validated by Wyong Council which, by heeding the HIA's concerns over market and cost implications, required *DCP100* to be renegotiated. The negotiation of *DCP100* between private interests, concerned with minimising the impact of policy on market functions, and council, pursuing a frame to ensure the increased aesthetic and environmental quality of dwellings, was facilitated through a series of formal and informal interactions. Each of these interactions became the site of network translation as each actor (the HIA and council) translated others in efforts to strengthen their authority claim and direct the network (*DCP100*). After the extensive enrolment of a myriad of (scientific, discursive, market) actors, *DCP100* was positioned as a negotiated translation that better represented the desires of council and private building interests.

This discussion of *DCP100* positions institutional arrangements as central actors/intermediaries in the construction of development policy. The institutional components of this interaction focus on the formal hierarchy of council, and the ability of some actors – in this case the HIA – to engage councillors in efforts to destabilise existing policy translations. Highlighting the complexity of institutional enrolment, informal arrangements were mobilised within the frame of formal arrangements, as council and industry actors attempted to construct a translation most aligned to their desired outcomes – that is, increased or decreased environmental considerations respectively. While the construction of *DCP100* is positioned as the outcome of formal and informal associations, each interaction is mediated by the differential enrolment of discursive and non-human actors (e.g. housing affordability and water tanks) for the purposes of creating a policy translation most aligned to the desires of their constituents (Murdoch, 1998; Law, 1999). As the actor translating for local builders, the industry representative enrolled a series of discursive arguments, such as the affordable nature of the region, in efforts to destabilise the policy translation forwarded by council. In opposition, the council mobilised a series of human and non-human actors to support the existing policy.

While the influence and interaction of formal and informal institutional arrangements are increasingly recognised as vital in understanding residential planning and market operation (Ball, 2003; Adams and Hastings, 2001; Guy and Henneberry, 2000), ANT offers a new lens through which to analyse these interactions. Through mobilising notions such as enrolment and translation, it is possible to trace the detailed interactions/negotiations which facilitate plan development. The adoption of ANT positions non-human actors at the centre of the institutional negotiation process. In the case of *DCP100* rainwater tanks represent a central actor in the policy actor-network – albeit their enrolment and translation differed significantly between actors. Drawing on ANT, policy development is viewed not as the smooth process of institutional

negotiation, nor the product on inherent power relations, but the end product of a complex series of interactions, enrolments and translations of a diversity of interested actors.

The final and formalised policy translation adopted by Wyong councillors represents a complex actor network translation, whereby both state and private actors were required to forgo an ideal translation in an effort to reach an outcome where some of their network objectives were realised (such as decreased cut-and-fill and water tanks). While the requirement to renegotiate/reenrol/retranslate builders ultimately changed the policy translation, this new translation was positioned by council officers as a more powerful policy, given that it was identified as the translation of a more coherent actor-network which now includes builders (Callon, 1986a; 1986b; Law, 2000a).

REFERENCES

Adams, D. and Hastings, E.M., 2001, Assessing Institutional Relations in Development Partnerships: The Land Development Corporation and the Hong Kong Government prior to 1997. *Urban* Studies, Vol. 38, 1473–1492

Adams, D. and Watkins, C., 2002, *Greenfields, Brownfields and Housing Development*. Oxford, UK: Blackwell.

Adams, D., Disberry, A., Hutchinson, N. and Munjoma, T., 2002, The impact of land management and development strategies on urban redevelopment prospects. In S. Guy and J. Henneberry, editors, *Development and Developers*. Oxford, UK: Blackwell.

Allen, J., 2004, The Whereabouts of power: Politics, government and space. *Geografiska Annaler*, Vol. 86B, 19–32.

Allmendinger, P., 1996, Development control and the legitimacy of planning decisions: A comment. *Town Planning Review*, Vol. 67, 229–233.

Amin, A. and Thrift, N., 2002, *Cities: Remaining the Urban*. Cambridge: Polity Press.

Ball, M., 2002, The organization of property development professions and practices. In S. Guy and J. Henneberry, editors, *Development and Developers*. Oxford, UK: Blackwell.

Ball, M., 2003, Markets and the Structure of the Housebuilding Industry: An International Perspective. *Urban Studies*, Vol. 40, 897–916.

Bassett, K., Griffiths, R. and Smith, I., 2002, Testing governance: Partnerships, planning and conflict in waterfront regeneration. *Urban Studies*, Vol. 39, 1757–1776.

Beer, A., Kearins, B. and Pieters, H., 2007, Housing Affordability and Planning in Australia: The Challenge of Policy Under Neo-liberalism. *Housing Studies*, Vol. 22, 11–24.

Burke, T., 1999, The provision of housing. In P. Troy, editor, *Serving the City*. Sydney, Australia: Pluto Press.

Callon, M., 1986a, The Sociology of an Actor-Network: The Case of the Electric Vehicle. In M. Callon, J. Law and A. Rip, editors, *Mapping the Dynamics of Science and Technology: Sociology of Science in the real world*. London, UK: MacMillan.

Callon, M., 1986b, Some elements of a sociology of translation: domestication of the scallops and fishermen of St Brieuc Bay. In J. Law, editor, *Power, Action and Belief: A New Sociology of Knowledge?* London, UK: Routledge and Kegan Paul.

Callon, M., 1991, Techno-economic networks and irreversibility. In J. Law, editor, *A Sociology of Monsters*. London, UK: Routledge.

Callon, M., 1999, Actor-network theory - the market test. In J. Law and J. Hassard, editors, *Actor Network Theory and After*. Oxford, UK: Blackwell.

Callon, M. and Latour, B., 1981, Unscrewing the big Leviathan: how actors macro-structure reality and how sociologists help them to do so. In K. Knorr-Cetina and A.V. Civourel, editors, *Advances in Social Theory and Methodology: Towards an integration of micro- macro-sociologies*. Boston, MA: Routledge and Kegan Paul.

Claydon, J., 1996, Negotiations in planning. In C. Greer, editor, *Implementing Town Planning*. Harlow, UK: Longman.

Claydon, J. and Smith, B., 1997, Negotiating Gains through the British Development Control System. *Urban Studies*, Vol. 34, 2003–2022.

Dowling, R., 2005, Residential Building in Australia, 1993-2003. *Urban Policy and Research*, Vol. 23, 447–464.

Ennis, F., 1997, Infrastructure Provision, the Negotiation Process and the Planner's Role. *Urban Studies*, Vol. 34, 1935–1954.

Fligstein, N., 2001, *The Architecture of Markets: An Economic Sociology of Twenty-First Century Capitalist Societies.* Princeton, NJ: Princeton University Press.

Gleeson, B. and Low, N., 2000, Revaluing planning: Roll back neo-liberalism in Australia. *Progress in Planning*, Vol. 53, 83–164.

Guy, S. and Henneberry, J., 2000, Understanding Urban Development Processes: Integrating the Economic and the Social in property Research. *Urban Studies*, Vol. 37, 2399–2416.

Healey, P., 1991, Debates in planning thought. In H. Thomas and P. Healey, editors, *Dilemmas of Planning Practice.* Aldershot, UK: Avebury Technical.

Healey, P., 1995, Discourses of Integration: Making Frameworks for Democratic Urban Planning. In P. Healey, S. Cameros, S. Davoudi, S. Graham and A. Madani-Pour, editors, *Managing Cities: The New Urban Context.* Chichester, UK: John Wiley and Sons.

Healey, P., 1997, *Collaborative Planning.* London, UK: MacMillan,.

Healey, P., Purdue, M. and Ennis, F., 1995, *Negotiating Development: Rationales and Practices for development obligations and planning gain.* London, UK: E&FN Spon.

Hillier, J., 2000, Going round the back? Complex networks and informal action in local planning processes. *Environment and Planning A*, Vol. 32, 33–54.

Hillier, J., 2002, *Shadows of Power: An Allegory of Prudence in Land-Use Planning.* London, UK: Routledge.

Keivani, R., Parsa, A. and McGreal, S., 2001, Globalisation, Institutional structures and real estate markets in Central European cities. *Urban Studies*, Vol. 38, 2457–2476.

Larner, W., 2003, Neoliberalism? Guest Editorial. *Environment and Planning D: Society and Space*, Vol. 21, 509–512.

Latham, A., 2002, Retheorising the Scale of Globalisation: Topologies, Actor-networks, and Cosmopolitanism. In A. Herod and M.W. Wright, editors, *Geographies of Power: Placing Scale.* Malden, MA: Blackwell.

Latour, B., 1988, *The Pasteurization of France.* Cambridge, MA: Harvard University Press.

Law, J., 1992, *Notes on the Theory of the Actor Network: Ordering, Strategy and Heterogeneity.* Lancaster, UK: Centre for Science Studies and the Department of Sociology, Lancaster University.

Law, J., 1999, After ANT: Complexity, naming and topology. In J. Law and J. Hassard, editors, *Actor Network Theory and After.* Oxford, UK: Blackwell.

Law, J., 2000a, *Networks, Relations, Cyborgs: on the Social Study of Technology.* Lancaster, UK: Centre for Science Studies and the Department of Sociology, Lancaster University.

Law, J., 2000b, *Economics as Interference (Draft).* Lancaster, UK: Centre for Science Studies and the Department of Sociology, Lancaster University.

Lowndes, V., 2001, Rescuing Aunt Sally: Taking Institutional Theory Seriously in Urban Politics. *Urban Studies*, Vol. 38, 1953–1971.

McGuirk, P.M., 2001, Situating communicative planning theory: context, power, and knowledge. *Environment and Planning A*, Vol. 33, 195–217.

McNeill, D., 2001, Embodying a Europe of the cities: geographies of mayoral leadership. *Area*, Vol. 33, 353–359.

Murdoch, J., 1995, Actor-networks and the evolution of economic forms: combining description and explanation in theories of regulation, flexible specialisation, and networks. *Environment and Planning A*, Vol. 27, 731–57.

Murdoch, J., 1997, Inhuman/nonhuman/human: actor-network theory and the prospects for a nondualistic and symmetrical perspective on nature and society. *Environment and Planning D: Society and Space*, Vol. 15, 731–756.

Murdoch, J., 1998, The Spaces of Actor-Network Theory. *Geoforum*, Vol. 29, 357–374.

Murdoch, J. and Marsden, T., 1995, The spatialization of politics: local and national actor-spaces in environmental conflict. *The Transactions of the Institute of British Geographers*, Vol. 20, 368–380.

New South Wales Department of Planning, 2006, *City of Cities - A Plan for Sydney's Future*. Sydney, Australia: NSW Department of Planning

O'Neill, P. and Whatmore, S., 2000, The business of place: networks of property, partnership and produce. *Geoforum*, Vol. 31, 121–136.

Peck, J., 2000, Doing Regulation. In G.L. Clark, M.P. Feldman and M.S, Gertler, editors, *The Oxford Handbook of Economic Geography*. Oxford, UK: Oxford University Press.

Podolny, J.M. and Page, K.L., 1998, Network Forms of Organisation. *Annual Review of Sociology*, Vol. 24, 57–76.

Smith, R.G., 2003, World city actor-networks. *Progress in Human Geography*, Vol. 27, 25–44.

Ruhil, A.V.S., Schneider, M., Teske, P. and Ji, B., 1999, Institutions and reform: Reinventing local government. *Urban Affairs Review*, Vol. 34, 433–455.

Tang, B., Choy, L.H.T. and Wat, J.F.K., 2000, Certainty and Discretion in Planning Control: A Case Study of Office Development in Hong Kong. *Urban Studies*, Vol. 37.13, 2465–2483.

Tichelar, M. and Watts, L., 2000, Role players and authority figures: Informal power relationships with local authorities. *Policy and Politics*, Vol. 28, 221–231.

Whatmore, S., 1997, Dissecting the autonomous self: hybrid cartographies for a relational ethics. *Environment and Planning D: Society and Space*, Vol. 15, 37–53.

Wyong Shire Council, 2002a, *Residential Development Strategy (Draft Report).* Wyong, Australia: Wyong Shire Council.

Wyong Shire Council, 2002b, *Media Release: Wyong Council exhibits blueprint* (26 July). Wyong, Australia: Wyong Shire Council.

Wyong Shire Council, 2003, *Development Control Plan 100 – Quality Housing*. Wyong, Australia: Wyong Shire Council.