

THE HARCOURTS BUILDING – A ‘SEISMIC’ SHIFT?

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ABSTRACT

Purpose – The purpose of this paper is to identify through the application of Actor Network Theory (ANT) the issues and impediments to the implementation of mandatory seismic retrofitting policies proposed by the New Zealand Government. In particular the tension between the heritage protection objectives contained in the Resource Management Act 1991 and the earthquake mitigation measures contained in the Building Act 2004 are examined.

Design/methodology/approach – The paper uses a case study approach based on the Harcourts Building in Wellington New Zealand and the case law relating to attempts to demolish this particular building. Use is made of ANT as a ‘lens’ to identify and study the controversies around mandatory seismic retrofitting of heritage buildings. The concept of translation is used to draw network diagrams.

Findings – It was found that the case law generated by Harcourts Building dispute did not represent a ‘seismic’ shift in the judicial interpretation of the Resource Management Act 1991 but did clarify the relationship between the RMA and the Building Act. ANT was also found to be an appropriate and useful method to apply to research into the challenge of the seismic retrofitting of heritage buildings.

Research limitations/implications – Although some of the findings will be case study specific many of the findings are highly relevant to many other buildings and urban locations throughout New Zealand.

Takeaway for practice – The Harcourts Building has been seen by many as an important precedent setting case regarding the rights of the property owner where heritage protection is an issue. It is thus important case law for property consultants dealing with heritage buildings.

Originality/value – The use of Actor Network Theory has been widely used in Science and Technology Studies (STS) and the social sciences in general but is not an approach that has been widely used to study property issues or controversies.

Social Implications – The retention and conservation of heritage buildings is an important social goal. This paper seeks to identify and improve understanding of the impediments to achieving this goal.

Keywords: ANT, seismic retrofitting, heritage buildings.

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INTRODUCTION

The purpose of this research was two-fold. The first was to gain a better understanding of the issues and controversies surrounding earthquake-prone buildings and thus to identify impediments to the implementation of mandatory seismic retrofitting policies being currently introduced by the New Zealand Government. Previous papers (Nahkies, 2009), (Nahkies, 2014) have noted the tension between the heritage protection objectives contained in the Resource Management Act 1991 and the earthquake mitigation measures contained in the Building Act 2004 in relation to earthquake-prone buildings. In order to examine and illustrate this tension a case study analysis was carried out on the Harcourts Building in Wellington. This building is earthquake-prone and also considered to have a high heritage value making this building an excellent subject for case study analysis. The definition of an earthquake-prone building is contained in the Building Act 2004 but in layman’s terms any building that is less than 33.33% of New Building Standard (NBS) is generally considered to be earthquake-prone. If a building is deemed to be earthquake-prone then it

will be required by proposed legislation to undergo a seismic retrofit. A seismic retrofit can be defined as the process of strengthening or enhancing the structural performance of an existing building in order to improve the ability of the building to better withstand the effects of an earthquake.

The second purpose of the research was to gain insights into Actor Network Theory (ANT) and examine its relevance and usefulness as a research methodology to be applied in a property context in the form of case study based exploratory research.

ANT is a field of scholarship closely associated with the work of Bruno Latour, Michael Cannon and John Law although Latour traces its origins back to the French philosopher Gabrielle Tarde. It is usually associated with social science researchers. It evolved out of the STS discipline but has been used in an ever increasing variety of contexts. However, its use in the property industry has been negligible. This is possibly due to the inherent bias of the property discipline to use quantitative methods as part of a positivist approach. (Levy & Henry, 2003) (Levy,2006).

Background.

The building is situated in the Wellington Central Business District on a 978 square metre site on the corner of Lambton Quay and Grey Street. This makes the site a prominent corner site with good development potential. The Building was originally completed in 1928 for T&G, an Australian insurer. It comprises 7 storeys of office accommodation, ground floor retail premises and a small rooftop flat.

The heritage value of the building was first formally recognised in 1982 when it was registered with a “C” classification under s35 of the Historic Places Act 1980. This classification was upgraded to a “B” classification in 1989 by the New Zealand Historic Places Trust. This change was appealed by the owner but the appeal was declined and the building was listed as a Category I listed building under The Historic Places Act 1993. It was listed for heritage protection in the Wellington District Plan in 1994.

In 2000 the HSBC office tower was developed on the site adjoining the Harcourts Building which was owned by the developers of the HSBC Tower. As part of the HSBC development two heritage listed buildings on the site were demolished although eventually the façade of one of the buildings - Hamilton Chambers was retained. In addition the services of the HSBC Tower were inserted into the light well space of the Harcourts Building. This insertion has subsequently been identified as an issue as there is no seismic separation between the two building and pounding effects during an earthquake are potentially a serious problem.

In November 2010 and February 2011 major earthquakes took place in Canterbury and raised both public and tenant awareness of earthquake risks. This was reported by the owner as reducing the value of the Harcourts building from \$20 to \$22 million dollars down to about \$12 million. In addition the building was deemed to be an “earth-quake prone building” by the Wellington City Council which initially assessed the building as only meeting 4% of New Building Standard (NBS). This was despite the owner having obtained an engineer’s assessment at 46% of NBS on the 28th June 2011. The Council reviewed their initial assessment and increased this to 17% NBS which still left the building defined as earthquake prone.

The Owner of the building had by this time formed plans to demolish the building and replace it with a 25 storey office tower. This earthquake-prone status of the building was not contested by the owner and as a result the Council issued a section 124 notice on the 27th July 2012. This notice to the owners required them to either strengthen the building or to demolish it within 20 years.

Rather than strengthen, the owner applied for a resource consent to completely demolish the building. The resource consent hearing was held in December 2012 before a panel of Commissioners appointed by the Wellington City Council. Forty eight submissions were received on the proposal with 18 in support and 30 in opposition. The decision was made on 25th February 2013 to decline the consent. The scene was thus set for the subsequent events that followed and which are described in depth later in this paper.

LITERATURE REVIEW

Risk

Central to the story of the Harcourt Building is the concept of risk. It is the risks relating to a potential building collapse in an earthquake that is used to justify demolition and it is the perception of risk that has driven the drop in value of the building and the flight of tenants from the building. A review of some of the relevant ‘risk’ literature was therefore undertaken.

Risk is a subject that is of interest to many disciplines including sociology, economics, finance, property, medicine and engineering. The multi disciplinary nature of risk is illustrated by the diverse nature of the literature that can be found relating to risk and risk mitigation. In dealing with the risk relating to earthquakes there is clearly a scientific element and the need to study a natural phenomenon. However, it has been strongly argued by sociologists that risk is essentially a cultural and social construct. The drive to reduce risk and make society safe is therefore a phenomenon that has been the subject of a substantial body of research by sociologists. Sociologists have studied the way in which society has perceived and responded to risks through time.

Under the techno scientific (realist) approach to risk there is a large body of work produced by experts in the fields of engineering, insurance, and economics. Earthquakes are low probability but high consequence events. The challenge of calculating the probability of earthquakes occurring and of then estimating their likely impact has received a lot of attention from the insurance industry and earthquake engineers. Work has also been done in the area of decision making and cost benefit analysis. For example, Vanzi (2002), Bommer (2002), and Cadona et al (2008) looked at the decision making process in terms of selecting the optimum retrofitting technique.

Two New Zealand examples of the techno scientific approach are the work of Hopkins and Stuart (2003) who calculated the benefit to cost ratio for 32 cities and towns in New Zealand using 18 input variables and the work of Cousins (2013) who calculated the probability of dying in an earthquake in different locations in New Zealand with high, medium or low seismic hazard.

The cultural-symbolic approach to risk is associated with researchers such as Douglas and Wildavsky (1982) who studied the subject of risk from an anthropological and cultural perspective. They concluded that each culture with their shared values and supporting social institutions is biased towards highlighting certain risks and downplaying others. They also highlighted that even the experts in risk assessment are likely to disagree and that supposedly objective assessment of risk will inevitably have bias imbedded in the choice of both the risk assessment methodology and within the methodology itself. They make the point that even though the estimation of risk may be scientific, the acceptance of risk will always be a political decision as it will require decisions on how much wealth should be sacrificed to achieve a certain level of health and safety. As they put it, the measurement of risk is scientific, the acceptability of risk is political.

Recent research in New Zealand carried out by Egbelakin and Wilkinson (2010), Egbelakin et al (2011) and Egbelakin et al (2012) has looked at the importance of behavioural and social impediments to successful implementation of earthquake mitigation. They found that although the level of awareness was high amongst building owners that were surveyed there was limited appetite for carrying out seismic retrofitting. Perceptions regarding high cost and low benefits relating to seismic retrofitting were impediments as were a lack of trust and belief in seismic techniques and professionals.

Social constructionism takes the view that risk is a subjective construct. Therefore the field of social science is vital to understanding risk and risk perception.

Many factors such as cost, risk perception and efficacy of mitigation measures interact to influence seismic retrofit decisions (Egbelakin and Wilkinson 2010, Lindell and Prater 2000a). Studies in the social, economic and decision sciences have sought to address this dilemma from different perspectives. Many socio-psychologists have focused on the impact of risk perception on mitigation decisions, concluding that how people perceive and personalise earthquake risk significantly influence the type of protective decision and behaviour adopted (Lepesteur *et al.* 2008, Lindell and Prater 2000b, Lindell and Prater 2002, Mulilis and Duval 1995, Tierney *et al.* 2001, Weinstein *et al.* 1998). Sociologists studied the social aspects of earthquake risk mitigation. These researchers found that quality of risk information provided to owners, communication style, and characteristics of the agencies responsible for conveying this information affect building owners' willingness to adopt protective measures (Mileti and Fitzpatrick 1993, Mulilis and Lippa 1990)

Of interest and relevance to earthquake mitigation is the work of Power who argues that risk management practices are becoming preoccupied with personal risks to the experts and institutions undertaking the risk management resulting in a "dangerous flight from judgement and a culture of defensiveness" (Power 2004, pp.15). Such an approach by engineers can have a negative impact on feasibility and can also lead politicians to introduce 'politically correct' but irrational mitigation policies.

Actor Network Theory (ANT)

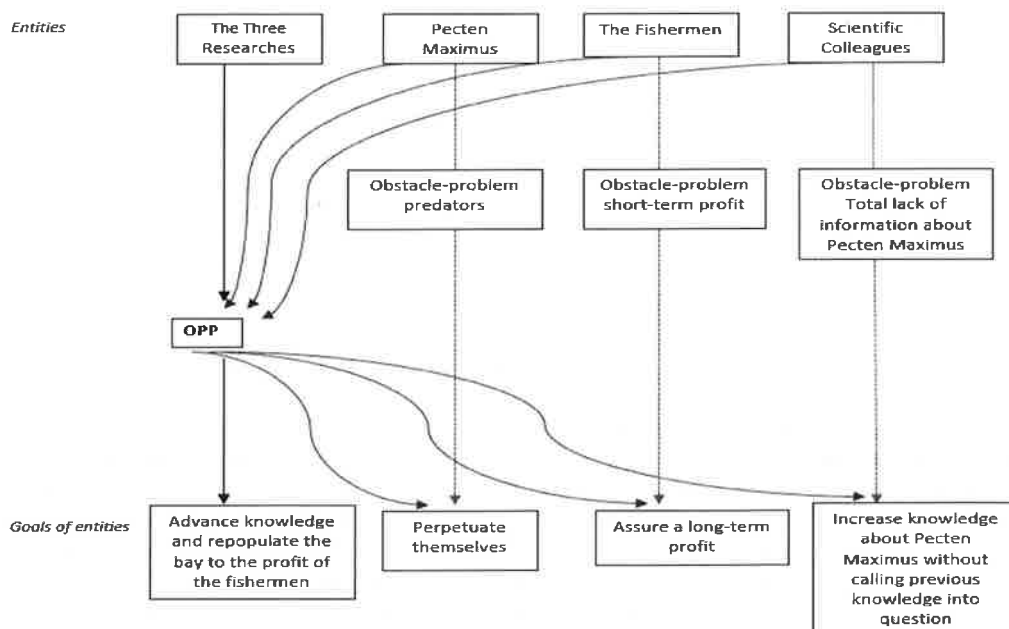
Recognition that seismic retrofitting is not just a techno scientific challenge but also a social one leads to the conclusion that social science methods would be an appropriate means to develop better retrofitting solutions that are acceptable to communities and individuals. The social science method of ANT was chosen as an approach worthy of study and trial. ANT is a field of scholarship that has grown and evolved in diverse ways since its development in the 1980s. ANT is a tool often used by social scientists to examine social interaction and particularly to look at power as an effect rather than a set of causes. The traditional cause and effect of the social is reversed and instead of the social (groups and power) casting 'actors' and causing actions it is the actors and the actions that cause the social. As well as this inversion of

cause and effect ANT is a radical departure from traditional social science thinking in that it is an attempt to escape the dualism between the human and the non-human. The well known ANT scholar Latour states that “it is a grave methodological mistake to limit in advance... the range of entities that may populate the social world” (Latour 2005, p.245). Actor-networks are a jumble of things (human and non-human) – how they hold together or get “punctuated” is at the core of ANT.

ANT seeks to describe reality as the outcome of interactions and connections between both human and non-human actors. These interactions and connections can be conceptualised as a form of network. ANT takes many forms and many strands have continued to evolve since its early beginnings. One such evolution was the work of Anne-Marie Mol whose study of atherosclerosis (Mol, 2002) showed how networks could be used to describe how reality can be enacted and how there can be multiple realities. She also showed how these multiple realities can be coordinated to effectively produce a coherent “it” which in her study was a disease. Having shown that there are multiple realities ANT researchers have recognised that realities can be altered or different realities chosen. This recognition about choice has resulted in the practice of what has been described by Mol (1999) as “ontological politics” where social science research can be used to instigate change and make a “real” difference.

One of the earlier approaches to ANT was the work of Michael Callon and his concept of “Translation”. His study of the ‘failure’ of a project to build an electric vehicle led him to develop the concept of “translation” which he illustrated in his paper on the scallop fishing industry in St Brieuc Bay and the interventions by scientists to save the industry from decline. In this paper Callon contends that the translation framework is “particularly well adapted to the study of the role played by science and technology in structuring power relationships” (1986:197). Callons uses a diagram to illustrate his translation process in the scallop farming case study.

Figure 1 – Callon’s Network Diagram (Callon, 1986, p.207, Figure2)



The diagrams sets out the actors or entities as being the three fisheries scientists; the scallops (Pectan Maximus); the fisherman; and the scientific colleagues of the researchers. Each entity/actor have their own goals. The diagram illustrates how unrelated actors can be brought together in a network that translates diverse interests into a common goal. This translation can be achieved by the use of what are described as “interessement” devices that serve to engage or interest each actor so that they accept the Obligatory Passage Point (OPP) as the means of achieving their goals. This approach can be used to explain how one viewpoint comes to be accepted as “fact” which is particularly useful where there is controversy or argument over which viewpoint is “fact” and which is “fiction”. The debate over the Harcourts Building is an example of just such a controversy where there are two sides to the argument with both side striving hard to have their point of view accepted as fact by the Environment Court. According to Callon there are four “moments of translation”. These moments “marks a progression in the negotiations which result in the designation of the legitimate spokesmen who in this case study say what the scallops want and need, and are not disavowed” (1986: 224). The four moments described by Callon are Problematization; Interessement; Enrolment; and Mobilization.

A successful translation relies on the deployment of intermediaries to achieve stability in the network. An intermediary is defined by Callon as “anything passing between actors that defines the relationship between them” (1991, p.134) and he states that “they compose networks by giving them form” (ibid. p.135). Examples of intermediaries are literary

inscriptions, technical artefacts, human beings, and money. Intermediaries are passed between actors and are crucial to the process of interestment. The crucial difference between an actor and an intermediary is that actors create intermediaries or forge connections whereas an intermediary do not (Callon, 1991).

The central notion of translation as explained by Latour (1987) is “to enrol others so that they participate in the construction of the fact: To control their behaviour in order to make their actions predictable (1987: 108). Translation is described by Latour as the interpretation given by the fact builders of their interests and that of the people they enrol” (1987:108).

Networks are inherently unstable and need work to maintain or stabilise them. The process of what is known in ANT as “punctualization” and “black boxing” is important. The complex nature of a network is simplified so that it is “reduced to a single function” (Law & Callon, 1992, p.24) or punctualized so that it represents the network. Punctualisation is described by Law (2004, pg 5) as “a precarious simplicity effects that hide a network” but as a process or effect has the benefit of helping deal with “endless complexity”. For example a TV or a healthy body. The analogy of GIS mapping systems can be used to illustrate whereby the user can decide what layers of detail they wish to examine rather than try and examine all the layers simultaneously.

The product of this process is known as a “black box “which is something that is accepted as stable and not subject to any debate or controversy. These black boxes can be seen as networks-within-networks. They are not opened up for inspection but accepted at face value as a given (a fact). They can give power to an actor who is able to simplify and black box complex networks (Latour 1991).

Latour and Woolgar (1986) studied the scientists at the Salk Institute in an ethnographic study and identified the ways in which statements of ‘fact’ were subject to what they termed “modalities”. Their discussion of modalities was in relation to the production of scientific journal articles but can also be applied in the context of evidence presented in court. They outlined a classification system of 5 levels that could be applied to ‘facts’. At the top of their classification are Type 5 statements which are well known and non contentious facts that are often so taken for granted that they are not made explicit. At the bottom of the classification is Type 1 statements which tend to be speculative or anecdotal.

In their study Latour and Woolgar also coined the phrase “inscription devices” to describe the variety of materials used by the scientists to transform ‘raw’ data to a more usable form. For example machines in a laboratory, maps, photos identification tags. Latour (1996) studied the use of inscription devices as part of his ethnographic study of scientists doing field work in the Amazon rain forest. His work highlighted that inscriptions devices are often mediated. This means that the inscription can go through a series of transformations during which a process of amplification or reduction of the raw data can occur. He called these transformation mediations or a succession of stages where the data can be traced in the way it travels through the different stages or mediations. He states “usually but not always inscriptions are two dimensional, superimposable, and combinable. They are always mobile, that is, they allow new translations and articulations while keeping some types of relations intact” (1996b:306-307). Roland (2012) gives the example of a Heritage Evaluation as an inscription device because it takes a mass of data and converts it to a more useable form.

The term “immutable mobiles” was used by Latour (1987: 226:7) to describe inscription devices which were objects stabilised as technologies to perform the same action in different locations. They are technologies that operate independently of their context because their creators can shield the objects from interfering user groups. An example is inscription devices ‘hidden’ away in laboratories by scientists who are able to restrict access. Guggenheim (2010) asserts that by comparison buildings can be described as “mutable immobiles” which is a significant difference as it highlights that buildings are unstable and changeable (mutable) and cannot be standardized because each is different due to location (immobile). As a result with buildings there is a constant problem with defining and categorising them. For example are they safe or unsafe; a heritage building or just an old building; an economic asset or a liability? This categorisation becomes less of an academic problem but more of a legal problem in controversies such as the Harcourts Building.

METHODOLOGY

There are many variations and types of ANT research and it is an area that continues to evolve and attract debate. However a fundamental and accepted maxim of ANT methodology is to “follow the actors” and in this way identify and trace the social connections or network. A qualitative case study is a staple ANT method as shown by many of the ethnographical case studies described in the Literature Review section of this paper.

The case study chosen as the basis for this paper was the Harcourts Building in Wellington. This was considered an ideal subject to apply the ‘lens’ of ANT to as it is a messy and complex situation which is constantly changing and evolving. It also involves both science and non-humans. In the Case Study chosen there are two significant non-human actors in the form of buildings and earthquakes so the idea of using ANT is a logical one.

However, I have found that the 'lens' of ANT is more like a 'kaleidoscope' so I have largely focused in this paper on applying the concept of 'translation' to the controversies surrounding the Harcourt Building while considering briefly some of the other concepts imbedded in ANT.

An advantage of using the Harcourts Building as a case study was the rich source of data available in the form of evidence presented at the Environment Court proceedings relating to the building. The written decisions of the two Environment Court hearings and the High Court hearing were also ideal for identifying and 'flushing' out relevant controversies relating to the building.

No formal interviews were undertaken of any of the 'actors' involved but the data base Newztext Plus was searched in order to download any relevant media references to the Harcourts Building and this also provided data for analysis.

There was also a range of other documents used as an empirical resource for this study such as the Resource Management Act 1991, the Building Act 2004, the Wellington City District Plan, the Wellington City Heritage Policy, Wellington City Earthquake-prone buildings policy and the Wellington City Council Guide to Earthquake-prone Buildings.

In order to present a coherent ANT story the ANT researcher must be selective and choose which story to tell as there are many stories that can be told about an object or situation and as John Law observes (2004, p.152): "the world could always be otherwise". In the case of the Harcourts Building there are clearly a number of different stories which could be told. From a practical viewpoint there must also be a beginning and an end to the story although it is clearly recognized in the ANT literature that the story continues past the ANT study.

The story I chose to tell for the Harcourts Building was based around the attempts by the owner to have the building demolished and the opposition that was mobilised to prevent this. I begin the story with the Christchurch Earthquakes in February 2011 and 'end' the story with the announcement in the media of the plans to strengthen the building. A full summary of the Story Timeline is contained in Appendix 1 of this paper to aid the reader.

FINDINGS

To "follow the actors" we must first trace the controversy which is the Harcourts Building through the various court cases.

First Environment Court Hearing

The initial decision to decline the resource consent to demolish was appealed to the Environment Court and a hearing took place in August 2013. Parties to the hearing were Lambton Quay Properties Nominee Limited (the owner and Appellant), the Wellington City Council (the Respondent) and the NZ Historic Places Trust and Wellington Civic Trust.

At this hearing the owner takes the position that he cannot use the property due to the safety issues relating to the building and the market perception of the building post the earthquakes in Christchurch in 2011. In order to satisfy the market in terms of safety he argues that the building must be strengthened to 100% of New Building Standard (NBS) and that such strengthening while technically feasible is not economically feasible.

The Wellington City Council opposes the demolition on the grounds that it is not consistent with the concept of sustainable development. However, it should be noted that the Council Planner supported demolition upon the basis that it is not reasonable to impose the cost of preservation of heritage on a private owner/developer, when the benefits of so doing are public benefits. Her evidence was presented at the Commissioners' hearing and was also presented to the Environment Court.

The NZHPT opposed the demolition due to the loss of heritage value and argued that feasible options were possible or at the least that a façade retention should be undertaken rather than complete demolition while the Wellington Civic Trust opposed the demolition on the grounds that the demolition might set an undesirable precedent.

In reviewing the case and the evidence presented there is little 'controversy' or debate over the heritage value of the building. This is somewhat unusual as debate over the heritage merits of a building are often at the core of cases such as this. As no significant challenges were mounted as to the heritage value of the building the Court concluded that it had significant heritage value.

In terms of seismicity issues there was initial 'controversy' over the structural strength of the building before our 'story' begins but the Council was able to get the earthquake-prone nature of the building accepted as fact. Engineering controversies in the First Environment Court Hearing revolved around whether the building needed to be strengthened up to 100% of NBS or whether 67% of NBS would suffice. Earthquakes in Wellington in July and August 2013 caused some damage to the building and the extent of this damage and whether it had further weakened the building was a

subject of dispute between engineers called by the owner and by NZHPT. There was also a degree of controversy over the earthquake issues relating to the adjoining HSBC Building and the extent to which the Harcourts Building posed a pounding risk to that building. The pounding risk was recognised by all but the ‘controversy’ was around the extent to which the costs of mitigating this pounding risk was a cost to the Harcourt Building rather than a cost to the HSBC Building.

Alternatives to complete demolition were considered at some length with a total of 11 different options considered including some adaptive reuse options. The key controversy around which the case hinged was the extent to which the various options had been explored and the basis on which the owner had ruled them to be infeasible. Central to the argument was the ‘site’ value attributable to the land and building if used for an adaptive re-use as a high land value would make such alternatives uneconomic.

This point is highlighted under the cross examination of the owner, Mr Dunajtschick and reported in the Environment Court judgement at paragraph 77 where the owner admits that he turned down an offer of \$5 million for the ‘site’ as part of a hotel conversion deal because he wanted \$10 million. This was particularly damaging to the owners case if you compare it with the evidence presented by Andrew Washington, a registered valuer who was engaged by Mr Dunajtschick with the agreement of NZHPT. His “redevelopment value” for the site was \$3.17 million.

The Environment Court also identified a ‘controversy’ in the form of an apparent “tension” between the Building Act which potentially encourages the demolition of heritage buildings on the grounds of safety and the RMA which seeks to prevent demolition. They say that it is ironical that the Wellington City Council must administer both the Building Act and the RMA. At paragraph 133 the Court states:

Is there a solution to the tension? We think not. It is another demonstration that the RMA provides mechanisms to manage development from the point of view of effects on the environment, and other statutes may independently govern other aspects of the use of resources.

In the judgement a 7 point summary is given of the Courts conclusions. The first 4 points are largely uncontroversial as they would be accepted by both sides. The last 3 points are “controversial” and are at the heart of why the owner lost his case. They are set out at paragraph 140 of the decision as follows:

We recognise that in its present state the building cannot support itself financially, let alone make an acceptable return on funds invested for its owner. But nor is that a reason, without more, to justify demolition. The District Plan, and s6, require the alternatives to be exhaustively and convincingly excluded before demolition can be justified.

While possible reuse as an office/retail building, and other adaptive reuses has been considered, we cannot be satisfied that they have been explored other than with a handicap imposed by a rigidly set bottom-line figure being demanded for the land and building as they are.

The Historic Places Trust, admittedly as a second best, has indicated that a sensitive retention of the building’s facade may be acceptable, but that position has not been adequately explored.

Like the Commissioners before them the Environment Court therefore concluded that there had not been sufficient investigation of alternatives to total demolition and dismissed the appeal. This was not to be the end of the story however as the decision was challenged in the High Court. The decision also clearly upset the Minister of Building at the time Maurice Williamson who stated in the media (The Christchurch Press, 2012) that the case highlighted conflicting government requirements relating to building safety and heritage protection. He was quoted as saying:

“We can’t leave a situation where we are wanting buildings right across the country to be strengthened or demolished in the interests of public safety... and then for another form of officialdom to say sorry, we are not going to let you do that.”

“You can’t have various forms of government administration having different views on the same issue where there is no solution” and “one of the things I’ve never ceased to be amazed with is the number of people who want to protect heritage buildings but aren’t prepared to stump up with any money.”

Clearly the Minister was not happy with the decision and was in support of the owner. It was reported at the time “that as a result of his views Government building and heritage officials had been asked to report on possible legislative changes in about a month”. It is not clear what the outcome of this report was although it may have factored into the final form of the Heritage NZ Act. Officials were also expected to report on government options for assistance or incentives for owners to strengthen buildings but there appears to have been no changes in policy resulting from that.

High Court Decision.

An appeal to the High Court must be on matters of law and not on how the evidence was evaluated. In the appeal to the High Court the owner states that the Environment Court made 15 errors of law. The High Court concluded that the bulk of these errors could not be substantiated or were not really matters of law. However, the Court did find the Environment Court had made two errors of law when it dismissed the appeal.

The first error in law was that the Environment Court applied the wrong test by stating that “the District Plan and s 6 [of the Resource Management Act] require the alternatives to be exhaustively and convincingly excluded before demolition can be justified”. The High Court considered that the Environment Court overstated the effect of s 6 of the RMA and may have misinterpreted the District Plan rules as shown by the omission of the word “reasonable” in paragraph 5 of their summary when discussing “alternatives”. Thus in the opinion of the High Court the Environment Court by applying the wrong legal test acted unfairly by requiring the building owner to discharge too high a burden of proof.

The second error of law was committed by the Environment Court when they concluded that the relevant provisions of the Resource Management Act and the Building Act could not be reconciled. By doing this the High Court deemed that they had failed to give adequate consideration to the risk to public safety and surrounding buildings if the Harcourts Building remains as it was. The High Court considered that the provisions of Building Act and consent provisions of the Resource Management Act are not completely irreconcilable and that it was clear that public safety is a factor that a consent authority needs to consider when assessing an application to demolish a heritage building.

In arriving at this conclusion the High Court appears to rely on the evidence of only one engineer and to put a very high level of current risk on the building. They appear to take a view that the building needs to be either strengthened or demolished **now**. This is in contradiction of the policy contained in the Wellington City Council Earthquake Prone Buildings Policy which allows until July 2027 for strengthening or demolition.

The Court allowed the appeal and remitted the decision back to the Environment court for rehearing with direction that the Environment Court had to:

- (1) Give consideration to demolition of the building only if convinced that there is no reasonable alternative to total demolition.
- (2) Give consideration to the risk to public safety and surrounding buildings if the Harcourts Building remains as it is.

2nd Environment Court Hearing

The 2nd hearing took place in August 2014 and the entire case was heard *de novo*. It is interesting that two of the Environmental Commissioners hearing the case were engineers. It would appear that the composition of the Court was ‘shaped’ by the ‘public safety issue’ highlighted by the High Court. However, the engineering and safety arguments were largely pushed to the background by the economic arguments that again took centre stage. This time however, little attention was paid to the potential for an adaptive re-use of the building. Instead the focus was clearly on whether the building could be rehabilitated for office use.

The owner, with the support of his valuation witness considered that the completed (strengthened) value of the building would be between \$13.7m and \$15m. Heritage New Zealand (previously known as The Historic Places Trust) countered this argument by providing evidence from the well known property investor Sir Robert Jones who was of the opinion that the value was in the order of \$20 - \$22 million. The Court concluded that Mr Dunatjtschiks view was “pessimistic” while that of Sir Robert Jones was “optimistic” and that a realistic value was likely to be between \$18 and \$20 million. Based on this value the Court then concluded that it would be economic to strengthen the building.

The controversial relationship between the HSBC Building and the Harcourts Building was again debated and the Court concluded that some of the capital costs of strengthening the Harcourts Building should be attributed to that building.

The Court was able to address the issue of public safety by saying that the matter would be addressed by strengthening the building which it considered to be an economic alternative. The threat by the owner to leave the building to demolition by neglect and create an unacceptable threat to public safety was clearly seen as a “bluff” by the Court who stated the following at paragraph 124 of their decision:

The owner indicated that it would do nothing if a demolition consent is not granted. Our conclusion is that this is an unlikely outcome. Given the value of the site and holding costs, we consider demolition by neglect is most unlikely because:

- (a) *The council is likely to review the Building Act notices and take action if necessary;*
- (b) *The building is relatively sound and watertight;*
- (c) *Its proximity to the HSBC Building is likely to affect the future tenants of that building if the Harcourts Building is neglected: and*
- (d) *Its prime position in the central city will militate against waiting 13 years until the Notice expires.*

Based on their conclusions that strengthening was economic and therefore a reasonable alternative and that by strengthening the building the concerns with public safety would be addressed the Environment Court dismissed the appeal on the 31st October 2014.

The Future of the Harcourts Building?

Reaction to the decision was reported in the Dominion Post on the 24th November 2014. The owner told the media that he was reluctantly accepting that he could not demolish the building but instead was planning to strengthen it. As a parting 'shot' he was quoted in the paper as saying the following:

"A folly as defined in the Collins dictionary is an ostentatious, useless building.... and it's going to be known as Mark's Folly forever"

The building is expected to take approximately 10 months and \$10 million dollars to strengthen.

Interpreting the Findings Using ANT

As discussed one way we can view the controversy or uncertainty regarding the Harcourts Building is one of translation. If we follow the Callon approach as discussed in the literature review we have four stages to consider being; Problemization; Interesement; Mobilization and Enrolment.

The Process of Translation

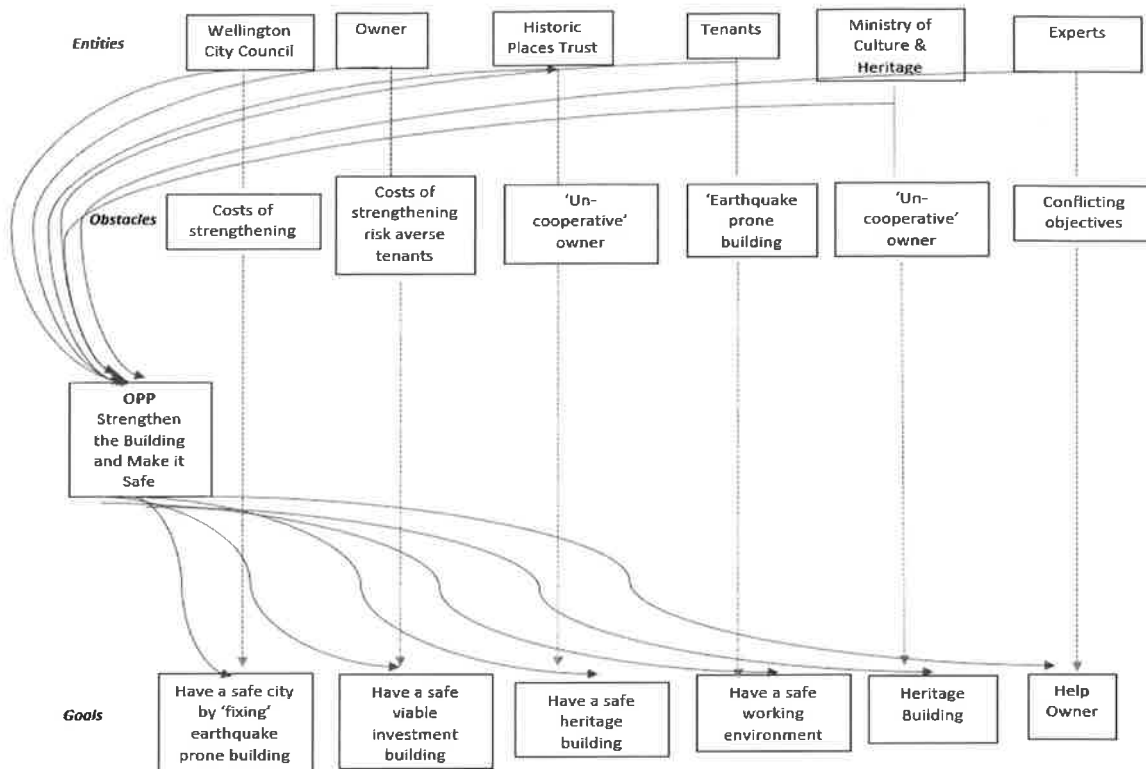
This initial phase of translation involves the translator or fact-builders defining who the other entities are as well as those entities' goals and problems. The translator tries to do this in a way that presents the translators objectives as indispensable to solving the other entities' problems. The translator must align their objective with those of the other entities so that it becomes the "obligatory passage point" which is bought into by all the entities. At the start of the story it would appear that the Wellington City Council is the translator who defines the problem as being an earthquake-prone (unsafe) building that needs remediation by strengthening or demolition. The OPP is to strengthen the building.

The process of interesement is the next phase where the network-builder (the Council) must interest potential allies into joining the actor-network. The owner of the building is clearly a target for interesement by the Council but he initially resists joining the Council by disputing the fact that the building is unsafe. However the Council is able to use an interesement device in the form of a Notice served using the powers conferred on the Council by the Building Act 2004. The Council also uses money as the interesement device to recruit Consulting Engineers to their network to bolster up the fact that the building is earthquake-prone. The Christchurch earthquakes also persuade the owner of the necessity to strengthen their building (and to join the Council network) due to the impact on the Wellington property market. Added to the network are the Ministry of Culture and Heritage and the Historic Places Trust who are interested in the building being strengthened in a way that is sensitive to the heritage values of the building and to also remove the threat of demolition.

The third stage of translation involves the cementing of alliances called enrolment. At this stage what was posed earlier as questions can now be transformed into statements. This process may take considerable effort on the part of the network builder since "there is always a a multiplicity of act-networks each trying to impose its own structure on potentially unreliable entities and thereby borrow their forces and treat them as its own (Law 1986: 70-71). Callon states that "Interesement achieves enrolment if it is successful. To describe enrolment is thus to describe the group of multilateral negotiations, trials of strength and tricks that accompany the interesement and enable them to succeed" (1986: 211). In order to help enrolment experts such as heritage engineers and property experts are recruited to the network to provide evidence to support the OPP. The fourth stage of translation involves mobilization of allies which would allow the Council to become the spokesperson or representative of the various allies in relation to the OPP.

The process of attempted network building or translation by the Wellington City Council can be represented in a diagram modelled on that used by Callon which was discussed in the Literature Review. This diagram which is shown as Figure 2 is notable as it shows both the owner and the Historic Places Trust as initially part of the same network as the option of strengthening the building is investigated. The Council attempts to get this accepted as a common goal by all parties however fails to achieve 'buy in' by the owner.

Figure 2. Network Diagram showing the relationship between each of the main actors and a common interest.



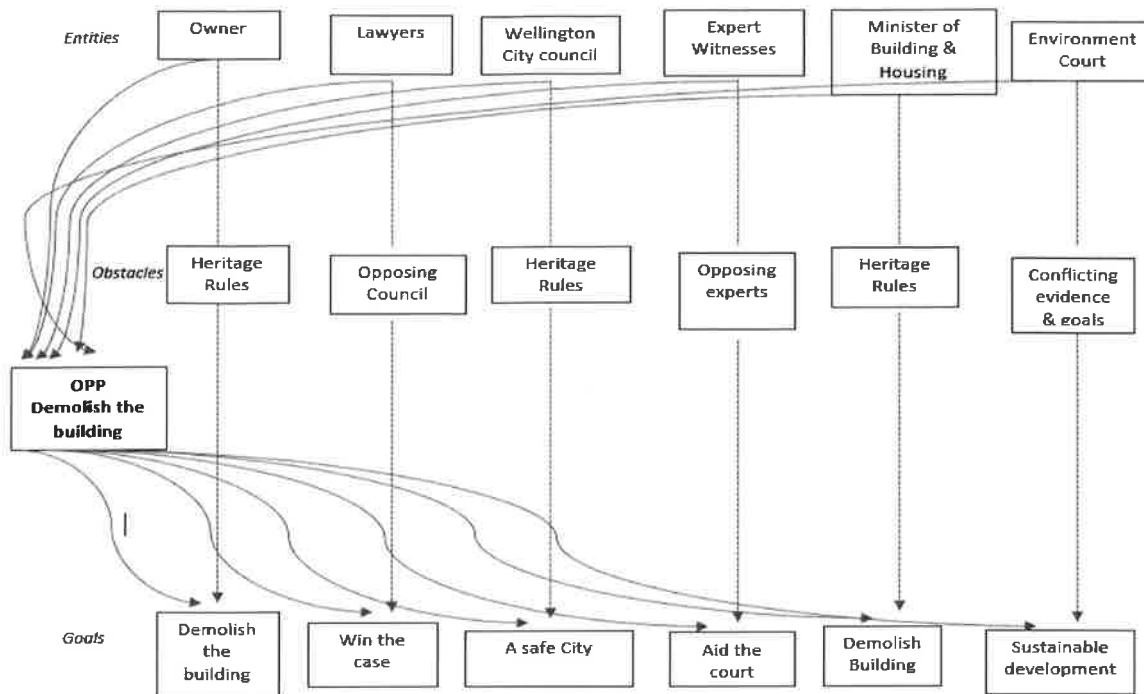
An analysis of events shows that the process of translation was far from successful for the Council and their attempt at network building which is illustrated in the above diagram ultimately failed. While the Council achieved interestment successfully they failed to enrol all the entities or to achieve mobilization. The evidence produced by the experts who produced interestment devices in the form of feasibility studies and engineering reports led the owner to reject the OPP being promoted by the Council. Instead the owner set out to build a competing network where the OPP was to demolish the building rather than strengthen it and the Historic Places Trust set up an opposing network. These two networks are illustrated in Figure 3 and Figure 4 respectively.

The Owner Network

The owner set out to change the Council attempt at problemization by changing the OPP. Instead of making the building safe by strengthening it the OPP becomes making the building safe by demolishing it. This is an example of a potential fifth moment of interestment identified by Callon and given the name of “dissidence”. Dissidence occurs where an actor ‘betrays’ the network by refusing to accept the OPP or the authority of the network builder as spokesman for the network. The owner sets out on a mission to have his assertion that it is uneconomic to strengthen the building accepted as a “fact”.

He moves to the interestment stage by ‘interesting’ a number of experts to provide ‘scientific’ evidence using (money) as the interestment device. Interestingly the Wellington City Council Planner is also part of his network as her report recommended demolition. Most importantly however the owner also hopes to add a key ally to the network in the form of the Council Commissioners who if convinced of his ‘facts’ will grant him permission to demolish the building. However, the Council Commissioners ‘betray’ his network by refusing to grant permission on the basis that his facts have not been proven. In response the owner tries to enlist a new ally in the form of the Environment Court and when that fails enlists the High Court and then a second Environment Court. It is not clear what interestment device is used but at some stage Central Government in the form of Minister of Building joins the network. His role in the story is fleeting as he was forced to resign due to an unrelated political controversy. His connection is found in media reports which also identifies other actors such as the Taxpayers Union and the Property Council joining the network.

Figure 3. Network diagram showing the main actors in the network ‘built’ by the owner.

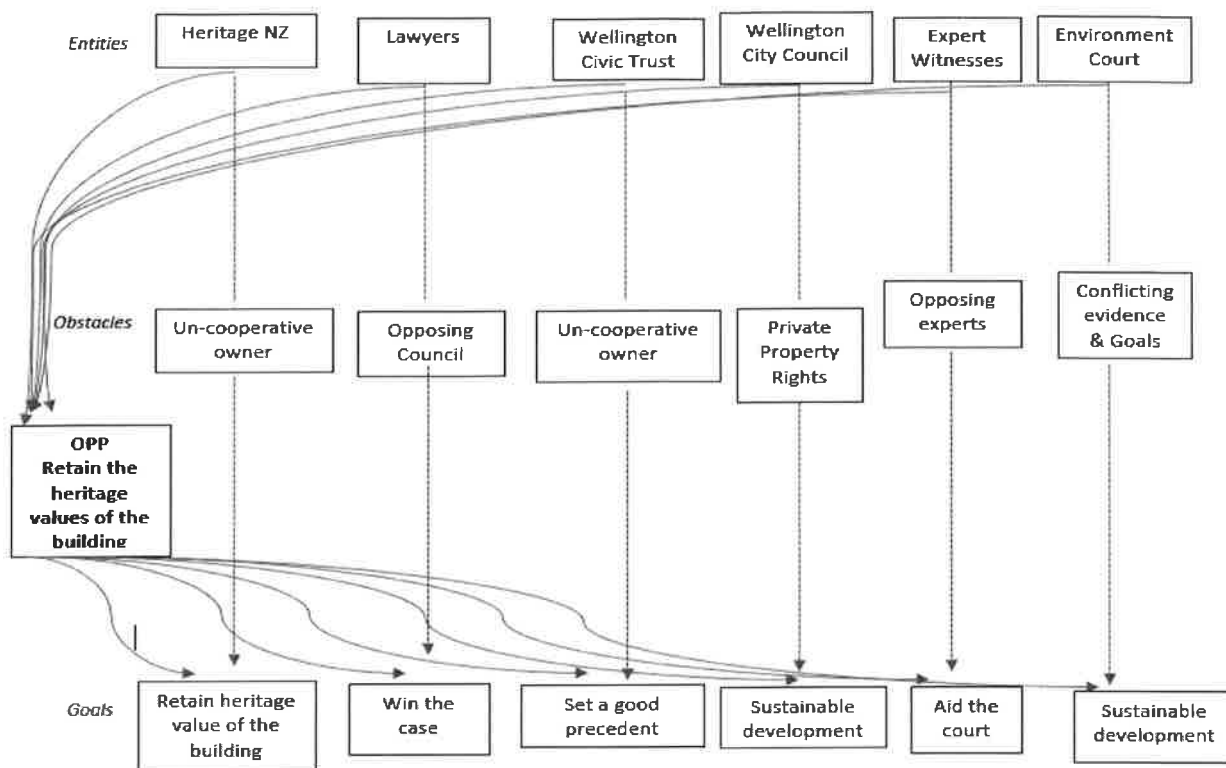


The Heritage Network

In response to the Owner setting up a network the Historic Places Trust also go about setting up a competing network in the hope of maintaining the original OPP of strengthening and retaining the building. They also hope to add the Council Commissioners to their network. As part of their interestment process they ‘interest’ the City Council in their network, the Wellington Civic Trust and a number of experts. They have problems in terms of recruiting the Wellington City Council as this organisation has a foot in each camp. They could be seen as being responsible for causing the controversy in the first place by serving the building owner with an Earthquake-prone Building Notice but in reality it was the Christchurch earthquakes and the resultant market reactions which triggered the owners desire to demolish. While being an actor in the first network depicted in Figure 2 the Ministry of Culture and Heritage does not appear to be part of the later “Heritage Network” for reasons unknown. By the time of the 2nd Environment Court Appeal the Wellington Civic Trust has also dropped out of the Heritage network.

Ultimately the Historic Places Trust is successful in getting their OPP accepted by the Environment Court which by disallowing the appeal forces the owner to also accept the OPP of retaining the building (and strengthening it). A new network which is not shown is now created that once again includes both the owner and the Historic Places Trust similar two that of Figure2.

Figure 4. Network diagram showing the network 'built' by the Historic Places Trust.



SUMMARY OF FINDINGS

The purpose of this paper was two-fold. The first was to follow the arguments and decisions in the 3 court cases held regarding the potential demolition of the Harcourts Building. Interest was high amongst both the property industry and the heritage community regarding what was seen as potentially a precedent setting case of national significance. This interest was noted by the Environment Court in the first decision where at paragraph 136 they said:

The Wellington Civic trust saw this as a test case with national implications beyond those of the urban form of central Wellington and was concerned about precedent around demolition of category I listed buildings... We agree with the Civic Trusts position that overturning a listing through total demolition of the building in question should not be undertaken lightly. In a case where, as here, the proposed demolition is a restricted discretionary activity, concern about setting a precedent can be overstated. A consideration of the Court's decisions about heritage will show that there is no precedent in a true sense. Every application has to be assessed on its merits, measured against the provisions of the Act and the relevant planning documents

The above quote plus a careful reading of the High Court and the Second Environment Court Decision leads me to conclude that there has been no "seismic shift" in terms of the safety versus heritage debate. Many saw it as a case of whether safety trumped heritage and that if this was the case that it would be a green light to demolish 'protected' heritage buildings. However, there is clearly no 'green light' given but rather an 'orange light'. Although the High Court considered that the bar had been set so high in the first decision that effectively it was a 'red light' the Environment Court stated again in the 2nd case at paragraph 55 that the that the threshold to achieve demolition of the building is a high one and that the Court must be convinced there is no reasonable alternative to total demolition. Unfortunately, it is still not clear as to what constitutes "reasonable" or the degree to which an owner must identify and investigate the feasibility of the different options.

The Case Study also raises questions about the role and composition of the Environment Court. The decision of the Court ultimately hinged on questions regarding the valuation of the property post retrofitting rather than on questions regarding engineering options. You could argue that such matters would be better considered by a Land Valuation Tribunal or at least that where the Environment Court was hearing such cases that it included members with valuation expertise as well as or instead of those with engineering expertise.

The question as to the extent to which public benefits (of safety) can be provided at personal cost also remains unclear and has relevance to the acceptable rate of return to be factored into any financial feasibility analysis. This question was effectively sidestepped in this case because the conclusion of the court was that effectively there was no private loss because on the basis of their conclusions strengthening was economic. This need to balance private and public costs and benefits remains a major impediment to the acceptance of mandatory seismic retrofitting policies.

The case study also highlighted a similar need to balance the costs and benefits of seismic retrofitting which spills over onto adjoining properties. Earthquake-prone buildings can create negative externalities that impact on adjoining properties due to the potential for pounding between buildings or the dangers of a building collapsing on the neighbouring building. For example risk averse tenants may be unwilling to occupy a 'safe' building which has an earthquake-prone building next door. This may lead to the owner of one property subsidising the cost of seismic retrofitting to an adjoining property as a rational response to market forces.

The spin put on the result by the heritage community was that it was a significant win for heritage. For example two headlines in the media which were typical were "Blocking of Harcourts demolition a precedent" and "Decision sets precedent on preservation". In both of those articles the general manager of Heritage New Zealand (previously known as the New Zealand Historic Places Trust) was reported as saying that if the decision had gone the other way it could have led to heritage losses on a much broader scale.

The fact that the owner was quoted as having spent about \$1.4 million on consultants and lawyers fees in his failed attempt to gain a resource consent to demolish will also lead to caution on the part of property developers.

A second objective of this paper was to use ANT as a different way of viewing the Harcourts Building debate and consider whether it would be a useful approach for shedding light on the challenges of balancing public safety with competing social objectives such as heritage protection. My review of the literature has led me to the conclusion that ANT has many potential applications to the 'mess' and controversy which characterises mandatory seismic retrofitting policies in New Zealand. Due to the need for brevity the main focus in this paper was to apply Callons concept of translation which is one of the older and more traditional applications of ANT. This was informative in terms of looking at the role of feasibility studies and the modalities around them. It also raises some interesting questions around the various participants in the Court process and their role. The role of the building itself became a focus and this participation of the non-human in the network is a key attribute of ANT.

What was interesting in this particular case was the entering into the network of the adjoining building which is a key area of the debate as the costs and benefits clearly spill over into adjoining properties and public areas making the process of cost benefit analysis and fairness of legislation even more problematic.

The concept of the "black box" is also an interesting one. Examples of this in the Harcourts case were the acceptance of the Harcourts Building as a "heritage" building. There is often a degree of controversy as to the heritage value of a particular building. There was also initial controversy over the assessed % NBS of the Harcourts Building which eventually got black boxed. In a similar way the appropriate level of strengthening was also eventually black boxed as it was considered and then accepted by the various parties that 100% of NBS was the appropriate level of seismic retrofit to aim to achieve.

However, central to the case was the feasibility study conducted by the valuer which the owner attempted to black box. The HPT initially attempted to sidestep this by introducing other alternative uses thereby rendering the feasibility study as irrelevant. This was successful in the first case but in the second case new evidence was presented and the option of alternative uses was ignored.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The biggest limitation in my study was the reliance on document analysis to "follow the actors". A richer ANT story could have been told if this document analysis was complemented by interviews and observation. For example attendance at the various court sittings and observation and recording of the cross examination of witnesses may have been informative. The role of Central Government in the story remained largely hidden from my analysis and may be an important but untold part of the story. Uncovering this storey however would be one which would be difficult. For example the role of the Ministry for Culture and Heritage remains unclear.

ANT had its origins in the study of scientists and scientific practice. The engineering profession is an area of science that is ripe for social science research. The way in which the engineering profession seeks to build scientific 'facts' relating to risk assessment, cost benefit analysis and engineering assessments are all controversies that are suitable for ANT studies. As discussed in this paper there are always other 'stories' that can be told and a number of these have become evident in the course of this study. For example, the tension between private property rights and the public good, the tension between local communities and central government mandated policies, the building as a mutable immobile and the challenge of the owner forced into a role as an 'accidental' developer are all 'stories' worthy of being told.

REFERENCES

The Building Act 2004.

The Resource Management Act 1991.

Bommer, J.J.,2002. Deterministic Vs . Probabilistic Seismic Hazard Assessment: An Exaggerated and Obstructive Dichotomy, *Journal of Earthquake Engineering*, 6:S1, 43-73.

Cardona. O., Ordaz.M.,Marulanda.M.,Barbet.C., 2008b, Estimation of Probabilistic Seismic Losses and the Public Economic Resilience - An Approach for a Macroeconomic Impact Evaluation, *Journal of Earthquake Engineering*, 12:S2, 60-70.

Callon, M. (1986). Some elements of a sociology of translation:domestication of the scallops and the fisherman of St Brieuc Bay. In J.Law (Ed.), *Power, action and belief: a new sociology of knowledge* (pp.196-223)

Callon, M. (1991). Techno-economic networks and irreversibility. In J.Law (Ed.), *A sociology of monsters: essays on power, technology and domination* (pp.132-161). London: Routledge.

Callon. M., & Latour,B. (1981)

Christchurch Press, (2013). "*Stymied by the law not on – Minister*" The Press 16th October 2013.

Cousins W.J. (2013). Potential benefits of strengthening earthquake-prone buildings. Conference Paper presented at 2013 New Zealand Society of Earthquake Engineers, Wellington

Douglas. M. & Wildavsky. A. (1982). *Risk and Culture*, University of California Press, Berkley 1982.

Egbelakin, T. & Wilkinson, S. (2010). Sociological and Behavioural Impediments to Earthquake Hazard Mitigation, *International Journal of Disaster Resilience in the Built Environment* 1(issue), 310-321.

Egbelakin,T.,Wilkinson, S.,Potangaroa, R.,Ingham,J. (2011). Enhancing seismic risk mitigation decisions: amotivational approach. *Construction Management and Economics* 29:10,1003-1016.

Egbelakin,T.,Wilkinson,S., Nahkies P.B. (2012) Impacts of the Property Market on Seismic Retrofit Decisions. *Pacific Rim Real Estate Society Conference, Adelaide, Australia*, 15th-18th January 2012.

Foster,R.J. (2012). *Landscaping Boulder Bay, Canterbury, New Zealand: the emergent and contested classification of authentic heritage baches and an endangered species of penguin*. PhD Thesis, Lincoln University, New Zealand.

Guggenheim, M. (2010). Mutable immobiles: building conversion as a problem of quasi-technologies. In Fraias & Bender (Ed,) *Urban Assemblages - How Actor –Network Theory Changes Urban Studies*. (pp.161-178). London & New York:Routledge

Hopkins D C & Stuart G (2003) Strengthening existing New Zealand Buildings for Earthquake. An Analysis of Cost benefit using Annual Probabilities. . Conference Paper presented at 2003 Pacific Conference on Earthquake Engineering, Taupo.

Latour,B. (1987). *Science in action:how to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.

Latour,B. (1991). Technology is society made durable. . In J.Law (Ed.), *A sociology of monsters: essays on power, technology and domination* (pp.103-131). London: Routledge.

Latour,B. (1996). On actor-network theory. A few clarifications plus more than a few complications. *Sociale Welt*, 47(4), 369-381.

Latour, B. (2005). *Reassembling the social: an introduction to actor-network-theory*. Oxford: Oxford University Press.

Latour,B., & Woolgar,S.(1986). *Laboratory Life; the construction of scientific facts*. Princeton,NJ: Princeton University Press.

Law,J. (1987). Technology and heterogeneous engineering: the case of Portuguese expansion. In W.E. Bijker, T.P.Hughes & T.J.Pinch (Eds.), *The social construction of technology systems* (pp.111-134). Cambridge,MA: MIT Press.

Law, J. (2004). *After Method: mess in social science research*. London and New York:Routledge.

Law,J & Callon,M. (1992). The life and death of an aircraft; a network analysis of technical change. In W.E. Bijker & J.Law(Eds.), *Shaping technology/building society: studies in sociotechnical change* (pp.21-52). Cambridge,MA:MIT Press.

Lepesteur, M., Wegner, A., Moore, S. A. & McComb, A. (2008). Importance of public information and perception for

- managing recreational activities in the Peel-Harvey estuary, Western Australia, *Journal of Environmental Management*, 87 (issue), 389-395.
- Levy, D.S. & Henry, M. (2003). A comparative analysis of US, UK and Australian published property research methodologies and methods, *Pacific Rim Property Research Journal*, 9(2), pp 148-162.
- Levy, D.S. (2006). Qualitative Methodology and Grounded Theory in Property Research. *Pacific Rim Property Research Journal*, 12(4), pp. 369-387.
- Lindell, K. M. & Prater, C. S. (2000a). Household Adoption of Seismic Hazard Adjustments: A Comparison of Residents in Two States, *International Journal of Mass Emergencies and Disasters*, 18 (issue), 317-338.
- Lindell, M. K., Alesch, D., Bolton, P. A., Greene, M. R., Larson, L. A., Lopes, R. May, P.J., M., J.P., N., S., , Nigg, J. M., Palm, R., Pate, P., Perry, R. W., Pine, J., Tubbesing, S. K. & Whitney, D. J. (1997). Adoption and implementation of hazard adjustments, *International Journal of Mass Emergencies and Disasters* 15 (issue), 327- 453.
- Lindell, M. K. & Prater, C. S. (2000b). Household adoption of seismic hazard adjustments: A comparison of residents in two states, *International Journal of Mass Emergencies and Disasters*, 18 (issue), 317 – 338.
- Lindell, M. K. & Prater, C. S. (2002). Risk Area Residents' Perceptions and Adoption of Seismic Hazard Adjustments, *Journal of Applied Social Psychology*, 32 (issue), 2377-2392.
- Mulilis, J.-P. & Duval, T. S. (1995). Negative Threat Appeals and Earthquake Preparedness: A Person-Relative-to-Event (PrE) Model of Coping With Threat, *Journal of Applied Social Psychology*, 25 (issue), 1319-1339.
- Mileti, D. S. & Fitzpatrick, C. (1993). *The great earthquake experiment: Risk communication and public action*, Westview, Boulder, CO.
- Mulilis, J. & Lippa, R. (1990). Behavioral change in earthquake preparedness due to negative threat appeals: A test of protection motivation theory, *Journal of Applied Social Psychology*, 20 (issue), 619-638.
- Mol, A. (1999). Ontological Politics. A word and some questions. In J. Law & J. Hassard (Eds.), *Actor Network Theory and After* (pp. 74-89). Oxford: Blackwell
- Mol, A. (2002). *The body multiple: ontology in medical practice*. Durham, NC; Duke University Press.
- Nahkies, P.B. (2009). Seismic Upgrading – Meeting the Economic Challenge: *Pacific Rim Real Estate Conference, Sydney, Australia*, 18-21 January 2009.
- Nahkies, P.B. (2014). Mandatory Seismic Retrofitting – A Case Study of the Land Use Impacts on a Small Provincial Town: *Pacific Rim Real Estate Society Conference, Christchurch, New Zealand*, 19th – 22nd January 2014.
- Power, M. (2004). *The risk management of everything*. London: Demos
- Vanzi, I. (2002). When Should Seismic Retrofitting of Existing Structures be Implemented in Order to Minimise Expected Losses, *Journal of Earthquake Engineering*, 6:1 53-73.
- Wellington City Council (2010), Wellington Heritage Policy
- Wellington City Council (Undated), Earthquake Prone Buildings – WCC Guide

Appendix 1- Timeline of the Story

Feb 2011	Canterbury earthquake
June 2011	Report of development plans in the media
July 2012	Issuing of EQP Notice
December 2012	Resource Consent Hearing
25 th February 2013	Resource Consent Declined
21 st July 2013	Earthquake in Wellington
August 2013	1 st Environment Court Hearing
7 th October 2013	Environment Court dismisses appeal
16 th October 2013	Minister of Building complains to the media.
24 th October 2013	Appeal to High Court Filed
2 nd May 2014	High Court decision in favour of the owner
August 2014	2 nd Environment Court Hearing
31 st October 2014	Environment Court dismisses appeal
28 th February 2015	Owner announces redevelopment plans