Privacy Versus Views: A Law and Economics Approach to Balancing Conflicting Urban Values

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In 2015 the "Oriental Bay fence case" of Aitchison v Walmsley *hit the New Zealand headlines. The widely publicised case centred on a conflict between neighbours in a Wellington hill suburb, with the Walmsleys having built a large fence-like structure to provide for their privacy, but which had the effect of obscuring the Aitchisons' panoramic views. While a long court process ensued, at heart it was a simple matter that many urban households could relate to: a conflict between competing urban values, of privacy versus views. This conflict illustrates the economic concept of externalities, which arise when one party's actions harm another party. Despite this harm often seeming to come from only one side,* Aitchison v Walmsley *shows the reciprocal nature of externalities. That is, externalities arise when two (or more) parties want to use the same scarce resource, but in inconsistent ways. In this case, while one party desires privacy, the other desires views. The question then is how such externality problems can best be resolved. Two principles from the field of law and economics assist in answering this. One, the Coase theorem, shows how externality problems can be resolved by private agreement between the relevant parties. The other, the Hobbes theorem, provides an approach when private agreement breaks down, and an authoritative third party, such as a court or government, is required to determine the outcome. Both*

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approaches provide a strong conceptual foundation for robust legal and economic analysis that can balance conflicting values in a way that best benefits society.

1. INTRODUCTION

Conflicts between neighbours are an inevitable consequence of modern urban living, particularly when high-value amenity benefits are at stake. One such conflict affecting many hill-dwelling urban households is achieving the balance between one household's privacy and another's views. A typical scenario might involve a hillside house providing its residents with views, perhaps of a harbour or cityscape, and with this comes a desire to preserve those views, free from impeding trees, hedges or fences. Lower down on the hill, and perhaps directly next door, is a neighbouring household that seeks privacy from the house above, that may look directly into their house or backyard. This privacy-seeking household would prefer that there is some sort of barrier to preserve their privacy, such as a fence or tall tree, in clear conflict with the desires of the view-seeking household.

This exact conflict played out recently in the New Zealand courts in the widely publicised case of *Aitchison v Walmsley*.[1] The case, which involved two separate (but related) decisions by the Environment Court in 2015 and 2016, involved the Aitchisons, who fulfil the role of the view-seeking household. The Aitchisons lived on a hill in the Wellington suburb of Roseneath, at a property that had once enjoyed expansive harbour views. However, those views had been impeded by the Walmsleys, who fulfil the role of the privacy-seeking household. The Walmsleys lived at an adjacent neighbouring property lower on the hill, and built a fence-like structure at the boundary of the two properties to protect their privacy. The Environment Court was called upon to decide on the legality of the Walmsleys' structure and whether it should be removed. Essentially the Court was asked to resolve the conflict of privacy versus views.

As well as raising various legal and planning issues, the case serves to illustrate some important principles in the field of law and economics, centred on the concept of an "externality". An externality is a cost or benefit imposed by the actions of one party on a bystander — a person (or persons) not involved in the original action, and who did not choose to incur the cost or benefit. Indeed, the Walmsleys' action to build a structure on their boundary imposed a cost on the Aitchisons by impairing their views. However, as this article will explain, the nature of externalities is in fact more nuanced than this simple explanation suggests.

1 *Aitchison v Walmsley* [2015] NZEnvC 163; and *Aitchison v Walmsley* [2016] NZEnvC 13.

Of particular importance are the ways in which externalities can best be addressed, and this article uses the *Aitchison v Walmsley* cases to illustrate two contrasting principles for doing so: one developed by a 20th-century Nobel Prize-winning economist, Ronald Coase; and the other drawing on the work of a 17th-century English philosopher, Thomas Hobbes. Each principle provides a mechanism for resolving externality problems in a way that best benefits society.

Both the Coase and Hobbes principles are concepts in the field of law and economics. Indeed, both concepts receive extensive treatment in Robert Cooter and Thomas Ulen's widely regarded *Law and Economics* text.[2] Law and economics is the use of concepts and analysis from the field of economics to analyse how legal sanctions influence human behaviour.[3] By doing so, law and economics can shed light on ways in which the law can be developed and enforced to achieve optimal outcomes from interactions among members of society.

This is exactly how the Coase and Hobbes principles that are illustrated in this article can be helpful: they provide an insight into how the law can be used to best resolve whether the Aitchisons should have views, or whether the Walmsleys should have privacy. These principles also go beyond consideration of competing values amongst neighbours, and are applicable to externality problems more generally, such as in addressing problems of air or water pollution.

Part 2 of this article discusses the key elements of *Aitchison v Walmsley*. Part 3 explains the nature of externalities, before developing each of the Coase (part 4) and Hobbes (part 5) principles for addressing externality issues. Part 6 considers the important role that property rights play in both of these principles, and part 7 discusses their practical implications. *Aitchison v Walmsley* is drawn on throughout as a useful way of illustrating these issues. Concluding thoughts are offered in part 8.

2. *AITCHISON V WALMSLEY*

Aitchison v Walmsley centred on a dispute between neighbouring (adjacent) properties in the Wellington hill suburb of Roseneath. The plaintiffs, Peter and Sylvia Aitchison, resided in a property on an elevated north-facing site. This property had enjoyed panoramic views of Wellington harbour, the cityscape,

2 Robert Cooter and Thomas Ulen *Law and Economics* (4th ed, Pearson/Addison-Wesley, Boston, 2004).

3 At 3.

and parts of the wider Wellington region through to the Hutt Valley.[4] These views were considered by the Environment Court to be "one of the City's most admired views",[5] and to have made "a significant contribution to the overall residential amenity of the [Aitchisons'] property".[6]

At the property immediately adjacent to the Aitchisons and, critically, situated lower down on the hill, were Heather and David Walmsley, the defendants. The Aitchisons' and the Walmsleys' properties were separated by a single boundary of about 20 metres in length. Immediately on the Aitchisons' side of this boundary was their outdoor living area, which provided the Aitchisons with the aforementioned views, but also allowed them to look over the top of the Walmsleys' house and garden area.

In 2015 the Walmsleys built a children's play structure along the boundary between the two properties. The Walmsleys' intention was to protect the privacy of their garden area, while also adhering to the rules of the Wellington City Council's District Plan. That plan did not allow for a fence to be built along the boundary, but it did allow (as a permitted activity — ie one that did not require a resource consent to proceed) a "residential structure" to be built.[7] Despite this, the Environment Court noted the "high degree of artificiality" in respect of the "structure", and that it could "just as accurately be described as a fence to which a play structure or walkway has been attached".[8]

The Walmsleys' structure had the effect of obscuring the Aitchisons' views, and the latter brought the matter before the Environment Court. This involved two separate judgments by the Court:

- In its September 2015 judgment, the Court considered whether the structure could be declared a permitted activity under the rules of the District Plan.[9] This has been referred to as the "Declaratory Decision";[10] and
- In its January 2016 judgment, the Court considered whether the structure should be removed.[11] This has been referred to as the "Enforcement Decision".[12]

The Declaratory Decision centred on the question of whether it was an error for the Council to find that the Walmsleys' structure was a permitted activity under

4 *Aitchison v Walmsley* [2016] NZEnvC 13 at [37].
5 *Aitchison v Walmsley* [2015] NZEnvC 163 at [1].
6 *Aitchison v Walmsley* [2016] NZEnvC 13 at [38].
7 At [11].
8 At [14].
9 *Aitchison v Walmsley* [2015] NZEnvC 163.
10 *Wellington City Council v Aitchison* [2017] NZHC 1264 at [2].
11 *Aitchison v Walmsley* [2016] NZEnvC 13.
12 *Wellington City Council v Aitchison* [2017] NZHC 1264 at [1].

the rules of its District Plan. The Walmsleys' structure was built at the boundary of the two properties, on top of a retaining wall. When measured from the top of this retaining wall, the height of the structure was approximately 2.2 metres. This was within the rules of the District Plan requiring that such structures do not exceed 2.5 metres in height from ground level at the boundary. Accordingly, the structure was considered by the Council to be a permitted activity.

However, a key consideration in the case was the definition of "ground level" at the boundary, with the presence of the retaining wall making this difficult to define. When measured from the base of the retaining wall, the height of the structure was 4 metres, which would be outside of the District Plan's height restriction. The Court's view in the Declaratory Decision differed from the Council's interpretation of its District Plan, with the former finding that "ground level" should be defined as the base of the retaining wall. As a result, the Court declared that the Walmsleys' structure was not a permitted activity under the District Plan.

In the Enforcement Decision, the Court considered whether the structure should be removed, even if it is accepted that it is a permitted activity. The Court focused on the adverse effects of the structure on the Aitchisons. As noted, a key consideration by the Court was the effect of the structure on the Aitchisons' views. As well as this, the Court found that the structure had other effects on the Aitchisons, specifically in respect of their privacy (the structure included a walkway that provided its users with views into the Aitchisons' property), shading (the height of the structure reduced the sunlight at the Aitchisons' property), and the "overbearing" nature of the structure.[13] These three effects do not appear to have been accorded any less weight by the Court than the effect of the structure on the Aitchisons' views. However, to illustrate the concepts that are set out in this article, it is preferable to consider only the effect of the structure on views. Doing so focuses the exposition on a more binary choice between views for the Aitchisons or privacy for the Walmsleys.

The Environment Court's Enforcement Decision found in favour of the Aitchisons, and ordered that the Walmsleys' structure be removed. The Court's finding was based on a number of factors, including:

- the "extreme nature of the adverse effects in their totality";[14]
- the artificiality of the structure;[15] and
- the lack of consideration by the Walmsleys to avoid, remedy or mitigate the adverse effects of the structure on the Aitchisons.[16]

13 *Aitchison v Walmsley* [2016] NZEnvC 13 at [28].
14 At [70].
15 At [72].
16 At [73].

Both the Declaratory and Enforcement Decisions were subject to further judicial consideration. The Declaratory Decision was upheld on appeal to the High Court, as the Wellington City Council sought to clarify the planning treatment of ground-level conditions at a residential boundary.[17] In early 2018 the Environment Court dismissed applications by the Walmsleys for a rehearing and, separately, a "recall" of the Court's Enforcement Decision.[18]

3. THE NATURE OF EXTERNALITIES

One of the key economic concepts that is highlighted by the *Aitchison v Walmsley* case is that of externalities. When individuals or businesses make decisions they take into account, either explicitly or implicitly, all of the costs and benefits of their decisions that directly impact on them. However, there may also be impacts that are felt beyond those people that are directly involved in a decision. That is, there can be costs and benefits that are imposed more indirectly on others, and such costs and benefits are often not accounted for by the original decision-maker. Economists refer to these costs and benefits as externalities: external costs or benefits imposed by the actions of one party on "bystanders", who have no control of the impacts they incur.[19]

A common example of an externality is that of water pollution. Consider an industrial factory that disposes of its waste in a river. Doing so may impose a cost on downstream recreational river users who can no longer swim in the river. Since the factory's actions impose a cost, indirectly, on other external parties, there is an externality. This would be referred to as a negative externality, to reflect the social cost from the factory's actions.

Externalities can also be positive, where one party's actions provide a benefit to a bystander. One example of this is a beekeeper, whose business can generate a benefit to nearby crop farmers (pollination from the bees can increase crop production). The beekeeper's decision-making is unlikely to take into account the benefits that nearby crop farmers receive, similar to the way in which the industrial factory is unlikely to take into account the costs it imposes on downstream recreational water users.

In the same way, it can be seen that there is an externality in the *Aitchison v Walmsley* case. The Walmsleys built a structure on their property to provide them with privacy. However, this action imposed a cost on the Aitchisons, by

17 *Wellington City Council v Aitchison* [2017] NZHC 1264.

18 *Aitchison v Walmsley* [2018] NZEnvC 4 and *Aitchison v Walmsley* [2018] NZEnvC 7.

19 See, for example, Tom Tietenberg and Lynne Lewis *Environmental and Natural Resource Economics* (8th ed, Pearson Education Inc, Boston, 2009) at 70–72.

impeding their views. Presumably the Walmsleys' decision to build the structure would have balanced the costs of building the structure (such as materials and labour) with the benefits that it would provide to their privacy (albeit that such balancing may have been implicit). However, it is unlikely that, in making this decision, the Walmsleys also considered the costs imposed on the Aitchisons from the obstruction to the latter's views. Indeed, in the Enforcement Decision the Court noted exactly this: the Walmsleys acknowledged that they did not have regard to the effect of their structure on the Aitchisons.[20]

This externality concept has a long history in economics. It was first articulated in the 19th century, and formalised by economist Arthur C Pigou in the 1930s.[21] The concept was significantly strengthened in 1960 by economics and legal scholar Ronald Coase, who would later go on to win the Nobel Prize in Economics for his efforts. It is now commonplace in any undergraduate course in economics, but it also transcends economics into the legal domain. Of particular note, Upton points to the link between the concept of externalities and the "effects-based" approach of the Resource Management Act 1991 (RMA).[22]

Coase's contribution to the externalities concept is of considerable importance. In a classic article, Coase characterised the externality problem as one arising from the desire of two parties to use the exact same resource but in inconsistent, and conflicting, ways.[23] In the water pollution example, an externality arises not because the factory pollutes the water per se, but rather because the factory and the recreational users both want to use the river water, but in conflicting ways. By polluting the river, the factory imposes a cost on recreational users who can no longer swim in the river. On the other hand, if the factory was no longer able to dispose of its waste in the river so that recreational users could swim there, this would impose a cost on the factory.

Likewise, in *Aitchison v Walmsley*, the Walmsleys' desire for privacy and the Aitchisons' desire for views were in conflict. The Walmsleys imposed a cost on the Aitchisons because the former built a structure that impeded the latter's views. However, the situation can also be looked at from the opposite angle: if the structure was not built (or was removed), the Aitchisons might be said to impose a cost on the Walmsleys, through encroaching on their privacy.

20 *Aitchison v Walmsley* [2016] NZEnvC 13 at [73].

21 As noted by Campbell R McConnell, Stanley L Brue and Sean M Flynn *Economics* (18th ed, Glencoe/McGraw-Hill, New York, 2008) at ch 16.

22 SD Upton "Purpose and Principle in the Resource Management Act" (1995) 3 Waikato Law Review 17 at 37.

23 RH Coase "The Problem of Social Cost" (1960) 3 Journal of Law and Economics 1. See also the discussion of Coase in Harold Demsetz "Property Rights" in P Newman (ed) *The New Palgrave Dictionary of Economics and the Law* (Macmillan Reference Ltd, London, 1998) vol 3.

As Stiglitz puts it, "[t]here would be no 'externality' if there were no house next door".[24]

Coase's point was that the externality problem can be looked at from both angles. That is, a negative externality arises not necessarily from solely one party's actions, but rather from the conflicting use of the same scarce resource by two (or more) parties. As Coase states, the externality issue is "a problem of a reciprocal nature".[25] Indeed, the Environment Court in *Aitchison v Walmsley* appeared to recognise this, at least in broad terms. Despite the focus of the case being on how the structure built by the Walmsleys impeded the Aitchisons' views, the Court also noted (in the Enforcement Decision) the Walmsleys' desire for privacy:[26]

> We have had regard to the fact that the Walmsleys' desire to erect a barrier between their property and the Aitchisons arises from their reasonable need for privacy in the garden area of their property.

Conflicting uses of scarce resources are commonplace in modern society, particularly in an urban setting. As Goldberg notes, "[d]amages in a society of interacting individuals are ubiquitous — that is the essence of the notion of the reciprocal nature of costs".[27] Accordingly, the appropriate question to ask when considering an externality is not whether one party (for example, the factory, or the Walmsleys) is imposing some cost on another (swimmers, or the Aitchisons). Rather, the "real question", according to Coase, is (in the context of *Aitchison v Walmsley*) whether the Walmsleys should be allowed to harm the Aitchisons' views by building a structure, or whether the Aitchisons should be allowed to harm the Walmsleys' privacy through the absence of the structure.[28] The point of identifying this reciprocity is to help focus the analysis so as to "avoid the more serious harm".[29]

Indeed, it is how this harm should be avoided that is the real crux of the externality problem, and it is to this issue that this article now turns.

24 Joseph E Stiglitz "The Economics Behind Law in a Market Economy: Alternatives to the Neoliberal Orthodoxy" in David Kennedy and Joseph E Stiglitz (eds) *Law and Economics with Chinese Characteristics: Institutions for Promoting Development in the Twenty-First Century* (Oxford University Press, Oxford, 2013) at 157.

25 Coase, above note 23, at 2.

26 *Aitchison v Walmsley* [2016] NZEnvC 13 at [65].

27 Victor P Goldberg "Commons, Clark, and the Emerging Post-Coasian Law and Economics" (1976) 10(4) Journal of Economic Issues 877 at 880.

28 Coase, above note 23, at 2.

29 At 2.

4. THE COASE THEOREM

Ronald Coase's contribution went beyond simply articulating the reciprocal nature of externalities. He also analysed the ways in which an externality problem could be resolved. In particular, Coase considered whether parties to an externality problem could agree (through negotiation or bargaining) between themselves to resolve the problem, without having to resort to a higher authority (such as a court or government entity). Coase's concern was whether such private agreement could overcome externalities in an "economically efficient" way. That is, in a way that achieves the greatest net benefits to all involved, and society more generally.

This led to what is now widely known as the "Coase theorem", the essence of which is that private agreement can lead to negative externalities being resolved in an economically efficient manner, albeit subject to some conditions (which will be returned to shortly). Moreover, an efficient outcome will occur regardless of how the initial division of rights in relation to the externality are allocated amongst the parties.

To explain further, it is useful to illustrate with a numerical example, and this is where *Aitchison v Walmsley* neatly fits. Suppose that the value to the Aitchisons of having expansive harbour views can be quantified as $100,000, while the value of privacy to the Walmsleys is worth $75,000. These figures are purely for illustrative purposes, but in reality they might be something that can be inferred from the values of each property in the housing market. Indeed, in the Environment Court's Enforcement Decision it noted the evidence that the loss of the Aitchisons' views "was a primary cause of a significant reduction in the economic value of the property".[30]

Recall that the externality in this case is the incompatibility between the Aitchisons' desire for views and the Walmsleys' desire for privacy. How can this incompatibility be resolved by a private agreement between these two parties, while achieving the greatest net benefit? To answer this question it is necessary to first consider how legal rights are initially allocated between the parties. That is, is our starting point one of the Walmsleys having a right to privacy, or one of the Aitchisons having a right to views (issues related to specifying such rights are discussed later in this article)?

First, suppose that the Walmsleys are allocated a legal right to privacy, so that they are entitled to (and do) build a structure to protect this privacy. The Aitchisons might complain about their loss of views, but (legally) they have no recourse because the Walmsleys hold a legal right to privacy. However, the Aitchisons and Walmsleys may be able to reach an agreement between themselves on a resolution. Suppose in particular that the Aitchisons could

30 *Aitchison v Walmsley* [2016] NZEnvC 13 at [65].

make an offer to the Walmsleys to remove the structure so as to restore the former's views. An offer that exceeds $75,000 (the value of privacy to the Walmsleys) but is less than $100,000 (the value of views to the Aitchisons) would result in the structure being removed.[31] Such an offer would also be mutually beneficial to both parties. That is, were the offer to be accepted and the structure to be removed, the Walmsleys would receive compensation that is more than the value of their lost privacy, while the Aitchisons would pay compensation that is less than the value of the views they gain.

Second, consider the alternative case where the legal right to views is allocated to the Aitchisons. In this case, the Walmsleys would be legally prevented from building any sort of structure that impedes these views. The Walmsleys might complain about their loss of privacy, and they may want to make an offer to the Aitchisons to allow them to gain some privacy. However, the maximum that the Walmsleys would be prepared to offer to gain privacy is $75,000 — any more than this means that they would pay more than their privacy is worth to them. This amount is below what the Aitchisons would be prepared to accept — they would not sacrifice their views for anything less than $100,000, being the value to them of those views.

In both cases, regardless of the way the legal rights are initially allocated, the outcome in this particular example is that the Aitchisons have their views, at the sacrifice of the Walmsleys' privacy. That is, if the right to privacy is initially allocated to the Walmsleys, then the Aitchisons could make an offer that would be accepted so as to provide them with views. If the right to views is initially allocated to the Aitchisons, then there is no offer that the Walmsleys could make that would be accepted, so the Aitchisons' right to views remains. It turns out that this is the economically efficient outcome, because the benefits to the Aitchisons of their views ($100,000 in this example) are greater than the costs to the Walmsleys of their lost privacy ($75,000 in the example). This then illustrates the Coase theorem: regardless of how the initial legal rights to views or privacy are allocated, a private solution between the parties can arise that achieves the economically efficient outcome.

Note, however, that the way in which rights are allocated does have distributional consequences, in terms of who pays whom. That is, if the legal rights to privacy were initially allocated to the Walmsleys, then in the above example there is a compensation payment that is made, while no such compensation is paid if the legal rights to views are initially allocated to the Aitchisons. This may be a relevant consideration if distributional concerns are of importance. For the Coase theorem, however, the focus is on the net benefits to society overall, rather than how those benefits are distributed. An analysis of distributional

31 There may also be some cost involved in removing the structure, and the offer would need to take this into account.

consequences can be a valid consideration, but the scope of this analysis is sufficiently broad that this article will not attempt to cover it.

The above example is hypothetical, and while the results may differ if different numbers were used, the Coase theorem's central proposition remains unchanged. It is important to note, however, that there are some conditions that are necessary for the Coase theorem to be satisfied. One is that a private agreement between the relevant parties is successful. This might not be the case if there are impediments to negotiation or bargaining, such as the costs involved in reaching an agreement. Coase recognised this, and used the term "transaction costs" to refer to all the possible impediments to private agreement.[32] Transaction costs might include, for example, the cost of spending time in discussions, or having lawyers draft and enforce contracts. As it is typically formulated, the Coase theorem requires that transaction costs are zero (or at least low) for an efficient allocation to be achieved by private agreement.

Another reason that private agreement may break down is that hostility between the parties prevents them from reaching an agreement (or even commencing negotiations). Similarly, parties may behave opportunistically and attempt to "hold up" the negotiations to reach a better deal, or they may perceive that they can reach a more desirable outcome by proceeding through the courts. Technically these sorts of issues might be captured in the notion of transaction costs, although it can be helpful to assess them as separate considerations.

Another key assumption underlying the Coase theorem is that legal (property) rights are well defined. That is, if (for example) the legal right to privacy were allocated to the Walmsleys, it would be important for the Walmsleys to know exactly what that right entails. The Declaratory Decision suggests that there was some ambiguity in the specification of property rights for the Aitchisons and Walmsleys, as discussed later in this article.

Indeed, it is for perhaps one (or all) of these reasons — high transaction costs, opportunistic behaviour, or poorly defined rights — that a private agreement did not arise between the Aitchisons and the Walmsleys. This is despite attempts at such an agreement — according to media reports, the Aitchisons offered to pay the Walmsleys to remove the structure once it was in place.[33] Clearly, however, no such private agreement could be struck. When such situations arise, the work of Thomas Hobbes provides a way forward.

32 As discussed in Cooter and Ulen, above note 2, at 88–89.

33 Joel Maxwell and Tom Hunt "Wellington's view-slashing fence to go" (1 October 2015) Stuff.co.nz <https://www.stuff.co.nz/life-style/home-property/72590164/wellingtons-viewslashing-fence-to-go>. Another possible reason that there was no private agreement reached is that any offer of compensation was below the value to the Walmsleys of their privacy.

5. THE HOBBES THEOREM

What has been referred to as the "polar opposite"[34] to the Coase theorem is a concept attributed to the 17th-century English philosopher Thomas Hobbes. Hobbes took a pessimistic view on the ability of people to reach a solution by bargaining or negotiating between themselves, and considered instead that such attempts would be fraught with problems.[35] One concern is that of hold-up. A hold-up problem often occurs when one party makes a (sunk) commitment to another party on the assumption that the relationship will proceed, allowing the second party to hold up the first so as to extract a greater concession in the bargaining.

Due to the risk of hold-up or disagreement more generally, Hobbes' approach was not to seek to facilitate private agreement, but rather to have a stronger and authoritative third party to force the relevant parties to agree. That is, this authoritative party would seek to allocate rights between the relevant parties, rather than have those parties determine the appropriate allocation of rights themselves. To achieve an economically efficient outcome, the allocation of these rights should be done in a way that minimises the costs, and maximises the benefit, from agreement. It is this that has been referred to as the "Hobbes theorem": resolving an externality problem in an economically efficient way involves some higher authority allocating rights to the party that values them the most.

It is straightforward to illustrate how the Hobbes theorem would work using the *Aitchison v Walmsley* example. On the fictional numbers presented earlier, the value of views to the Aitchisons was $100,000, while the value of privacy to the Walmsleys was $75,000. An efficient allocation would therefore involve allocating the right to views to the Aitchisons, as this is the higher-value use. Unlike the example of the Coase theorem discussed above, this allocation requires no negotiation or bargaining between the two parties, nor any exchange of compensation (although it does require information about the parties' relative values, which is discussed further later in this article). Rather, it requires an authoritative third party, such as a government or court, to (in this example) explicitly allocate the right to views to the Aitchisons, which would require the Walmsleys to remove their view-impeding structure.

Indeed, this is effectively what the Environment Court did in the *Aitchison v Walmsley* Enforcement Decision. The Court found that, "[e]ven giving the greatest weight possible to the Walmsleys' undisputed right to privacy", the adverse effects of the structure on the Aitchisons' views (along with other

34 Robert Cooter "The Cost of Coase" (1982) 11 Journal of Legal Studies 1 at 18.

35 Cooter and Ulen, above n 2, at 97 note that Hobbes did not express himself in these terms, but this is the nature of the argument that these authors have drawn from Hobbes' work.

adverse effects) supported a finding that the structure should be removed.[36] While the Court did not explicitly place a monetary value on the Aitchisons' views (or the other adverse effects) or the Walmsleys' privacy, it may have implicitly done so. On an economic interpretation, the Court (implicitly) found that the higher-value use of the resource was the Aitchisons' views, and as a result the legal rights to those views were allocated to the Aitchisons.

Consider another example of the application of the Hobbes theorem, building on Milgrom and Roberts.[37] Milgrom and Roberts note that, at one point in time in recent history, people and businesses were generally freely able to pollute the air or water to remove their waste products. Doing so, however, led to environmental degradation, and this imposed costs on other members of society through, for example, the health risks from dirty waterways or smog. As discussed earlier, this is a clear example of an externality problem, arising from an inconsistent and conflicting use of the same resources (air and water) by multiple parties.

Before coming to the Hobbes theorem, consider the application of the Coase theorem to this issue. Under the Coase theorem, an economically efficient solution to this externality problem might first involve assigning rights to pollute to the polluters. If the transaction costs of private bargaining are low (and those rights are well defined), then polluters would have an incentive to sell these rights to those who value a cleaner environment, or to other polluters that have a less environmentally damaging way of disposing of their waste. As Milgrom and Roberts note, this would occur "if the cost of disposing of [polluters'] wastes in a more environmentally friendly way were less than the price they were offered for their rights".[38] If such trading occurs, then the economically efficient outcome could be achieved. That is, it would maximise the overall net benefits from the combination of economic activity that requires disposal of pollutants into the environment and the value of that environment to society.

As an aside, it is worth noting that such an approach underlies the concept of emissions trading schemes, which are often used to address climate change. An emissions trading scheme sets a cap on emissions and allows those who generate emissions to trade rights to emit between themselves or to environmental groups. Provided such schemes are well designed, including ensuring the transaction costs of trading are low, this can generate economically efficient outcomes.[39] Similar "Coasian market" schemes have also been applied

36 *Aitchison v Walmsley* [2016] NZEnvC 13 at [69]–[70].

37 Paul Milgrom and John Roberts *Economics, Organization & Management* (Prentice-Hall, Englewood Cliffs, NJ, 1992) at 304–305.

38 At 304.

39 An example where an emissions trading scheme is generally considered to have worked well is the US sulphur dioxide allowance trading programme, which

successfully in other instances, such as in auctions for broadcasting spectrum worldwide,[40] and for gas pipeline capacity in the US.[41]

Returning to the example, as Milgrom and Roberts note, there are cases where transaction costs for addressing water or air pollution problems can be significant, and so we may turn to the Hobbes theorem for guidance. Transaction costs may be high if it is difficult to identify the affected parties (particularly when there are a large number of them) and coordinate a bargaining solution between those parties. There may also be high transaction costs associated with monitoring and enforcing rights to ensure that polluters are not cheating on their obligations. In these circumstances, it may be difficult for private solutions to arise, making it more appropriate to invoke the Hobbes theorem. If, for example, the environment was considered a higher-value use of the resource then, as Milgrom and Roberts state, it would be appropriate to "lodge the rights to the environment with the public at large and to have the government enforce these rights through the legal and regulatory systems".[42] Such an approach might be implemented, for example, by an outright ban on certain forms of pollution.

6. THE IMPORTANCE OF PROPERTY RIGHTS

Both the Coase and Hobbes theorems are premised on well-defined/fully specified property rights. This premise does not always hold, despite the best intentions of governments, courts and society more generally. As this part of the article will explain, the Declaratory Decision in *Aitchison v Walmsley* is illustrative of how difficult it can be to fully specify property rights. Before coming to this, it is helpful to understand exactly what is meant by property rights and what consequences arise when they are poorly specified.

From an economics perspective, property rights are "the socially acceptable uses to which the holder of such rights can put the scarce resources to which these rights refer".[43] That is, a property right provides its holder with the right to use resources in specific, "socially acceptable" ways. Anderson and Huggins

has been in operation since 1995. Nathaniel O'Keohane and Sheila M Olmstead *Markets and the Environment* (2nd ed, Island Press, Washington, 2016) at 200–205 provide a description of this programme.

40 Evan R Kwerel and Gregory L Rosston "An Insiders' View of FCC Spectrum Auctions" (2000) 17(3) Journal of Regulatory Economics 253.

41 Jeff D Makholm "Regulation of Natural Gas in the United States, Canada, and Europe: Prospects for a Low Carbon Fuel" (2015) 9(1) Review of Environmental Economics and Policy 107.

42 Milgram and Roberts, above n 37, at 305.

43 Demsetz, above note 23, at 144.

put this succinctly by noting that property rights are the "rules of the game" that define who gets to do what with property.[44]

What is (or is not) considered socially acceptable with regard to the use of resources may be defined either formally or informally. Property rights can be specified formally and explicitly through government legislation that defines the way in which resources should be used. An example is the Land Transfer Act 1952, which implements the Torrens title system and defines private titles to land and the ways in which those titles can be transferred.[45] Property rights may also be defined formally through the court system, or at the local government level through, for example, planning instruments. Indeed, the use of district and regional plans under the RMA involves the establishment of rules as to what can and cannot be done with property, thereby formally defining property rights.

Property rights may also be defined informally such as through social or cultural norms. A simple example might be the allocation of seats on public transport, for which there are typically no formal rules, but seat allocation based on first in, first served is (generally) considered to be socially acceptable. A more complex example might be the informal nature of "squatters' rights", which often defined property right allocations to land during frontier development phases.[46]

It is important to note that property rights are flexible and evolving. Indeed, because property rights are based on "socially acceptable" uses, what is considered socially acceptable can change over time.[47] A pertinent example is that of climate change: for a long period of time following the Industrial Revolution, the use of fossil fuels was not considered to have material adverse consequences, at least not globally. It is only in recent years that societal values have changed to the point where concern over human-induced global climate change has changed (or is changing) the acceptable uses of fossil fuels.

Moreover, property rights may also evolve from informal to formal rights.

44 Terry L Anderson and Laura E Huggins *Property Rights: A Practical Guide to Freedom and Prosperity* (Hoover Institution Press, Stanford, CA, 2003).

45 For further discussion see Richard P Boast and Neil C Quigley "Regulatory Reform and Property Rights in New Zealand" in Susy Frankel (ed) *Learning from the Past, Adapting for the Future: Regulatory Reform in New Zealand* (New Zealand Law Foundation and LexisNexis, Wellington, 2011).

46 For an analysis with respect to the American West see Terry L Anderson and PJ Hill "The Evolution of Property Rights: A Study of the American West" (1975) 18(1) Journal of Law and Economics 163.

47 This leaves aside the question of compensation for property rights that are impaired because of changing societal values. For a discussion of this issue see Lewis Evans, Neil Quigley and Kevin Counsell "Protection of Private Property Rights and Just Compensation: An Economic Analysis of the Most Fundamental Human Right Not Provided in New Zealand" (ISCR Monograph Series No 3, New Zealand Institute for the Study of Competition and Regulation, Wellington, February 2009).

Anderson and Huggins give the example of the establishment of water rights in the 19th century in the Western United States.[48] Initially water users developed their own, informal, set of rules based on a "prior appropriation" system (the first user of water in time has exclusive rights over later users). This system was eventually codified more formally in territorial and state laws.

Even formally specified rights may evolve from being specified only in formal documentation to additional specification through the common law (that seeks to clarify the nature of the rights). Indeed, as will be discussed shortly, this is essentially what happened in *Aitchison v Walmsley*.

Secure and clearly specified property rights are important for achieving outcomes consistent with economic efficiency. Under the Coase theorem, if rights are not well defined then it will be unclear to private individuals what it is that is being bargained for. Similarly, in the Hobbes theorem, poorly defined rights would make it difficult for an authoritative party to decide on how those rights would be allocated. More generally, Evans, Quigley and Counsell summarise the importance of having well-defined, secure and properly enforced property rights:[49]

> These rights enhance the workings of the economic system by ensuring incentives are compatible with sustainable resource use and socially desirable outcomes. They also reduce socially wasteful expenditure incurred in protecting property rights (through lobbying politicians for favourable policies and legislation) or in invoking extra-legal means of protection and enforcing rights that are not recognised in law.

Importantly, a *formal* definition of property rights does not necessarily imply a *complete* definition of property rights. Ambiguities may still arise even where property rights are formally specified in the legislation or other documentation. This appears to be exactly the issue underlying the Declaratory Decision in *Aitchison v Walmsley*. The intention of the Wellington City Council's District Plan was to set out clearly what could and could not be done with property: the Walmsleys were not permitted to build a "fence", but they could build a "residential structure", provided it met the height conditions set out in that District Plan. As it turned out, however, the specification of these height conditions required further clarification, by way of the Environment Court's Declaratory Decision.

It is perhaps not surprising that a private solution to the externality problem between the Aitchisons and the Walmsleys broke down, given the way in which the underlying property rights were defined. The Walmsleys presumably thought

48 Anderson and Huggins, above note 44, at ch 3.
49 Evans, Quigley and Counsell, above note 47, at 2.

that they had a valid right to build the structure, as it was (ostensibly) permitted in the Council's District Plan. However, the Court's Declaratory Decision clarified this, finding that the structure was not permitted as it did not satisfy the relevant height restrictions, based on the Court's clarification of "ground level" conditions. Arguably the Enforcement Decision went further in clarifying the nature of the property rights in *Aitchison v Walmsley*, illustrating that there was little difference between a "structure" and a "fence" in this particular case. By clarifying the property rights, these decisions laid the foundation for an application of the Coase or Hobbes theorems.

7. PRACTICAL IMPLICATIONS FROM THE COASE AND HOBBES THEOREMS

While the Coase theorem and the Hobbes theorem are important theoretical principles, it can be tempting to dismiss them as just that: overly theoretical concepts with little practical relevance to the "real world" of human interaction within a legal and economic system. However, these two principles do have important practical applications, particularly in respect of how the law can be structured and applied to achieve the greatest benefit to society.

The Coase theorem provides us with the principle that the efficient use of resources can be achieved through private agreement when transaction costs are low. It therefore suggests that the law should be structured in a way to facilitate lower transaction costs and remove impediments to private agreement. Cooter and Ulen refer to this as the "normative Coase theorem", insofar as it offers prescriptive guidance regarding how the law should be structured. As these authors note, by facilitating private agreement, a low-transaction cost legal structure will "thus reliev[e] lawmakers of the difficult task of allocating legal rights efficiently".[50]

One way in which transaction costs may be lowered is through dispute resolution processes that seek to facilitate agreements between conflicting parties while avoiding the courts, such as the Banking Ombudsman or Disputes Tribunals. More relevant to environmental conflicts are provisions in the RMA that make activities on the boundary between two properties a permitted activity provided approval is given by affected neighbours.[51] This lowers transaction costs by allowing neighbours to reach agreement on boundary activities, without resorting to a costlier process of obtaining resource consent.

As has been noted, however, it is not always the case that transaction costs are sufficiently low, or that strategic behaviour can be prevented, so as to

50 Cooter and Ulen, above n 2, at 97.
51 Resource Management Act 1991, s 87BA.

facilitate private agreement. In these cases, a more formal process is required to resolve externality issues, such as a court or local authority resource consent/planning process. The Hobbes theorem then provides us with an underlying objective of such processes: allocate rights to the highest-value use, to achieve the greatest net benefit to society.[52] Cooter and Ulen refer to this as the "normative Hobbes theorem".[53]

Allocating rights to the highest-value use may be determined by a qualitative judgement of relative values, informed by independent experts in the relevant fields of judgement. For example, in the *Aitchison v Walmsley* Enforcement Decision the Court heard expert evidence from planning experts, an environmental psychologist and an urban designer, regarding the effects of the Walmsleys' structure on privacy, views, shading and its dominance.[54] The highest-value use could also be informed by more explicit valuation — for example, using the technique of cost benefit analysis.[55] Indeed, such an approach has been informative in some Environment Court decisions.[56]

Whether implicitly or explicitly, for a court (or some other authoritative decision-maker) to allocate rights to the highest-value use requires a

52 One further consideration is whether a private agreement to resolve an externality problem could be struck ex post (after a court's decision) if the court failed to resolve the problem in the most efficient manner. This can depend in part on the nature of the court's decision: whether an injunction or compensatory damages. Of relevance here is the seminal contribution of Calabresi and Melamed who showed that if transaction costs are high then a more efficient remedy is an award of damages, while if transaction costs are low then an injunction is more efficient as it provides a clearer position from which the parties can reach a private agreement ex post (Guido Calabresi and A Douglas Melamed "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral" (1972) 85 Harvard Law Review 1089; see also Cooter and Ulen, above note 2, at 104–106). Transaction costs are therefore a relevant consideration in respect of ex post agreement. In addition, Farnsworth studied a number of actual "old-fashioned nuisance cases" and found that parties did not bargain after judgment, due not to transaction costs but to acrimony between the parties and a distaste for any sort of private agreement regarding the rights at issue (Ward Farnsworth "Do Parties to Nuisance Cases Bargain After Judgment? A Glimpse Inside the Cathedral" (1999) 66 University of Chicago Law Review 373).

53 Cooter and Ulen, above n 2, at 97.

54 *Aitchison v Walmsley* [2016] NZEnvC 13 at [25].

55 For a more detailed discussion of the use of cost benefit analysis to inform economic efficiency, particularly in respect of the RMA, see Kevin Counsell, Lewis Evans and James Mellsop "Objective RMA decision-making: Cost benefit analysis as an economic and practical framework" (November 2010) Resource Management Journal 4.

56 Examples are *Maniototo Environmental Society Inc v Central Otago District Council* [2009] NZEnvC 293 and *Lower Waitaki River Management Society Inc v Canterbury Regional Council* [2009] NZEnvC 242.

material level of information. This in itself imposes costs, being the costs of gathering and processing this information. It may also be difficult to obtain this information, particularly when it is held by private parties and they may have an incentive to misstate it. Where information costs are high, it may be preferable to facilitate private agreement to avoid these information costs. On the other hand, facilitating private agreement leads to its own set of costs that have already been discussed — the transaction costs of negotiating and reaching agreement. As such, the balance between the Coase and Hobbes theorems in practice is one of balancing information costs with transaction costs.[57]

Finally, when taken together the Coase and Hobbes theorems highlight the importance of clearly specifying property rights. However, it can be difficult to determine what a "clearly specified" or "well-defined" property right means in practice. As Stiglitz states, it is impossible to have "perfectly" defined property rights.[58] Indeed, to perfectly specify property rights in an RMA setting requires writing plans and policy instruments that anticipate all possible uses of property and define the appropriate rights. Clearly such an approach is not plausible: as well as being exceptionally costly, it is not possible to anticipate every eventuality regarding the use of property, looking forward over the lifetime of a plan or policy instrument. Ultimately it may be that property rights are necessarily incomplete.[59]

As such, the theory of incomplete contracts provides some useful insights on the appropriate way forward. In the same way as it is not possible to perfectly anticipate all ways in which property rights should be defined, so too are contracts more generally not able to anticipate all eventualities, and are necessarily incomplete. One response to this is to design contracts to best minimise the costs of negotiating and drafting additional provisions relative to the risk of certain eventualities occurring, while allowing scope for "gap-filling" in contracts, such as by the courts.[60]

This approach might also be applied to the specification of property rights, particularly in respect of the planning process and RMA system in New Zealand. The appropriate approach is likely one that balances the costs of specifying property rights, or making incremental changes in their specification, against the benefits that such changes bring, and using the courts to fill the gaps. Indeed, the Declaratory Decision in *Aitchison v Walmsley* can be seen as filling the gap in the Wellington City Council's District Plan to help better specify the nature of the underlying property rights.

57 Cooter and Ulen, above note 2, at 99.
58 Stiglitz, above note 24, at 170.
59 Stiglitz, above note 24, at 171 states, "Imperfect property rights may suffice".
60 See Cooter and Ulen, above note 2, at 212.

8. CONCLUSIONS

Aitchison v Walmsley was a litigious process, with two cases in the Environment Court, one of which was appealed to the High Court, along with various other cases relating to costs and (potential) rehearings. At its core, however, it was a simple dispute between neighbours that many households could likely relate to. It pitted the desire for views from an urban household on a hillside, against the desire for privacy from a neighbour lower down. Looking at this conflict from both sides — of privacy versus views — can help in understanding the economic concept of externalities, and their reciprocal nature. An externality is a cost or benefit imposed by the actions of one party on another (independent) party. It arises not because of solely one party's actions, but because both parties want to use the same resource in inconsistent, and conflicting, ways. In *Aitchison v Walmsley* the use of the boundary between the two properties conflicted: the Aitchisons wanted the boundary to be free from impediments to provide for their views; while the Walmsleys wanted a fence along the boundary to provide for their privacy.

The case also helps in understanding two principles from law and economics that can be used to address externalities in a way that achieves the greatest net benefit to society. The Coase theorem tells us that private agreement can resolve the externality problem in a way that maximises societal net benefit, regardless of how legal rights are allocated, provided that the transaction costs of reaching that agreement are low and property rights are well defined. There is merit in resolving externality problems privately, as it can take the pressure off the court system and take advantage of information the parties hold. As such, there is a role for policy-makers to seek to structure the law to lower transaction costs and clearly specify property rights, to facilitate such private agreement.

However, transaction costs are not always low in practice, and private agreements can break down, meaning that the allocation of rights can be important. In these circumstances, the Hobbes theorem says that, if the objective is to generate the maximum net benefit to society, legal rights should be allocated to the highest-value use.

The Coase theorem suggests that a private agreement could have been an option to resolve the conflict between the Aitchisons and the Walmsleys regarding the best use of their shared boundary. While attempts were made at such an agreement, ultimately it did not occur. The Hobbes theorem says that the best use of the boundary should therefore be determined by an authoritative third party based on highest-value use. On an economic interpretation, the Environment Court's Enforcement Decision to allocate the rights to views to the Aitchisons did just that.

Moreover, for both the Coase and Hobbes theorems, the underlying rights as to the socially acceptable uses of property (property rights) need to be clearly

specified. Poorly specified property rights can undermine the incentives for individuals to invest, innovate, and more generally use their rights in ways that are socially desirable. In *Aitchison v Walmsley*, there were some ambiguities in the way property rights were specified, which the Environment Court's Declaratory Decision sought to clarify.

While the Coase and Hobbes theorems take opposing views, they are nonetheless still both relevant to the treatment of externalities. They can both achieve the same outcome — an economically efficient allocation of resources — but take a different route to get to that outcome. The appropriate approach to invoke is likely to depend on the circumstances: private agreement may occur naturally in many circumstances, but where it does not — due to high transaction costs for example — then allocation of rights should be to the highest-value use. While transaction costs are a feature of many real-world markets — that is, they are ubiquitous — they are not ubiquitously *high*. Moreover, they are in many ways malleable — the law can be structured in a way to help lower transaction costs.

Ultimately the Coase and Hobbes theorems show that robust legal and economic analysis is a necessary condition for achieving outcomes that generate overall net benefits for society. Indeed, the last word can be left to Ronald Coase who succinctly summarises what is needed: "patient study of how, in practice, the market, firms and governments handle the problem of harmful effects".[61]

61 Coase, above note 23, at 18.