Eminent Domain and the Psychology of Property Rights: Proposed Use, Subjective Attachment, and Taker Identity

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The U.S. Supreme Court’s decision in *Kelo v. City of New London*, allowing governments to force the sale of private property to promote economic development, provoked bipartisan and widespread public outrage. Given that the decision in *Kelo* was rendered virtually inevitable by the Court’s earlier public use decisions, what accounts for the dread and dismay that the decision provoked among ordinary citizens? We conducted two experiments that represent an early effort at addressing a few of the many possible causes underlying the *Kelo* backlash. Together, these studies suggest that the constitutional focus on public purpose in *Kelo* does not fully, or even principally, explain the public outrage that followed it. Our experiments suggest that subjective attachment to property looms far larger in determining the perceived justice of a taking. We have only begun to map out the contours of this response, but these initial findings show promise in helping to build a more democratic model for the law and policies dealing with takings.

I. INTRODUCTION

One of the most controversial U.S. Supreme Court cases of the past several years is one that came to no surprise to legal scholars and lawyers, and merely reaffirmed established legal precedent. But *Kelo v. City of New London* -- the case that permitted government to force the sale of private property for the purpose of economic development -- raised the ire of a previously oblivious public. Rarely has a single Supreme Court decision triggered a

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groundswell of popular outrage, a news frenzy, and immediate legislative response. In testimony before Congress, property scholar Thomas Merrill commented that *Kelo* “is unique in modern annals of law in terms of the negative response it has evoked” (U.S. Senate, 2005). A multitude of reform laws in many states followed quickly on the heels of the decision, with the declared purpose to limit the government’s ability to exercise its power of eminent domain. There is controversy about the extent to which the post-*Kelo* reform laws will bring about real reform. Some commentators argue that many states have adopted reforms where “blight” exceptions are so broad that the law provides virtually no protection at all against economic development takings (Somin, 2007). The effect of post-*Kelo* reform efforts is not yet clear, but it is clear that the reform efforts were invigorated by the public opinion backlash that was unleashed following the Court’s announcement of the decision in *Kelo*.

Using the extreme public reaction to *Kelo* as our starting point, in this paper we seek to understand ordinary people’s expectations about property rights, and more specifically, popular expectations about the circumstances under which government should be permitted to take property from a private owner. From one economic perspective, government takings of private property are theoretically unproblematic because the owner is entitled to just compensation under the Fifth Amendment. The assumption is that government will only force the sale of property if the benefit is higher than the cost of compensating the owner. Thus, if the owner is fully compensated and the public is left better off, there will always be an overall social improvement resulting from a taking.

In reality, the exercise of the power of eminent domain is not always unproblematic. One obvious problem is that landowners may not be fully compensated for all of their losses (e.g., attorneys’ fees and moving expenses). And in the case of homeowners (as well as others) there is the problem of the “subjective value” of the land. That is, a homeowner who
has not placed her home on the market values the property more than the market price of the property. Otherwise she would have accepted the market price and sold the property previously. In many instances, then, the value of the property to the owner, or the subjective value, might exceed--and in some cases, greatly exceed--the fair market value of the property. The “subjective value” problem is essentially a question of psychology: what are the characteristics of the person, and more importantly, the person’s relationship to the property, that cause the person to attach a higher value to the property than the market value?

Issues about subjective value are certainly relevant to the rift between the law one the one hand, and psychology on the other, in the domain of property rights. But subjective valuation does not explain the law-psychology rift in its entirety. First, recall that Kelo was not concerned with the valuation of condemned property at all – neither market value nor subjective value. Rather, Kelo was concerned only with the question of what constitutes a sufficient public purpose to justify a government taking in the first place. And the immediate popular backlash against Kelo suggests that the purpose of economic development as a justification for forcing an owner to sell property is insufficient in the minds of an overwhelming majority of citizens from across the political spectrum. The case and its accompanying backlash suggest that the divide between the law of property and the psychology of property is about more than just money.

To further our understanding of the psychology of property rights in the eminent domain context, we conducted two experiments in which we explored two factors hypothesized to influence perceptions of property rights. The results, overall, suggest that current eminent domain jurisprudence has failed to address some deep concerns that ordinary people have about the eminent domain power. First, we found that adjusting
compensation to reflect subjective valuation was, in some circumstances and for some people, wholly insufficient. That is, under some circumstances, some people indicated that no amount of money was sufficient to compensate for the loss of their property. We found that the strength of the owner’s ties to the property – i.e., how long the property was in the owner’s family – had strong effects on perceptions of the propriety of giving up the property, on willingness to sell, and on willingness to sell at any price. Surprisingly, in light of the legal focus of *Kelo* on public purpose, we found little effect of the purpose of the taking on willingness to sell, although, we found that the extent to which people perceived a government taking to be justified depended on the planned use for the property. In general, people were much more comfortable with being displaced for a laudatory purpose such as building a new children’s hospital, than for a purely commercial purpose such as a shopping mall. Interestingly, we found that one discomforting situation was when the government sought to take the property but gave no indication of how it planned to use the property – there were virtually no differences in reactions to the government proposing a shopping mall and the government not specifying the proposed use for the property.

In order to understand the *Kelo* backlash, it is important to understand why the public use issue had never before attracted widespread popular attention. We therefore begin by briefly reviewing the Court’s treatment of the public use clause in the Fifth Amendment prior to the *Kelo* decision, and briefly review the decision itself. We then review legal scholarship that addresses factors that might help explain the backlash, including subjective value, dignitary harms, and measures of compensation. Finally, we describe our experiments and results, and close by discussing the implications of the results.

II. EMINENT DOMAIN LAW & *Kelo v. City of New London*
A. The Eminent Domain Power and Public Use

The Fifth Amendment provides “…nor shall private property be taken for public use, without just compensation.” The “public use” language in the Fifth Amendment has long been interpreted to impose a limit on government takings of private property, but at the same time, the term “public use” has been very loosely defined. The standard for review established well prior to the decision in *Kelo* is whether the taking is rationally related to a conceivable public purpose. The Court established this standard in two condemnation cases. In the 1950s, the District of Columbia undertook an enormous urban renewal project, in which a large portion of Southwest D.C. would be condemned and rebuilt to eliminate blight. In *Berman v. Parker*, the Supreme Court permitted the entire redevelopment to go forward, even though it meant that the plaintiff’s non-blighted store would be condemned, thousands of predominantly African-American residents would be displaced, and the land would be turned over to a private developer. The developer built 5900 units of housing after the area was cleared; only 310 were classified as affordable to the former residents of the area, and by the 1960s, the area was predominantly white (Pritchett, 2003).

Thirty years later, the Supreme Court even more explicitly articulated the rational review standard for public use questions in condemnation cases. In *Hawaii Housing Authority v. Midkiff*, the Hawaii legislature tried to reduce a long-standing concentration of land ownership by forcing some landlords to sell leased residential property to the state, which in turn would sell the property to the lessees. The Court affirmed the constitutionality of the Hawaii legislation, on the grounds that local legislatures are in a better position than courts to decide the wisdom of this type of “socioeconomic legislation” (p.243). The only question

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for the court, then was whether “the legislature’s purpose is legitimate and its means are not irrational” (p. 242-3).

One pre-\textit{Kelo} case is perhaps especially comparable to \textit{Kelo} in that it seemed to have sparked broad public opposition. In \textit{Poletown Neighborhood Council v. City of Detroit} (1981),\footnote{\textit{Poletown Neighborhood Council v. City of Detroit}, 304 N.W.2d 455, 410 Mich. 616 (1981).} the Michigan Supreme Court ruled in favor of a city redevelopment plan involving the forced sale of homes in Detroit’s working class Poletown neighborhood. Eminent domain was invoked to require the removal of over 4000 residents and the condemnation of more than a 1000 homes and businesses, as well as several churches in order to make room for a new General Motors assembly plant. The Michigan Supreme Court’s decision permitting the condemnation of the Poletown neighborhood of Detroit sparked widespread public outrage.

After years of opposition to the decision and similar applications of eminent domain that followed, the Michigan Supreme Court ultimately overruled itself in a 2004 decision (\textit{County of Wayne v. Hathcock},\footnote{\textit{County of Wayne v. Hathcock}, 684 N.W. 2d 765 (Mich. 2004).} decided just two months before the U.S. Supreme Court granted certiorari in \textit{Kelo}), that was unanimous in its condemnation of \textit{Poletown}. The Justices conceded that \textit{Poletown} had erroneously ignored the distinction between public use and public purpose – the very same distinction that the \textit{Kelo} plaintiffs urged the U.S. Supreme Court to make.

By comparison, \textit{Kelo} in some ways was a less egregious case on its merits than Poletown – many fewer people, homes and businesses were displaced, the neighborhood was less tight-knit, and the influence of large corporate interests was less explicit. Nonetheless, public dismay about Poletown foreshadowed the national backlash that ensued when the U.S. Supreme Court decided \textit{Kelo}. 
B. *Kelo v. City of New London*

1. Background and Facts

The waterfront neighborhood of Fort Trumbull in New London, Connecticut, had been the home of the Coast Guard Academy in the early 20th Century, and later, the Naval Undersea Warfare Center. After decades of economic decline, a Connecticut state agency designated the city of New London as a “distressed municipality” in 1990. But in the late 1990s it looked as though the tide might be turning in New London; state and local officials persuaded Pfizer – the world’s largest pharmaceutical manufacturer - to locate its research headquarters in Fort Trumbull. During the negotiations with state economic development officials, Pfizer’s design firm produced a “vision statement” depicting a redevelopment plan for Fort Trumbull, which included a high-end residential district, offices, retail businesses, expanded parking, and a marina (Mann, 2005).

A plan similar to Pfizer’s vision statement eventually was adopted by the New London Development Corporation (NLDC), which served as the city’s development agent. According to state officials, making the area attractive to Pfizer executives and employees was important, and redeveloping Fort Trumbull was an integral part of the state’s deal with Pfizer (Mann, 2005). It was clear from the beginning of negotiations between state officials and Pfizer that eminent domain would be needed to clear out the existing neighborhood (Mann, 2005). Pfizer, however, denies having imposed conditions on its decision to relocate (Mann, 2005).

The city of New London estimated that the project would create over 1000 jobs, and would increase tax revenues. The NLDC had purchased most of the 115 parcels needed from willing sellers. The city sought to use the power of eminent domain to purchase the remaining 15 parcels from their unwilling owners. The property owners included Susette
Kelo, who had lived in her house for nearly ten years, had made substantial improvements to the property, and prized its view of the water. Also included were Wilhelmina and Charles Dery. Wilhelmina was born in her house in 1918, and Charles had lived there since their marriage some 60 years earlier. Their son lived in the house next door which he received as a wedding gift. None of the properties were themselves blighted or in poor condition. They were selected for condemnation because they happened to be located within the development area. One distinctive feature of the case is that the plaintiffs were being asked to leave their homes despite the fact the city government might not use the land for a long time, and as to some of the plaintiffs, the specific use for their property was still undetermined, even by the time of oral argument at the U.S. Supreme Court. In fact, in 2008, three years after the U.S. Supreme Court decided Kelo, the land where the homes once stood is still vacant.

2. The Decision

The five-justice majority opinion,\(^6\) authored by Justice Stevens, held that there was no finding that the development plan was a mere pretext to benefit Pfizer or any other private party. Instead, it was a carefully planned project designed to promote economic development. A broad definition of public use reflects deference to state and local legislatures about land use policies. The Court felt it should defer with respect to which lands need to be acquired, rather than overseeing choice of boundary lines. Perhaps anticipating the public outcry that followed, the Court closed its opinion by pointing out that states are

\(^6\) Joining the majority opinion were Stevens, Souter, Breyer, Ginsburg, and Kennedy (who also concurred separately).
free to impose public use requirements that are stricter than the baseline requirement of the Fifth Amendment.7

Justice O’Connor authored a dissenting opinion that was joined by Justices Rehnquist, Scalia, and Thomas. For our purposes, the dissent is noteworthy because of how strongly it seemed to resonate with subsequent public opinion, as expressed in media accounts of the decision. The dissent argued that if the Court permits the proposed taking, then all private property could now be taken and transferred to another private property so long as it might be upgraded – all the legislature has to do is deem it beneficial to the public. The dissent pointed out that the property owners were not holding out for more money, nor were they opposed to development in the area. Instead, they objected in principle to the government taking their homes for the private use of the owners simply because the new owners would make more productive use of the property. The dissent argued that the Fifth Amendment protects security of property especially for owners who are unable to protect themselves in the political process against the majority’s will. If the political branches were the sole arbiter of the public-private distinction, the “public use” requirement would be merely “hortatory fluff.”8

III. EXPLORING THE BACKLASH

The Kelo decision prompted widespread dismay among the public (Nadler, Diamond & Patton, 2008). The disapproval rating for Kelo was around 80%-90%, a figure higher than that for many other controversial U.S. Supreme Court cases. Remarkably, disapproval was uniform across political party, income levels, age, gender, race, and education levels (Nadler,

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7 Justice Kennedy provided the crucial fifth vote, and authored his own concurrence. In it, he argued that a rational basis test for deciding whether the public use requirement has been met is sufficient for ensuring that governments do not favor a particular private party with only incidental public benefits.

8 Justice Thomas filed a separate dissent based on a textualist interpretation of the term “public use” contained in the Fifth Amendment.
Diamond, & Patton, 2008). The decision enjoyed a high level of public awareness: more newspaper editorialized about *Kelo* than other takings case during that term. *The Economist* reported that *Kelo* “has set off a fierce backlash that may yet be as potent as the anti-abortion movement” (The Economist, 2005).

A. Subjective Value

What were the driving factors behind the “unexpected post-decision hullabaloo” (Garnett, 2007)? One aspect of the case that seems to have captured the public imagination was the obvious fact that the plaintiffs were not willing sellers. Of course, this is true almost by definition anytime a government agency files a condemnation proceeding in court, because it is an indication that negotiations have failed. Oftentimes negotiation stalemate results from a disagreement over how much money constitutes just compensation for the property owner. But the plaintiffs in *Kelo* did not appear to be holdouts, in the sense that they were strategically waiting to capture more of the surplus for themselves. Rather, they appeared to be what Siegelman & Parchomovsky (2004) have dubbed “holdins” – they had a strong subjective attachment to their property, and moreover, might have been unwilling to sell for any price.

There are a number of reasons why a property owner might be unwilling to sell at a price anywhere close to fair market value, and in the extreme, unwilling to sell at any price at all. The first category of reasons has generally been classified under the term “subjective value.” We use this term to capture all the reasons why owners might have a special attachment to their property: the improvements they have made over the years using their own labor and design ideas; the memories inexorably connected with the property, including milestones like births, birthdays, and weddings, along with mundane but no less important memories of everyday living; proximity to friends and family (Fee, 2006); connections with
others in the neighborhood that leverage social capital (Putnam, 2000); expression of personality (Fee 2006); the ability of a home to provide the opportunity to maintain and express personal and group identity (Radin, 1983; Paul, 1991).

B. Dignitary Harms

A second set of reasons for an owner facing condemnation to be unwilling to sell centers around what Garnett has called “dignitary harms” (Garnett, 2006; 2007) – that is, emotional reactions like outrage, resentment, and insult, that result from the perception of being unfairly targeted or treated by the government. Garnett has argued that when governments condemn property for purposes that depart from traditional public uses like highways, owners are more likely to experience dignitary harms for a number of reasons (Garnett, 2006). The first stems directly from Justice O’Connor’s dissent in Kelo: if a government can take homes for the purpose of promoting economic development, then no one’s property is safe. This general anxiety about the slippery slope of the exercise of eminent domain power is salient not only for the already targeted property owner, but also for owners who have not yet been targeted, but who now feel a heightened sense of vulnerability.

Property owners may also feel particularly harmed by non-traditional public condemnations for expressive reasons (Anderson & Pildes, 2000): owners feel insulted by the meaning of the taking and what it says about their property. For example, an owner whose modest family home is condemned and transferred to another private owner may well feel insulted by the implication that someone else could make better use of their property; on a collective level, the corresponding experience is the collective outrage at the implication that the local neighborhood is somehow blighted or deficient (Garnett, 2006). The latter possibility is exacerbated by the fact that an explicit finding of blight is a statutory
precondition for condemnation in many situations (Garnett, 2006). "What the owner reads into the alleged taking may well be the subtext: You do not matter" (Rose, 2006).

Finally, resentment regarding condemnations for non-traditional public purposes may stem from the perception that private developers are receiving a windfall, and that the windfall was not accidental or unavoidable, but rather was the result of deliberate governmental action. It is not uncommon, for example, for takers to offer the condemned property to developers for well-below market price as an incentive to go forward with development. Moreover, in some instances there is a perception that the windfall is being channeled to politically powerful parties, at the expense of displaced property owners (Garnett, 2006).

Dignitary harms may be especially acute when the target property is a home. As others have previously observed— including Justice Thomas in his 

Kelo dissent—the law recognizes the special, if not sacred character of the home, in areas as disparate as government searches, free speech, and tax policy (Radin, 1982; Ballard, 2006; Barros, 2006; Fee, 2006). Accordingly, some scholars have proposed that homes be treated differently than other types of property when evaluating public purpose claims or just compensation claims (Barros, 2006; Fee, 2006). Thus, both home ownership and the perceived legitimacy of the purpose of the taking may increase resistance to selling, the amount demanded to produce a voluntary sale, and the outrage resulting from a forced taking. Perceived illegitimacy of the taking, whether due to the purpose of the taking or to the procedures used

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9 In the 

Kelo plan, the developer would be given a 99-year lease on a 90-acre tract of waterfront land for a rent of $1 per year. 545 U.S. at 476 n.4.

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Kelo provides a relevant example. At the time the redevelopment plan for Fort Trumbull was formulated, the head of the NLDC was married to a Pfizer research director (Herszenhorn, 2000). This imbued the deal with an “unwholesomely cozy aspect” (Kanner, 2007).

11 Justice Thomas stated, “Something has gone seriously awry with this Court’s interpretation of the Constitution. Though citizens are safe from the government in their homes, the homes themselves are not.” 545 U.S. at 518.
to bring it about, may even magnify both the subjective value of the property and the dignitary harm (Rachlinski & Jourden, 1998).

C. Just Compensation

Because there may be a direct link between public use and dignitary harms, the amount of compensation an owner demands might be influenced by the purpose of the taking. Indeed, there are some dignitary harms that might be incapable of compensation at all – they may be reasons for “holdins” of the sort that no amount of money could persuade the owner to voluntarily sell.

The vulnerability associated with being targeted for a non-traditional condemnation violates the traditional understanding of land that gives the owner a right to exclude all others, to give up ownership only if she chooses and to set the price at which she is willing to sell. As Carol Rose has observed, “there is something about land that makes you think that when you own it, it is really, really yours” (Rose, 1996). Eminent domain, as a general matter, violates that expectation by both forcing the sale and setting the price. The property owner faced with an exercise of eminent domain has a right only to compensation – a liability rule that entitles the injured party to damages --- rather than the right to prevent the transfer -- a property rule that would enable the property owner to avoid being injured at all. The ability to refuse to sell inherent in a property rule also enables the property owner to extract greater compensation. Thus, a fully realized property rule would make it possible for the property owner to incorporate the subjective value of the property if she chose to sell. The difference in power on both of these grounds makes it understandable that property owners prefer a property rule to a liability rule. It may also explain the general antipathy to eminent domain and why the public found *Kelo* so objectionable.
In light of subjective value and the threat of perceived dignitary harm, the valuation of property taken by eminent domain becomes problematic. Rather than recognizing those values, eminent domain statutes tend instead to set compensation at the fair market value of the property.\textsuperscript{12} Fair market value is defined as “the price that property would sell for on the open market. It is the price that would be agreed on between a willing buyer and a willing seller, with neither being required to act, and both having reasonable knowledge of the relevant facts.”\textsuperscript{13} Setting compensation at that level prevents property owners from inflating the value of the property by conjecturing what the condemner will actually pay for the property.\textsuperscript{14} Yet it also prevents the property owner subject to eminent domain from receiving compensation for the greater subjective value the property owner may genuinely have for the property she owns. Thus, compensation for a taking pegged to fair market value almost inevitably will undercompensate the owner of the property (Ellickson, 1973; Epstein, 1985; Merrill, 1986; Lunney, 1993).

A number of scholars have generated proposals for compensation in condemnation cases as an alternative to fair market value. Some scholars have called for compensation to exceed fair market value by a set proportion, such as 125% or 150%, to give two examples (Epstein, 1985; Ulen, 1992; Merrill, U.S. Senate, 2005; Fee, 2006). Interestingly for our purposes, Ellickson (1973) proposed that compensation be determined by a schedule that takes into account not only fair market value, but also the length of time the owner has held the property. Other scholars have made similar proposals (Merrill, U.S. Senate, 2005; Barros, 2006). Krier & Serkin (2004) argue that compensation should be adjusted according to the

\textsuperscript{12} E.g., Cal Code Civ Proc § 1263.310 (2008)(“Measure of compensation: Compensation shall be awarded for the property taken. The measure of this compensation is the fair market value of the property taken.”)


degree to which the purpose departs from a traditionally public one. For what they deem ‘public ruses,’ where condemned property is transferred to private parties to promote economic revitalization, for example, they propose that compensation reflect the projected economic benefits of the project to permit condemnees to share in the benefit that the community as a whole expects to receive (Krier & Serkin, 2004). Another creative proposal calls for a self-assessment system, whereby the property owner sets the price of her property; the taker either takes it or leaves it; if the government does not take the property at that price, then the owner cannot sell the property for less than that price in the future (the owner must pay to the government the difference between a subsequent willing buyer’s price and the owner’s previously set price); and the owner’s property tax liability going forward is based on the owner’s set price (Bell & Parchomovsky, 2007).

All of the theories just discussed are intended to address various perceived shortcomings of current eminent domain law and practice. A key empirical question is, to what extent do the problems identified by legal scholars address the concerns of property owners and ordinary citizens generally? In the next section, we describe how we experimentally investigated a few of these ideas about subjective value, dignitary harms, holdins, and increased compensation.

IV. THE EXPERIMENTS

In this paper, we report two experiments in which we attempt to empirically scratch the surface of the story of the *Kelo* backlash, in an effort to investigate the nature of the values that people perceived to be threatened by the decision. There are, of course, a myriad of different possibilities that could be investigated. For example, perhaps people perceive something unique and special about homeownership, as opposed to other types of property ownership. Perhaps people attach special significance to the labor invested in property to
improve it and make it one’s own. Perhaps people are concerned that the government does not always use fair procedures when it exercises its power of eminent domain. Or, people might be concerned that individual property owners are powerless against local governments, or are victims of schemes by unholy alliances between private developers and local government representatives.

We decided to begin this larger investigation testing the effects of two factors: one that implicates the degree of attachment that people are likely to have to their property above and beyond market value, and the other which begins to unpack reactions to the legitimacy of various public purposes. Both factors are hypothesized to influence how people perceive the prospect of giving up land that they own. First, we varied whether the property had been in the owner’s family for just a short time (2 years) or a long time (100 years). Second, we varied whether the property would be used to build a children’s hospital, a shopping mall, or, in a third condition the use was left unspecified. We discuss these factors in turn.

We hypothesized that property that has belonged to a family for a long time is viewed differently than property that has been owned only for a short time. One characteristic of the Kelo case that seems to have captured the popular imagination was the identity of the plaintiffs and their relationship to their property. Among the Kelo plaintiffs was an octogenarian who had lived in her house since her birth in 1918, and her husband who had lived there since their marriage. Their adult son lived in the house next door which he had received as a wedding present. During oral argument in the Kelo case, Justice Scalia challenged the lawyer for the city of New London to acknowledge the special nature of this plaintiff’s relationship to her property: “Yes, you're paying for it, but you're giving the money to somebody who doesn't want the money, who wants to live in the house that she's lived in.
her whole life. That counts for nothing?" Although unacknowledged in the Fifth Amendment, unrecognized as a legitimate factor in the Court’s opinion in *Kelo*, and unproblematic in a traditional economic analysis, we predicted that the length of property ownership, reflecting subjective value of property hinted at in Justice Scalia’s question, would influence judgments about the taking.

We also hypothesized that takings are viewed as more unjust when the purpose of the taking differs substantially from the public use archetypes like schools, highways, and post offices. The issue at the core of the *Kelo* decision was the nature of benefits of the proposed development, and to whom those benefits would inure. The Court found that the benefits included job creation and tax base expansion, and that the public was the main beneficiary, thereby satisfying the “public use” requirement of the Fifth Amendment. The public at large, by contrast, did not appear to be satisfied with this justification. We hypothesized that the more the proposed use for the targeted property appears speculative, vague, or for the benefit of private parties, the more unfair the taking will be perceived. The proposed use in *Kelo* was criticized on all of these grounds. At the other end of the spectrum, there are proposed uses which are difficult to criticize on grounds of necessity; these include the public use archetypes of schools and highways, and it is certainly true that eminent domain has often been invoked to force property sales for these purposes, especially the latter. But we wished to go a step further, and test a proposed use that would evoke a sense of moral necessity, and for this reason we chose to test reactions to a proposal to use eminent domain to build a children’s hospital. Harm to children is especially salient in

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15 Oral argument transcript, p. 39.
16 Highways are probably the most archetypal reason that governments invoke their power of eminent domain to take property; but stores, hospitals and many other proposed uses have prompted eminent domain takings, both before and after *Kelo*. See, e.g., *Didden v. Village of Port Chester*, 173 Fed. Appx. 931 (2d Cir. 2006) (affirming that a condemnation to make way for a Walgreens store does not violate the takings clause); *Housing and*
many moral contexts (Rozin, 1999), and a proposed use that alleviates harm to children would be expected to have a strong moral pull.

For these reasons, we hypothesized that a proposal to use the property for a children’s hospital should be perceived as more acceptable than for a shopping mall or when the proposed use is unknown. It was less clear whether people would react differently when the proposed use was a shopping mall or some unspecified proposed use. People often prefer certainty. Moreover, they may assume that an unknown proposed purpose indicates either an inappropriate transfer or simply poor planning and thus signals an unnecessary action. If so, people might even judge a proposed shopping mall more acceptable than a taking with an unspecified proposed purpose.

Finally, we examined reactions to proposals from two different sources. In earlier research, Medin, et al. (1999) used a voluntary transfer scenario involving a developer, and found that both period of ownership and proposed use influenced willingness to sell as well as attitudes about moving. We used these measures as a starting point, and also investigated the role of personal control in these transactions. In our Experiment 1, the owner was approached by the county government which expressed interest in buying the property in a voluntary transaction, although the scenario indicated that there was a threat of potential eminent domain if the transaction did not go through. In Experiment 2, the initial proposal to sell came from a developer and there was no indication of governmental interest in the

then, after the participant evaluated the developer's proposal, the participant learned that the government planned to use its power of eminent domain to force the sale of the property. Thus, whereas in Experiment 1 we assessed reactions to a proposed voluntary transfer proposed by the government, in Experiment 2, we assessed reactions in the more typical eminent domain situation in which a two-step approach occurs, an overture by a private party for a voluntary sale followed by a coerced transfer.

V. EXPERIMENT 1: VOLUNTARY TRANSFER UNDER THREAT OF EMINENT DOMAIN

A. Experiment 1: Participants and Design

Participants were invited to participate via an email message sent to individuals who had previously registered as a volunteer to participate in web-based research. Participants were offered an incentive for participation in the form of a random draw to receive a gift certificate from an online retailer. Participants were assured that their responses would remain anonymous and that identifying information would not be collected.

A total of 568 participants completed the questionnaire; of these, 58% were female. 87% were white, 5% Black, 3% Hispanic, 3% Asian, and 2% Native American. The mean age was 40 years. 20% had a high school degree, 60% had attended college, and 19% had attended graduate school. Most owned their own place of residence (71%). Twenty-four percent currently live in an urban area, 42% in a suburb, 16% in a small town, and 19% in a rural area.

The experiment had a 2 (Term on Land: short, long) x 3 (Proposed Use: children’s hospital, shopping mall, none) x 2 (Response Format: scale, open) between-subjects design. The last factor, Response Format, is explained in further detail below.

17 Participant recruitment was managed by the StudyResponse Project, hosted by the School of Information Studies at Syracuse University, at http://www.studyresponse.com.
Participants read a vignette and then answered questions. The vignette and questionnaire took an estimated 10-15 minutes to complete.

B. Experiment 1: Materials and Measures

Each participant read only one version of the vignette, which was presented as follows:

THE PROPERTY
You live in a house on a plot of land. The property (the house plus land) has a market value of $200,000. The property has been in your family for \[2/100\] years.

THE PLAN
The county government is planning to build [a new children’s hospital / a new shopping mall / [none]] on a large parcel of land that includes your property.

THE PROPOSED DEAL.
The county government approaches you and tells you about a property (house plus land) not too far away that is extremely similar to your current property. An independent appraiser tells you that the new property is valued at $200,000. The county asks you to move to this new property and agrees to cover all expenses associated with the move.

If necessary, the county government can go to court and use its power of eminent domain to require you to sell your property. In that case, the court will award you the fair market value of your property, that is, $200,000.

SUMMARY
-If you accept the current offer, you will get the new property (worth $200,000) plus moving expenses.
-If you don't come to an agreement with the county, the county can go to court and the court will award you $200,000, but no replacement property, and no moving expenses.

The first dependent variable was the amount of money participants demanded in order for them to agree to sell the property, over and above the other property and moving expenses. Each participant received one of two different response formats for this question. The scale response required participants to choose from seven different dollar amounts (from $0 through $1 million), or else indicate that “No incentive is high enough to trade.”

The open response permitted participants to write in their own dollar amount, or else indicate that they would demand no additional payment, or that no incentive is enough.

Thus, participants responded to one of the two response formats below:

The government has offered to trade you the other property (worth $200,000) plus pay all of your moving expenses. How much incentive would you need to agree to part with your property and to move, IN ADDITION TO the new property and moving expenses?
The government has offered to trade you the other property (worth $200,000) plus pay all of your moving expenses. How much incentive would you need to agree to part with your property and to move, IN ADDITION TO the new property and moving expenses?

___ $0 (will trade for new land plus moving expenses)
___ $5000
___ $10,000
___ $50,000
___ $100,000
___ $500,000
___ $1 million
___ No incentive is high enough to trade]

[OPEN:
___ $0 (will trade for new land plus moving expenses)
___ No incentive is high enough to trade
___ $____________ (specify amount)]

We hypothesized that the scale format would have the advantage of prompting participants to think about a wide range of possibilities because it explicitly displayed many different options; on the other hand, the scale format might tend to anchor responses higher or lower than an open format. On the other hand, we were concerned that an open format would result in a great deal of variation in responses, because of individual differences in interpretation of the nature of the question. For this reason, we decided to assign participants randomly to one of the two response formats. Pilot testing\(^\text{18}\) of the scale format indicated that no participants chose an amount between $1 and $1000, and very few chose between $1 and $10,000. Therefore, we constructed a scale that included two dollar figures within each level of magnitude beginning with $5000 up to $1 million.

We also included several attitude measures, each using a 7-point scale. Participants indicated how they felt about moving from the property under the circumstances (1: very

\(^{18}\) We ran a pilot test of this experiment to initially assess the response format to the incentive question, as well as the attitude questions. Results are reported in an earlier unpublished version of this manuscript, and are available from the authors upon request.
bad, 7: very good); the extent to which the government was morally wrong or right in asking them to move (1: very wrong, 7: very right); the extent to which the participant, having moved, was morally wrong or right to do so (1: very wrong, 7: very right); the extent to which moving will be harmful or beneficial to the community (1: huge harm, 7: huge benefit); the extent to which the government was motivated by bad motives and by good motives (1: not at all, 7: very much). We also included an open ended question asking what participants thought the government would actually do with the property, if and when they obtained it.

C. Experiment 1: Results

1. Willingness to Sell

In the scenario, the government had proposed to purchase the participant’s property in exchange for an equivalent parcel of property nearby, and moving expenses. Participants indicated how much money they would require, over and above the new property and moving expenses, to sell the land. Overall, 19.3% of participants were willing to accept the government’s offer without additional compensation. The others specified an additional amount they would require or said they would refuse to sell, suggesting that these 80.7% of the respondents attached some additional subjective value to the land. The additional price they identified for the land transfer, however, also may have included costs not generally covered by the moving expenses the government was willing to pay. The open-ended responses to the question in which we asked participants for their thoughts on how much incentive they would need to part with their land indicated that many respondents anticipated additional expenses associated with a move, such as re-decorating, and others felt they were entitled to additional compensation for the inconvenience of moving. Nonetheless, it is clear that a significant portion of the participants did view the land as
possessing substantial additional subjective value: about 36% said they would require $100,000 or more to accept the transfer, and an additional 9.4% said “no incentive is high enough to trade.”

To test the effect of variations in the circumstances of the offer (Term on Land, Proposed Use, and Response Format) on participants’ willingness to trade, we conducted two analyses. First, we examined effects of these factors on the rate at which participants were not willing to trade at all by choosing “no incentive is high enough to trade.” Second, we tested how variations on the circumstances of the offer affected participants’ dollar amount they demanded to trade. Of participants who indicated willingness to trade, overall mean demand (over and above the equivalent property and moving expenses) was $61,942.

2. Refusals to Sell

We first examined the proportion of subjects who refused absolutely to sell their property, by selecting the option labeled “No incentive is high enough to trade.” Overall, 9.4% of participants indicated that no incentive was high enough, indicating, presumably, that they were unwilling to sell at any price.

This proportion varied across term and use conditions. First, however, note that Response Format (scale or open) did not appear to influence the overall proportion of respondents who indicated that no incentive is high enough to trade (scale: 8.1%; open: 10.7%; Fisher’s Exact Test p = .315). Further analysis revealed that this proportion did not vary with the interaction of Response Format with Use or with Term. Specifically, we ran a logistic regression testing the effect of Use, Term, Format, Use*Term, Use*Format, Term*Format, and Use*Term*Format on the binary outcome Refusals. The interactions involving Format were not statistically significant (Term*Format $\chi^2(1) = 1.45; p = .23$; Use*Format $\chi^2(1) = 0.9, p = .33$; Use*Term*Format $\chi^2(1) = 0.3, p = .56$). Therefore, for
purposes of further analyzing the proportion of respondents who indicated that no incentive is high enough to trade, we report results combined across response format condition.

The effect of Use and Term on the proportion of respondents who indicated that no incentive is high enough to trade is depicted in Table 1. To test whether these apparent differences were statistically significant, we conducted a logistic regression analysis with the binary dependent variable of refusal or non-refusal to sell. The model included the variables Term, Use. Hospital was the reference category for the Use contrast. The percentage refusing to sell differed significantly by Term, such that participants whose family owned the land for a short term of two years were less likely to refuse to sell (5.2%) than participants whose family owned the land for a long term of 100 years (13.7%), Wald $\chi^2(1)= 11.10; p < .001$. The Use variable was not statistically significant, Wald $\chi^2(1)= 1.27; p =.26$. We then tested a logistic regression model that included the interaction of Term * Use. There was a statistically significant interaction between Term and Proposed Use, Wald $\chi^2(1)= 4.10, p < .05$. Table 1 indicates that the difference in refusal rate between short and long term is not as pronounced when the proposed use is a hospital, compared to when the proposed use is a shopping mall or is unspecified.

Table 1: Experiment 1 Percentage Refusing to Sell (“no incentive is high enough to trade”) by Term and Use (N’s in parentheses)

<table>
<thead>
<tr>
<th>Term</th>
<th>Use</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital</td>
<td>Mall</td>
</tr>
<tr>
<td>Short</td>
<td>9.9% (91)</td>
<td>1.0% (99)</td>
</tr>
<tr>
<td>Long</td>
<td>13.0% (92)</td>
<td>15.3% (85)</td>
</tr>
<tr>
<td>Total</td>
<td><strong>11.5% (183)</strong></td>
<td>7.6% (184)</td>
</tr>
</tbody>
</table>

3. Dollar Amount Demanded to Sell
Recall that dollar amount demanded to sell was collected in two different Response Formats: open (where respondents could enter any dollar amount) and scale (where respondents indicated a dollar amount on an ordered scale consisting of 8 choices). The distribution of residuals in the open format departed substantially from normality (even after log and other transformations). For this reason, we transformed the open format responses to fit them onto the 8 choice scale, and analyzed all data together.\textsuperscript{19}

We hypothesized that using the land for the purpose of building a children’s hospital would be viewed as a more benign proposed use than either a shopping mall or an unknown proposed use. Accordingly, for the Use variable, we used Hospital as the contrast variable. (We also compared the shopping mall and unknown conditions with one another).

We conducted an ordered logit analysis with the dependent variable amount demanded, on a scale of 1-8, where 1 indicated $0, and 8 indicated the response labeled “No incentive is high enough to trade.” The first model included the variables Term, Use, and Format. The results, indicated in Table 2, show statistically significant effects for Term and Format. For ease of interpretation, we express mean differences in dollar amounts. For Term, participants whose family held the land for 100 years demanded more money from the government (M=$75,500) than participants whose family held the land for 2 years (M=$27,200). For Format, the Scale format elicited a higher mean demand (M=$67,000) than the Open format (M=$32,000). Within the Use condition, the mean for Hospital was $43,600, whereas the mean for Mall/Unknown was $50,500; this comparison did not reach conventional levels of statistical significance (p = .13). We note that the mean for Mall was ($56,000) and mean for Unknown was ($46,400). Finally, we tested a second model, depicted in Table 2, that included all interactions; none of the interactions were statistically significant.

\textsuperscript{19} The scale choices were as follows: 1: $0; 2: $5,000; 3: $10,000; 4: $50,000; 5: $100,000; 6: $500,000; 7: $1,000,000; 8: No incentive is high enough to trade.
Table 2: Experiment 1 Ordered Logit Results for Amount Demanded

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (S.E.)</th>
<th>Wald χ²</th>
<th>p value</th>
<th>Coefficient (S.E.)</th>
<th>Wald χ²</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>-.873 (.154)</td>
<td>32.29</td>
<td>.001</td>
<td>-.940 (.246)</td>
<td>14.59</td>
<td>.001</td>
</tr>
<tr>
<td>Use</td>
<td>-.243 (.161)</td>
<td>2.27</td>
<td>.13</td>
<td>-.533 (.297)</td>
<td>3.22</td>
<td>.073</td>
</tr>
<tr>
<td>Format</td>
<td>-.661 (.153)</td>
<td>18.70</td>
<td>.001</td>
<td>-.678 (.272)</td>
<td>6.21</td>
<td>.013</td>
</tr>
<tr>
<td>Term*Use</td>
<td>.436 (.434)</td>
<td>1.01</td>
<td>.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format*Term</td>
<td>-.068 (.368)</td>
<td>.03</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format*Use</td>
<td>.313 (.462)</td>
<td>.46</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format<em>Term</em>Use</td>
<td>-.295 (.647)</td>
<td>.21</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-1048.25</td>
<td></td>
<td></td>
<td>-1047.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>χ²</td>
<td>56.78</td>
<td></td>
<td></td>
<td>58.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>557</td>
<td></td>
<td></td>
<td>557</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Attitude Measures

The means for attitude measures are reported in Table 3.

a. Attitudes Toward Moving

Participants were asked how they would feel about moving from their property if they come to a mutually acceptable agreement with the government. Those whose family owned the land for 100 years felt more negatively about moving than those who owned the land for only 2 years, F(1, 559) = 17.56, p < .001. As in the prior analysis, we contrasted responses in the children’s hospital condition in one group with the responses in the shopping mall and

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20 None of the demographic characteristics measured (education, gender, race, homeownership, area of residence) had any measurable influence on the dependent variables.
unknown conditions as another group. (We also compared the shopping mall and unknown conditions with one another, and found no significant difference between them). The contrast of Hospital v. Mall/None was statistically significant, such that respondents felt more positive about moving when the proposed use for their property was a hospital, compared with a mall or an unspecified purpose, $F(1, 559) = 6.02, p < .05$. 21

Term and Proposed Use also influenced the extent to which participants felt that it was moral for them to move under the circumstances. Those whose family owned the land for 100 years felt more immoral about moving than those who owned the land for only 2 years, $F(1, 562) = 7.84, p < .01$. The contrast of Hospital v. Mall/None was statistically significant, such that respondents felt it was more moral to move when the proposed use for their property was a hospital, compared with a mall or an unspecified purpose, $F(1, 562) = 10.76, p < .01$.

Term and Proposed Use also influenced the extent to which the community would be incurring a harm or benefit as a result of the participants’ moving. Those whose family owned the land for 100 years felt that it was less beneficial to the community for them to move compared to those who owned the land for only 2 years, $F(1, 563) = 6.29, p < .05$. The contrast of Hospital v. Mall/None was statistically significant, such that respondents felt it was more beneficial for the community for them to move when the proposed use for their property was a hospital, compared with a mall or an unspecified purpose, $F(1, 563) = 72.03, p < .001$.

21 There was no interaction between Proposed Use and Term on this measure or on any of the attitudinal measures with the exception of participants’ assessment of the extent to which the government was motivated by good motives, depicted in Figure 1 and discussed below.
Table 3: Experiment 1 Mean Responses for Attitude Measures (SD in parentheses)

<table>
<thead>
<tr>
<th>Term</th>
<th>Short</th>
<th>Long</th>
<th>Proposed Use</th>
<th>Hospital</th>
<th>Mall</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Moving</td>
<td>3.91</td>
<td>3.38</td>
<td>3.81</td>
<td>3.60</td>
<td>3.54</td>
<td>3.65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.65)</td>
<td>(1.66)</td>
<td>(1.67)</td>
<td>(1.63)</td>
<td>(1.71)</td>
<td>(1.67)</td>
<td></td>
</tr>
<tr>
<td>I Am Morally Right If I Move</td>
<td>4.66</td>
<td>4.38</td>
<td>4.80</td>
<td>4.43</td>
<td>4.36</td>
<td>4.53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.50)</td>
<td>(1.50)</td>
<td>(1.41)</td>
<td>(1.42)</td>
<td>(1.64)</td>
<td>(1.51)</td>
<td></td>
</tr>
<tr>
<td>Moving Will Benefit Community</td>
<td>4.52</td>
<td>4.30</td>
<td>5.25</td>
<td>3.97</td>
<td>4.05</td>
<td>4.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.42)</td>
<td>(1.35)</td>
<td>(1.34)</td>
<td>(1.28)</td>
<td>(1.19)</td>
<td>(1.39)</td>
<td></td>
</tr>
<tr>
<td>Gov’t Morally Right</td>
<td>3.38</td>
<td>2.98</td>
<td>3.71</td>
<td>2.77</td>
<td>3.08</td>
<td>3.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.61)</td>
<td>(1.62)</td>
<td>(1.67)</td>
<td>(1.48)</td>
<td>(1.59)</td>
<td>(1.63)</td>
<td></td>
</tr>
<tr>
<td>Gov’t Had Good Motives</td>
<td>4.69</td>
<td>4.15</td>
<td>5.26</td>
<td>4.12</td>
<td>3.95</td>
<td>4.43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.45)</td>
<td>(1.68)</td>
<td>(1.39)</td>
<td>(1.48)</td>
<td>(1.56)</td>
<td>(1.59)</td>
<td></td>
</tr>
<tr>
<td>Gov’t Had Bad Motives</td>
<td>3.42</td>
<td>3.82</td>
<td>3.01</td>
<td>3.93</td>
<td>3.90</td>
<td>3.62</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.59)</td>
<td>(1.63)</td>
<td>(1.58)</td>
<td>(1.55)</td>
<td>(1.57)</td>
<td>(1.62)</td>
<td></td>
</tr>
</tbody>
</table>

b. Attitudes Toward the Government

Participants were asked about the extent to which the government was morally wrong or morally right to ask the participant to move from their property. Those whose family owned the land for 100 years felt that it was less moral for the government to ask them to move than those who owned the land for only 2 years, F(1, 559) = 8.06, p < .01. The contrast of Hospital v. Mall/None was statistically significant, such that respondents felt that it was less moral for the government to ask them to move for a mall or an unspecified purpose, compared to moving for a hospital, F(1, 559) = 18.17, p < .001.

We asked two separate questions about government motives: the extent to which the government had good motives in deciding to develop the property, and the extent to which it had bad motives in deciding to develop the property. Term and Proposed Use influenced both measures. Those whose family owned the land for 100 years less strongly endorsed the
extent to which the government had good motives, $F(1, 557) = 12.90, p < .001$, and more strongly endorsed the extent to which the government had bad motives, $F(1, 558) = 7.77, p < .01$ in deciding to develop the property, than those who owned the land for only 2 years. The contrast of Hospital v. Mall/None was statistically significant, such that respondents less strongly endorsed the extent to which the government had good motives, $F(1, 557) = 90.34, p < .001$, and more strongly endorsed the extent to which the government had bad motives, $F(1, 558) = 43.28, p < .001$, in deciding to develop the property when the purpose was a mall or was unspecified, compared to a hospital. In addition, for the question about good motives, there was an interaction between Term and Proposed Use, $F(1, 557) = 5.04, p < .05$. When the owner had held the property for 100 years, the proposed use for the property made a bigger difference in attribution of good motives to the government, compared to when the owner had held the property for only 2 years. As depicted in Figure 1, when the proposed use was a mall or was unspecified, and the property was held for 100 years, participants were especially disinclined to attribute good motives to the government.

Post-hoc tests of simple main effects confirmed that, within the mall/unspecified group, long term owners attribution of governmental good motives was significantly lower than that of short term owners, $F(1, 557) = 26.24, p < .05$.

Figure 1. Experiment 1 mean assessment of good motives of government, by proposed use and term
VI. Experiment 2: Voluntary Transfer Followed by Eminent Domain Taking

When a government decides to force the sale of private property to make way for private development, this decision often comes after the developer has unsuccessfully sought to purchase the property directly from the owner. In the second experiment, we examine this situation from the perspective of the property owner, who is first approached by a developer, and later learns that the county government seeks to force the sale of their property through eminent domain. The sequence of events in the materials maps onto the real world experiences of many property owners who face a possible forced sale through eminent domain.

Whereas in Experiment 1 we measured the amount of money participants demanded when the government sought to purchase their property in the shadow of a forced sale, in Experiment 2 we measured the amount demanded when the would-be purchaser was a
private developer, and eminent domain had not yet been explicitly mentioned. We anticipated that the factors we varied in Experiment 1 – Term and Proposed Use – would similarly affect judgments in Experiment 2, despite the difference in the identity of the would-be purchaser and prior to the explicit threat of forced sale. We also expected that attitudes about the situation would turn steeply negative once the character of the proposed sale changed from voluntary to forced.

A. Experiment 2: Participants and Design

A total of 313 participants completed the questionnaire for Experiment 2. They were recruited in the same manner as the first experiment, and their demographic characteristics were very similar to participants in Experiment 1.

The experiment had a 2 (Term on Land: short, long) x 3 (Proposed Use: children’s hospital, shopping mall, none) between-subjects design. Participants read a vignette and then answering questions. The vignette and questionnaire took an estimated 10-15 minutes to complete.

B. Experiment 2: Materials

The materials used in Experiment 2 were similar to those in Experiment 1 with a few key changes. The vignette read as follows:

You live on a plot of land with a market value of $200,000. The land has been in your family for [2 / 100] years. A developer plans to build [a new children’s hospital / a new shopping mall / [none]] on a large parcel of land, including your property.

The developer approaches you and tells you about a piece of land not too far off that is extremely similar to the one you currently live on. An independent appraiser tells you that the new piece of land is valued at $200,000. The developer asks you to move to this new piece of land and agrees to cover all expenses associated with the move.

In Experiment 2, it is a developer who approaches the landowner, rather than the county government. Accordingly, there is no mention of the possibility of a forced sale or the use of
eminent domain. After reading the scenario, participants indicated how much additional incentive they would require to move, using an 8-point scale similar (but not identical) to the one that was used in the Scale condition in Experiment 1. Participants also answered a set of questions about their attitude toward the situation, and responses were measured on a 9-point scale. These included the extent to which: you would feel good about moving, moving would be fair for everyone involved, moving would be morally wrong, moving would benefit the community, and the purchaser is paying attention to the benefits for the community. To assess the extent to which participants felt that the purchaser had bad motives, we asked two questions: the extent to which the developer was motivated by improper factors, and the extent to which the developer had shady motives. Responses to these two items were highly correlated, and were combined to form a measure of purchaser bad motives, (Cronbach’s Alpha = .85). Finally, we asked the extent to which it would be better to leave things as they are and not move.

Next, participants were given an additional event to consider as follows:

Now fast forward in time. The agreement has fallen through with the developer. The county government has stepped in and decided that it will exercise its power of eminent domain to help the project go forward. That means that the government will require you to sell the property and will pay you fair market value for the property, that is, $200,000. Please answer the following questions indicating how you feel about moving under these circumstances.

Participants then answered the same set of attitude questions again.

C. Experiment 2 Results

1. Time 1 – Voluntary Sale to a Developer

a. Willingness to Sell

---

22 Participants chose from among the following dollar amounts, coded from 1-8: $0, $10, $100, $1000, $10,000, $100,000, $1,000,000. No incentive is high enough to trade.
Participants indicated how much money they would require, over and above the new property and moving expenses, to sell the land. Overall, about 56% required $100,000 or more to agree to sell. An additional 15% were unwilling to sell to the developer at all.

b. Refusals to Sell

Overall 15% of respondents were unwilling to sell. We note initially that this is a significantly higher percentage than the 9% refusing to sell in the first experiment, where the offer came from the government (rather than a developer) under the explicit threat of eminent domain ($\chi^2(1) = 5.69; p = .017; \text{Fisher's Exact Test } p = .019$).

The 15% who were unwilling to sell varied across conditions, as shown in Table 4, which depicts in the bottom row the percentage of refusals to sell across each subgroup. To test whether these apparent differences were statistically significant, we conducted a logistic regression analysis which included Term and Use as predictor variables, and where Hospital was the reference category for the Use contrast. The percentage refusing to sell differed significantly by Term, such that participants whose family owned the land for a short term of two years were less likely to refuse to sell (7%) than participants whose family owned the land for a long term of 100 years (23%), Wald $\chi^2 (1) = 13.17, p < .001$. Proposed Use was marginally statistically significant, Wald $\chi^2 (1) = 3.22, p = .07$. We ran a second model to test the interaction between Term and Proposed Use; the interaction was not significant, Wald $\chi^2 (1) = 0.18, p = .67$. 
Table 4: Experiment 2 Frequencies: “How much incentive would you need to part with your land and to move, IN ADDITION TO the new land and moving expenses?”

<table>
<thead>
<tr>
<th>Term</th>
<th>Use</th>
<th>Hospital</th>
<th>Mall</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short</td>
<td>$0</td>
<td>7%</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>$10</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>$100</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>$1,000</td>
<td>5%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>$10,000</td>
<td>25%</td>
<td>30%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>$100,000</td>
<td>41%</td>
<td>40%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>$1,000,000</td>
<td>16%</td>
<td>21%</td>
<td>20%</td>
</tr>
<tr>
<td>No incentive high enough</td>
<td>5%</td>
<td>7%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>56</td>
<td>57</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Long</td>
<td>$0</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>$100</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>$1,000</td>
<td>0%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>$10,000</td>
<td>23%</td>
<td>7%</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>$100,000</td>
<td>32%</td>
<td>39%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>$1,000,000</td>
<td>25%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>No incentive high enough</td>
<td>14%</td>
<td>24%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>44</td>
<td>54</td>
<td>51</td>
<td></td>
</tr>
</tbody>
</table>

c. Dollar Amount Demanded to Sell

We conducted an ordered logit models to examine the effects of Term and Proposed Use on incentive level demanded. The first model examined Term and Use (contrasting hospital with mall/unspecified, as in Experiment 1). The effect of Term was statistically significant, Wald $\chi^2 (1) = 16.66$, $p < .001$. The mean demand for participants who held the land for only 2 years was $78,400, whereas the mean demand for participants who held the land for a long term of 100 years was $370,000. The effect for Proposed Use was marginally significant, $\chi^2(1) = 3.66$, $p = .06$. A second model included the Term*Use interaction, which was not significant, $\chi^2 (1) = 0.68, p = .41.$
2. Attitudes: Proposed Sale to Developer v. Forced Taking by Government

Attitudes were measured in Time 1, and then participants were told that the deal with the developer would not go forward, and instead, the government would exercise its power of eminent domain to take the property in exchange for fair market value. Attitudes were then measured again in Time 2. We found that when the government stepped in to assist the developer, and forced the owner to sell by threatening to use its power of eminent domain, participants’ attitudes changed drastically – modest opposition to the prospect of taking the property became vigorous opposition. The means are depicted in Table 5, where all responses are on a 9-point scale, and reversed where necessary, so that higher means indicate attitudes that are more positive. Paired t-tests confirmed that participants in Time 2 now felt much more negatively about moving from their land, felt that it was much less fair for everyone involved, felt that moving was more morally wrong, that the result for the community would be less beneficial, and that the government had bad motives. Participants in Time 2 now felt strongly that it would be better to leave things as they were and not move.

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23 Repeated measures ANOVAs revealed that these relationships were not moderated by Term or Proposed Use.
Table 5: Experiment 2 Changes in Attitudes From Voluntary Transfer to Forced Sale  
(Scale 1-7, Higher Means Indicate More Positive Attitudes)

<table>
<thead>
<tr>
<th>Time</th>
<th>T1 (Developer) Mean (SD)</th>
<th>T2 (Government) Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude toward moving</td>
<td>3.81 (2.06)</td>
<td>2.12 (1.76)</td>
</tr>
<tr>
<td>Moving fair for everyone</td>
<td>4.47 (2.14)</td>
<td>2.60 (1.94)</td>
</tr>
<tr>
<td>Moving morally wrong (reversed)</td>
<td>5.59 (2.41)</td>
<td>3.50 (2.62)</td>
</tr>
<tr>
<td>Moving will benefit community</td>
<td>5.27 (2.11)</td>
<td>4.19 (2.29)</td>
</tr>
<tr>
<td>Purchaser paying attention to community</td>
<td>4.70 (1.99)</td>
<td>4.43 (2.39)</td>
</tr>
<tr>
<td>Purchaser has bad motives (reversed)</td>
<td>4.94 (2.07)</td>
<td>3.65 (2.23)</td>
</tr>
<tr>
<td>Better to leave things as they are (reversed)</td>
<td>4.12 (2.27)</td>
<td>2.98 (2.18)</td>
</tr>
</tbody>
</table>

** p < .01  
*  p < .05
VII. Discussion

The legal controversy dealt with in *Kelo* focused on the purpose of the taking. The planned development in that case promised economic benefits to the community in the form of jobs and taxes. The Supreme Court determined that the predicted economic benefit was a purpose sufficient to meet the public use test of the Fifth Amendment. But public reaction was not confined to concerns about the purpose of the taking. In particular, and consistent with our findings here, public sensitivity also responded to the impact of the taking on the owners who were being forced to sell, fueling the furious public response to *Kelo*. Although the law of eminent domain does not recognize distinctions among property owners beyond those reflected in the fair market value of the property, public sensibilities include more. In these experiments, we showed how reaction to the prospect of a taking is influenced by the circumstances of the owners who are being asked to give up their land.

The Court in *Kelo* did not by its decision rule out the possibility that increased compensation could be given to some property owners. Rather, the Court avoided invoking the strong medicine of the public use doctrine, which operates as a property rule (as opposed to a liability rule), barring certain condemnations but permitting others. The decision left room both for political compromise about such things as compensation, and at the same time, left intact a federal cause of action in instances when the government’s stated public use is a sham or pretext. What the Court did was to sanction an arguably low threshold for public purpose.

Our experiments indicate that respondents reacting to the prospect of eminent domain are only moderately sensitive to the purpose of the taking, at least with regard to the purposes we tested. We intentionally tested the effect of a purpose, the children’s hospital, that was perceived as particularly socially justified (as borne out by the attitude data).
Although the perceived legitimacy of the purpose (children’s hospital versus shopping mall) influenced attitudes toward moving, and perceptions of the morality of the government and of the transaction, it did not reduce refusal to sell in Experiment 1, nor did it affect the price the homeowner would have accepted to sell in Experiment 1; the effects in Experiment 2 were only marginally statistically significant. Yet, there is some suggestion in Experiment 2 that the purpose of the taking influenced the price the homeowner demanded, as well as the likelihood that the owner would refuse to sell. This pattern of results suggests that a property rule might satisfy people in some situations where proposed use is perceived as questionable; at the same time, our data suggest that variability in use might also be satisfied by a liability rule – i.e., higher compensation when the proposed use is perceived as questionable.

Interestingly, this latter result comports with Krier & Serkin’s (2004) suggestion that compensation should be increased for non-traditional public uses, although probably not for the same reasons they suggest. They argue that for non-traditional public uses, where the property ends up in private hands (what they term ‘public ruses’), the owner should be entitled to additional compensation above fair market value, because fair market value reflects neither the owner’s subjective value of the property nor the fact that the owner might be precluded from sharing in the economic benefits of the taking. In our experiments, however, owners were being compensated with comparable property in the same neighborhood, so they would have reaped the same benefits (both economic benefits and access to the mall) as everyone else. The higher average demand in the shopping mall condition (assuming it is a reliable effect), is probably motivated more by dignitary harms than economic concerns.

In contrast, the owner’s relationship to the property exerted strong and consistent effects. The homeowner considering the transfer of a property owned for 100 years was seen
as entitled to more compensation, and the transfer was viewed as less morally acceptable, than when the homeowner had owned the property for only two years. The length of ownership imbues the property with subjective value that is not recognized by the fair market value standard that the law of eminent domain uses as the metric for just compensation. One indication of this special connection to property is revealed in the responses to the open-ended question asking participants to describe their thoughts on moving from their land. While some participants in the two experiments cited factors relating to the market value of the property and incidental expenses associated with moving, many focused on personal attachment, reflecting subjective value that increased with time of ownership. In the short term condition, typical responses included: “If I've only been there 2 years it wouldn't be that big a deal.”24 In the long term condition, typical responses included: “I would have great difficulties leaving land that my family has owned for a 100 years.” A long term of ownership not only caused participants to feel worse about moving, but also significantly increased the perception that the move was morally wrong, whatever the purpose of the move.

Our measures of how participants viewed a request to sell also revealed some additional sources of resistance to eminent domain. Lurking behind reactions to the bare facts of a request to sell were participants’ suspicions about the motives of the developer or governmental body seeking the sale. Thus, even though the value of the allegedly comparable land was evaluated by an independent appraiser, a number of respondents, in their open-ended responses, raised questions about whether the comparable property was

24 In Experiment 1, of 290 respondents in the short term condition, 39 out of 49 respondents who explicitly commented on the effect of the length of ownership on personal attachment remarked that attachment would be weak after only two years, and that moving would be relatively easy. Conversely, of 278 respondents in the long term condition, 43 out of 48 respondents who explicitly commented remarked that attachment would be strong after 100 years, and moving would be especially difficult.
truly comparable and whether their own land might have unknown value, such as mineral rights. In Experiment 2, when we raised the issue by asking how much the development decision was badly motivated, participants reacted with some suspicion even to the developer who was requesting a purely voluntary transaction. On 9-point scales on which 1 indicated no improper or shady motivation, and 9 indicated very much, the developer was rated 5.0. When government stepped in with its power of eminent domain after the developer and the landowner failed to reach an agreement on the transfer, a situation that often supplies the backdrop for a taking, negative assumptions about the government’s motivations averaged 6.35. Clear and open democratic procedures allowing for participation by all of those affected by a prospective taking may be a key to assuring that the taking is not only legally justified but also acceptable, not only protecting against improper takings but also crucial for alleviating concerns about nefarious motives and backroom dealing.

Public reaction to *Kelo* was nearly uniform and extremely negative (Nadler, Diamond & Patton, 2008). The taking in that case was for economic development. Our results suggest a wider scope for public concern, pointing to factors that were present in the facts of *Kelo*, but were not the focus of the legal analysis. Our measures reveal that the plaintiffs’ relationship to their property in *Kelo*, even more than the nature of the public purpose at issue, may have encouraged public outrage. Although the participants in Experiment 1, threatened by a potential governmental action, generally indicated that they would prefer not to move, their perceptions of the fairness and morality of the request to move were tempered considerably by their level of attachment to the property and, to a lesser degree, by the purpose of the move. When they had owned the land for two years and the proposed use for it was a children’s hospital, they acknowledged the benefit to the community (M=5.3; 1:huge harm, 7:huge benefit), saw the move as morally correct (M=4.8; 1:very wrong, 7:very
right) and saw the government as paying attention to that community benefit (M=5.3; 1: huge harm, 7: huge benefit). They also saw the government’s motives as positive (M=5.3). In addition, they were only slightly negative in their attitude toward about moving under these circumstances (M=3.9; 1: very bad, 7: very good).

The Court in *Kelo* took notice of what it characterized as the full planning and democratic consideration of the redevelopment plan that led to the taking. Some scholars have questioned the value and propriety of scrutinizing the degree of planning that proceeds a taking to determine whether judicial deference is warranted or property has been taken under the mere pretext of a public purpose (Garnett, 2007; Kanner, 2007). Whether or not planning is a useful and legitimate indicator of a genuine public purpose, researchers who study procedural justice (e.g., Lind & Tyler, 1988; Tyler, 2000) might predict that public hearings and opportunities for diverse constituencies to be heard might reduce feelings of dignitary harm. We suspect that while considerations of procedural justice might ameliorate the perceived unfairness of eminent domain for some takings, long term home ownership may instill an entitlement and provoke an outrage that cannot be avoided with even the most democratic decision making process. In future research we plan to investigate the potential role of procedure in influencing public reaction. Here we note that when the homeowners in Experiment 1 who had owned their homes for a lengthy time were faced with a taking for a mall or unspecified purpose, they were particularly likely to conclude that the motive for the taking was not good. Thus, they readily assumed that the democratic process had failed and that special interests were controlling. That assumption may affect perceptions even when it is not warranted.

The indignation in response to being called on to move was particularly palpable in Experiment 2 when the initially voluntary negotiations with the developer ended in a taking
by the government using its eminent domain powers. As it would in the typical eminent
domain taking, this version of the scenario not only took control away from the homeowner,
but also meant that the homeowner would receive only fair market value for the property.
The reactions of the participants turned dramatically negative. Across all conditions, the
taking was viewed as morally wrong (M=6.5; 1:not wrong, 9:very wrong), and even short
term owners making way for a children’s hospital rated the taking above the midpoint
(M=5.8) on the immorality scale. Thus, despite some variation in response across conditions,
reaction to eminent domain was not hospitable.

This intense negative reaction to what even the homeowner acknowledges is a
positive social purpose, the children’s hospital, suggests the power of the dignitary insult that
a forced taking can engender by violating the homeowner’s ability to exert control over this
core personal possession (Radin, 1982; Garnett, 2006). One interesting possibility is whether
perceptions of injustice from the taking might be reduced if the nature of the homeowner’s
contribution to the public good were formally recognized (e.g., by honoring the displaced
homeowner as a benefactor of the new hospital). Symbolic compensation may be required to
supplement financial compensation in addressing dignitary harm.25 If, instead, the key insult
arises from the denial of autonomy in controlling a piece of self that is inherent in eminent
domain, at least as applied to one’s “castle,” external appreciation for the sacrifice may not
compensate for the subjective value of that dwelling (Lind & Tyler, 1988; Tyler, 2000).

One justification for eminent domain is to avoid permitting a few holdouts to
prevent, or demand unreasonable compensation for, property needed for governmental
projects that will offer large public benefits. Our experiments to this point have not
investigated whether the public sees a taking as more legitimate, or at least less illegitimate.

25 We thank John Darley for suggesting this possibility.
when the property owner is a holdout. We did, however, conduct a preliminary test of the
holdout effect on the short term homeowner faced a governmental plan to construct a
children’s hospital and found no difference in demand price or willingness to sell when the
participant’s property was the last parcel needed for the project. Certainly in _Kelo_, public
outrage did not appear to be tempered by the perception that the plaintiffs were holdouts,
but the news coverage did not focus on that feature. A more thorough investigation of
responses to holdouts assessing when they are viewed as greedy and when as principled is
clearly warranted.

Two important questions, not addressed in these experiments, are whether the fact
that the property of interest was a home stimulated a sense of entitlement that would not be
recognized for other types of properties, and whether the fact that participants responded in
the role of the property owner stimulated an endowment effect that led to a negative
reaction to the proposed taking of the property. Homes are particularly likely to attract
subjective value. Indeed, the conflicts over lands originally held by Native Americans and
the dispute over Jerusalem in the Middle East reflect cultural attachments based on history
with a “homeland” that is threatened by a taking. While market pricing sees real property as
fungible, people do not always share that view. Property can be invested with meaning
beyond its market value. Property scholar Professor Thomas Merrill recognized this in
proposing increased compensation in a taking that involves a dwelling, although he would
apply it to businesses and farms as well as owner occupied homes:

Another promising reform idea would be to require more complete
compensation for persons whose property is taken by eminent domain. The
constitutional standard requires fair market value, no more and no less.
Congress modified this when it passed the Uniform Relocation Act in 1970,
which requires some additional compensation for moving expenses and loss
of personal property. Congress could modify the Relocation Act again, in
order to nudge the compensation formula further in the direction of
providing truly "just" compensation.
For example, Congress could require that when occupied homes, businesses or farms are taken, the owner is entitled to a percentage bonus above fair market value, equal to one percentage point for each year the owner has continuously occupied the property (Merrill, U.S. Senate, 2005).

If, as some research suggests, homes stimulate a special public sense of entitlement (the castle doctrine), this approach could be applied only for dwellings. Further experiments are needed to explore how, if at all, public reactions change when the property taken is a business rather than a dwelling.

A second question is raised by our focus on the purported landowner in this research. Unlike the few earlier surveys of reactions to eminent domain, in this survey-experiment we asked questions that put the respondent in the role of the individual whose property was at risk. The endowment effect may explain some of the large subjective value that respondents placed on their property in all conditions, even when the land had been in their possession for only two years and the government was requesting the transfer to facilitate the construction of a children’s hospital (Rachlinski & Jorden, 1998). To assess the impact of perspective on judgments, future research should assess the extent to which the perspective of the respondent (owner or observer) affects judgments about fairness.

Together, our experiments reveal the limits of case law and traditional economic analysis in understanding *Kelo* and eminent domain. In particular, the results demonstrate that subjective attachment looms large in determining the justice of a taking and swamps the apparent influence of even the most laudatory purpose. We have only begun to map out the contours of this response, but these initial findings show promise in helping to build a more democratic model for the law and policies dealing with takings.
REFERENCES


US Senate (Sept 20, 2005), The Kelo Decision: Investigating Takings of Homes and Other Private Property: Hearing Before the United States Senate Committee on the Judiciary (testimony of Thomas Merrill, Columbia Law School).