Designing Real Interests: 
A Framework for Collective Property Practices

GABRIEL CUELLAR
University of Minnesota, University of Michigan

Keywords: real property, urban design, spatial politics, agency

Real property, and its systems of landholding and land division, is virtually everywhere. As a fundamental infrastructure to territories and cities, property shapes, in great part, social relations, development, and spatial transformation. As designers always work in the context of a property system, it is important to have frameworks that allow them to interpret and understand how property operates, systemically and in the context of any given site. Furthermore, if they are to intervene in such systems, design methodologies are also needed. This project aims to provide such tools, emphasizing how social and environmental interdependence can facilitate the practice of property beyond the status quo.

The terms “property” and “ownership” are often used interchangeably. The latter is less flexible, however, because, with “ownership,” there is little agency for anyone but the owner. This project builds on a concept that recognizes a wider set of stakeholders, and may give designers leverage: the interest. Interests include all the relations, stakes, obligations, and rights that an entity may have in land. Interests account for the many ways in which actors are involved in property, whether they own or don’t. The advantage of interpreting property through interests is that they capture varying degrees of interdependence, access, and ways of conceiving property boundaries. Through five scenarios, this project outlines a design approach working with property’s spatial and relational dimensions. Each scenario explores how property lines can interact with various kinds of interests, terms of collective use, land policy, and ecological and social relations. In this framework, designers may gain agency in tapping into the power that property mediates and tackling environmental change, housing affordability, and spatial segregation.

The following is an elaboration of five possible ways of working with property interests: creating interests, which generates new forms of use or value; collecting interests, which gathers together disparate interests for some purpose; articulating interests, which reorganizes property relations while maintaining property lines; fragmenting interests, which spatially divides different portions of a property; and conditioning interests, which alters property with some external device.

Creating interests entails the establishment of a new geography of use or value embedded into an existing legal landscape.

This scenario explores interests in carbon to foster collectivity around climate mitigation. California leads the way with its carbon cap-and-trade platform, but it is used primarily by landholders of forested areas. If cities recognized a property interest in carbon, might it help create new value in biomass, encourage cooperation, and reduce emissions?

Suppose the valuation of biomass is instituted and a group of residents register the first carbon tract. By collectively holding the tract, they reduce their individual costs to register the property. Next, on another tract, neighbors remove their garages and grow trees on their combined yards, creating a larger carbon reduction. Further, observing the increased value of the neighboring carbon properties over time, a larger group of residents registers one tract covering half a block. They deconstruct their houses and build an apartment building for themselves. The remaining land is cultivated as a native landscape, raising the function of the tract. Other landholders and tenants register carbon properties, facilitating cooperative climate action and physical transformation across the city.

Collecting interests gathers together disparate ones for some identified purposes.

This scenario merges lots to orchestrate new housing forms despite zoning laws. To deal with the housing crises, accessory dwelling units are now permitted throughout many US cities. However, their development depends on the initiative of individual landholders and inflexible zoning. As a result, vast interior portions of city blocks remain underutilized. Could resident coordination support the expansion of affordable housing?

Suppose several neighbors join their properties to form a cooperative plot. The cooperative then builds new housing. With an economy of scale, they have higher collective equity and reduced construction costs. Next, by combining properties back-to-back, the zoning requirement for a rear setback is avoided. This opens the block to new configurations. Further, a whole-block cooperative can be assembled, maintaining courtyard space and providing more living and working options. Lacking street frontage, housing and offices in the courtyard is available at reduced rates. New urban morphologies and property arrangements reinvent the typical city block, making conditions for more neighbors.
Figure 1. Create Interests. Video frames by author.

Articulating interests refers to the reorganizing of interests without changing property lines.

This scenario addresses a rural condition involving property and labor. In the Midwest, migrant farmhands face precarious working conditions, while farmers struggle to harvest fields and stay afloat by cultivating scattered parcels over a wide area. Could new property arrangements create synergy between agricultural labor and farmland?

Suppose farmers and farmhands could build a network with mutual benefits. Each farmer in a local area dedicates 10% of their land for usufructuary use by migrant workers. This temporary land interest enables migrants to cultivate fields of their own or use the land for other purposes. The network also allows farmers to pool their resources and provide housing for the migrants. Farmers benefit, because these rights may encourage a more annually consistent availability of farmhands. When the harvest ends, a grouping of farms in the South hosts the farmhands for another season. Through revised property interests, migrant workers help reconsolidate farmland regionally.

Fragmenting interests involves the geographic dispersal or legal breakup of property.

This scenario addresses the discriminatory nature of many jurisdictional boundaries in US cities. The districts of US Congress members are regularly redrawn to ensure that they each comprise an equal quantity of constituents. However, legislators have often used the redistricting process to marginalize the voting power of
BIPOC communities. Is it possible to disrupt these gerrymandered districts through property?

Suppose a non-profit voting rights organization buys a parcel in a gerrymandered district. The organization splits the land’s interests into 500,000 legal fragments, one for each of the district’s voting-eligible residents. Mailboxes are provided on site, allowing voters from adjacent gerrymandered districts to register their home addresses, and consequently their voting district, there. The parcel neutralizes the discriminatory boundary—until the districts are redrawn.

Reconditioning interests involves changing property with some external device.

This scenario uses a special taxation to reorient real estate dynamics. While governments today impose a range of taxes, one source of value that is not taxed: the value of location. Economist Henry George argued that land value derives from society at-large, rather than the actions of any landholder. If implemented, how would the cost of holding land in high-value locations impact land use and housing affordability?

Suppose a land value tax is instituted, creating an increased tax burden on lots in the center of a city. In response, some landholders erect new buildings, maximizing economic rent and more easily paying the tax. Other landholders attempt to reduce their tax burden by reducing the size of their holdings, dedicating portions to the public domain. Next, a parcel that cuts through...
the block permits pedestrian access to the block interior. Remaining landholders split their lots, creating small parcels in the middle of the block that are more affordable, given their size and distance from the street. Soon after, commercial developers construct mixed-use buildings on the remaining, heavily-taxed lots. The land value tax influences a range of architectural outcomes, producing a more resourceful and equitable use of land.

The role of design in property systems is not straightforward or singular—as these scenarios show, a broad range of effects, some regenerative, others potentially detrimental, could result from each operation. Further design-research into this topic should thus aim to further account for variability, evidence-based land policy case studies, and the contingencies of collective action. At this stage, the project shows how design may help cultivate a wider spectrum of societal participation and belonging, recasting property practices as a means of commoning worlds entrenched in real estate. As long as architecture remains bound to land, its critical practice must contend with the institutions that govern it, recognizing the qualification of the ground itself a form of design.
Figure 4. Fragment Interests. Video frames by author.
Figure 5. Condition Interests. Video frames by author.
ENDNOTES

1. The images shown in this paper are frames excerpted from full-length videos, which use animation, LiDAR data, and captions to further describe and visualize the five scenarios presented here. The five videos are available as follows. Cadaster (Gabriel Cuellar and Athar Mufreh). “Designing Real Interests.” YouTube video playlist, 5 videos. http://bit.ly/4058CsA.