Walking through a typical residential neighbourhood in the US, you pass dozens of single-family houses, each resembling the other. This urban regularity is repeated, invisibly, in the financial and political uniformity of the underlying land plots. However, a couple of unremarkable houses on the block are part of a community land trust (CLT), a local entity that permanently retains the interest to the ground. Despite their modest appearance, these two houses are spatially coordinated in an urban-scale constellation: their relative position, proximity, and terms of use work to inconspicuously advance social justice. Indeed, to appreciate the potential of the CLT model, one must observe the way that the trust’s land is distributed spatially in a city.

Community land trusts have recently garnered attention as a tool against the commodification of real property, a basic infrastructure that societies rely upon. However, the CLT model is only the most recent tool in a contested, centuries-long struggle concerned with defining the proper ordering of property. In the US, where the CLT model was developed, property’s cultural meaning and spatial formation are rooted in the demands of populist movements. Indeed, historically, property developed there as a populist imperative: the making, settling, and ‘owning’ of land are markers of a democratic order in which smallholders assert power in a society based on land productivity.1 As such, the prevailing ideology holds that the more land resides in the hands of ‘the people’, the more democratic the society becomes. To ‘own’ land is integral to the nation’s core political identity, regardless of party affiliation. The CLT model is thus situated in a socio-spatial context in which the notion of collective self-determination is already defined.

Within this well-established system of land-holding, CLTs aim to redefine both ‘the people’ and the political role of property. It is especially due to its spatial characteristics, rather than its financial structure, in fact, that the CLT model is successful in doing so. CLTs put aspects of the US land system into question by deploying patterns of strategic urban dispersal, referred to here as property scattering. If the society’s colonial populism pitched squatters against speculators, the contemporary populism, which CLTs are a part of, is a contest of commercial real estate developers and resident-led land development. Accordingly, in the best of the cases that will be discussed here, the CLT model is a form of anti-establishment populism rooted in a society where land is a populist imperative.

Retracing the emergence, historical context, and present state of CLTs in the US, we demonstrate how their distinctive spatial qualities transcend singular sites to acquire agency in a broader urban field. Drawing from discourses in sociology and legal theory, we propose that CLTs benefit from what we call ‘virtues of proximity’, unlike commercial real estate development which generally exploits economies of scale. This involves studying the impact of the spatial distribution of community land trust properties on the organisation’s ability to meet its goals, which are often tied to the advancement of social justice. Presenting the spatial strategies of CLTs in various cities, including Atlanta, Minneapolis,
of up to 16 000 hectares were dispensed to any ‘planter’ who made the voyage from Britain.\(^2\) Arriving by the hundreds in the early 1600s, colonists and their headright allotments quickly compounded the colonisation and dispossession of Indigenous nations.\(^3\) Despite such liberal land grants, however, planters quickly grew tired of taxation and their status in service of wealthy investors in London. Settlers’ desire to acquire the Crown’s Indian Land Reserve on the colonial frontier contributed to the Revolutionary War, in which colonists ceded from Great Britain and established the United States proper.

Carrying forward the conflicts of the colonial era, the period from the late eighteenth to late nineteenth century was characterised by a struggle between agrarian squatters and land speculators. Accustomed to the provision of free land during the colonial period, settlers pressed their elected representatives to make more land available in the newly-established US republic. Although the system initially favoured speculators, the federal government instituted increasingly populist land policies throughout the 1800s, particularly under the administration of Thomas Jefferson.\(^4\) This culminated in the development of the ‘homestead’, a settler land grant programme in the ager publicum, or public domain. In its role as the ‘trustee for society’, the US government appropriated further territories for the public domain and quickly transferred them into the hands of individual settlers in the form of homesteads.\(^5\) What made the policy particularly populist was its emphasis on the figure of the settler-squatter, whose plantation on the frontier was subsidised with a host of federal relief and credit measures. Ultimately over 240 million hectares were granted, reinforcing the status and national image of the landholder.

This liquidation of the public domain had particular spatial consequences, namely the creation of a myriad of equally-sized, equally-positioned smallholding plots. This spatialisation of US landholding populism is observed in both Jefferson’s
Public Lands Survey System (PLSS) – a method to subdivide territories newly dispossessed – and the frontier townsite, a template for establishing new cities. The two grid-shaped structures mirror each other, one designed for rural property and the other for urban property. Reflecting the prevailing politics, each of the small property increments traced by the PLSS and townsite geometries is designed for one settler to use the land. In contrast to the large estates of non-resident land speculators from New York, Boston, and Philadelphia, the smallholding landscape was sized to individual farmers.

Configured in this way, land is the common denominator which equalises the people; every citizen starts on the same footing, ‘owning’ a cell of land equivalent to all others. Guided by this ideology, thousands of townsites across the US were designed as isometric property fabrics formed for the footprint of the homesteader. [Fig. 1] Indeed, the centres and respective hinterlands of Chicago, Denver, San Francisco, Las Vegas, Houston, Salt Lake City, and more were all formed in this way. The fine-grained subdivision of the US property fabric thereby materialised the imperative that an equal interval of land should be made available to all of the people. And, accordingly, the holding of land came to correspond with citizenship.

By the turn of the twentieth century, however, the troubling definition of ‘the people’ and the predominance of the real estate market soon led to renewed calls and action for land reform. The very term ‘populism’ was taken up by a US political party, a central platform of which was to challenge the land system in two important ways. Firstly, they sought to dismantle the syndicates of corporate land speculators which, since the late 1800s, had essentially undone the territorialisation of smallholding by consolidating large swaths of land for industrial economies of scale. Secondly, as a party established in part by Black farmers, they sought to reconstruct the national image of ‘the people.’ As the beneficiaries of the homestead grants were largely single, armed, Euro-American men, Black farmers and farmers of colour had gained little from the prevailing slant of land populism. While the People’s Party proved unpopular with the white male electorate at the time, it reiterated the conviction for smallholding against corporate consolidation and challenged white supremacist construct of the citizen.

Popular settlement on public lands reached a critical point in the 1930s, which marked a drastic shift in federal land policies that continues to the present. The public domain, which had served as a bank of free land for settlers since the late 1700s, was put into a conservation programme in 1935. This territorial withdrawal coincided with a demographic shift. For the first time, there were more people in cities than in rural areas, largely as a result of African-Americans fleeing oppression in the US South. The nation’s fixation with land needed to find a new expression within this altered context. Accordingly, the distribution of real property – historically an agrarian issue under direct purview of the federal government – gradually became a matter of housing in cities. Cooperating with real estate speculators, the federal government devised a system of urban homesteading, which subsidised market actors in the provision of popular housing. In this new arrangement, the government assigns the private sector with the task of creating and distributing real property to the masses.

The spatial implications here are significant: there are no further lands to subdivide or new towns to found. Instead, the populist imperative for landholding must negotiate existing cities and legal geographies already in place. [Fig. 2] Therefore, the CLT, building on the People Party’s activist legacy to support smallholding and expand the construct of ‘the people’, today confronts a spatial context markedly different from that of the early twentieth century. With its aim to bring land into community control and buffer it from the market, CLTs must contend with the myriad of economic and political forces in cities and the private sector which continues the government’s charge to develop land. In this way, the CLT plays a part in a contemporary replay of the historical land populism.
Fig. 2: The spatial dimensions of popular landholding in the US, 1600s to present. Drawing: authors.

Fig. 3: Community land trust's legal-financial distinction between ground interest and use interest. Drawing: authors.
Scattering in the urban field

The premise of the CLT relies on distinguishing the interest in the land itself from the interest in using the land. The land interest is held by a non-profit organisation which holds the land ‘in trust’ for a particular community and its future residents, while the plot’s use interest is held by a leaseholder, who agrees to a long-term rental and a resale agreement.\(^\text{10}\) When the lease is to be transferred to another party, the market appreciation accruing over the duration of the lease is retained by the trust, rather than being captured by the leaseholder. [Fig. 3] Although CLTs are led and managed by residents, not investors, their success depends significantly on these financial terms: how the cost of the land interest is buffered from market appreciation. This allows the use interest to be leased at a low price in perpetuity. However, CLTs have an impact beyond financial terms – they also act spatially.

Beyond financial terms and as explained above, what is most striking from a spatial point of view is that virtually all CLTs are scattered, in other words the properties in the trust are dispersed over an area. [Fig. 4] The reasons for this are various. Unlike commercial developers that have capital to afford long-term and risky strategies, land trusts negotiate the socio-financial dynamics of the property fabric with funding limited by the annual cycle of grant-based financing. Spatial scattering is also a consequence of the diverse methods through which trusts acquire land.

Like any agent in the urban field, CLTs establish their spatial foothold in negotiation with other forces, material and immaterial. The conditions that influence the spatial formations of trusts can be attributed partially to their financial, architectural, temporal, operational, and organisational dynamics. In this respect, CLTs contend with the same spectrum of contingencies that market-oriented real estate actors do. Yet, the resources and methods that characterise CLTs differ from those of established commercial developers. Some of these effectively amount to financial constraints that make property scattering an inevitability, but CLTs also respond strategically to the dispersal of their landholdings. In other words, while resident-led landholding practices exist within the hegemonic capitalist system, they nevertheless employ different kinds of leverage and techniques to achieve their aims. Importantly, trust properties are embedded in the geometric matrix of property lines. Therefore, any analysis of a CLT’s establishment, maintenance, and change over time must account for, on one hand, the multitude of conditions that influence the trust and, on the other, the formal characteristics of the property fabric.

In financial terms, CLTs have fewer resources at their disposal than market-oriented land practices, because their financial model is based on different funding sources. In general, in comparison to commercial developers that operate in a financial ecosystem driven by venture capitalists, equity offers, and several forms of private lending, non-profit land trusts typically compose their project financing from a variety of regional public and private sources.\(^\text{11}\) Moreover, the funding they ultimately amass rarely approaches the scales of market-driven real estate. This results in a couple of spatial implications. Firstly, due to the limited capital available, new construction is, in most but not all cases, financially out of reach. Consequently, CLTs primarily focus on the acquisition of existing building stock. Secondly, grant funding is typically tied to grantees making a ‘demonstrable impact’ – a measure that most expediently translates to trusts managing an ever-expanding portfolio of affordable housing units, the use category most favoured by grant-makers.\(^\text{12}\) In other words, grant-based financing leads trusts to invest mainly in a high quantity of lower-cost residential properties.

As it concerns morphological and time-based factors, trusts rarely have the opportunity to acquire several adjoining properties, which also contributes to their scattered pattern. CLTs generally serve neighbourhoods where land subdivision has produced a fine pattern of properties. The discrete
Fig. 4: Superimposed CLT holdings in various US cities. Map: Gabriel Cuéllar, Athar Mufreh, Xiaohan Gu, Clare Coburn.
units that make up this territorial organisation are each held by a different entity, with its own timeline for investment and interests in the land in question. Every property line, in other words, bounds a different set of socio-financial dynamics. These rarely align at any point in time in a way that would allow a CLT, within its funding cycles, to perform a convenient assemblage of multiple parcels. These formal and temporal characteristics diverge markedly from that of commercial developments, the economy of scale of which generally depends on the merger of numerous directly adjacent plots of land, facilitating the efficient construction and management of a single development.\(^\text{13}\) Although CLTs do have long-term plans and target certain parcels for acquisition, the risk involved with assemblage strategies makes them largely unfeasible within the grant-financed system.\(^\text{14}\) Accordingly, the lands incorporated into trusts are mostly proximate, rather than immediately adjacent to each other.

Interpreting a map of a trust’s landholdings, one may easily conclude that the pattern is arbitrary. This appearance is due in great part to the operational context of any given trust. More specifically, it has to do with the means by which the CLT incorporates land into its trust. Unlike commercial development, the outright purchase of land is only one of the many options available to a CLT. In fact, means of acquisition are a key indicator of the level of responsiveness that a trust has in relation to the community it serves. Rondo Community Land Trust in Saint Paul, for example, uses a ‘buyer-initiated’ building rehabilitation grant programme that provides residents money to renovate their house in exchange for title to the land. This is tied to the fact that in the Rondo neighbourhood, the median building age is over 105 years. Similar acquisition models include those directed to residents facing tax forfeiture, building code violations, or mortgage foreclosure. In such instances, trusts pay off residents’ outstanding debts in exchange for the land title. Another important avenue to acquire property is through donations or symbolic one-dollar sales. This may occur when a government jurisdiction aims to support a trust by donating its publicly-held ‘surplus property’ land in kind. The acquisition of vacant public lands is a priority of the Sacramento Community Land Trust in California, which has a working group dedicated to surveying and prioritising them.\(^\text{15}\) Land donations are ideal for many trusts, as they partially relieve the need for loans. The New York Community Land Initiative, which represents the interests of several emerging CLTs, is a campaign to channel public land into community control, using, among other means, right-of-first-refusal contracts.\(^\text{16}\) Additionally, public-private partnerships also feature in trust’s land acquisition models. Using Developer Agreements, for example, the Flagstaff Community Land Trust in Arizona has obtained lots within new masterplanned subdivisions built to the market specifications of commercial developers.\(^\text{17}\) In summary, the spatial landholding patterns of CLTs can be read to a degree as the consequence of their diverse methods of acquisition.

**Histories of coordinated scattering**

The resident-led land trust, and real property in general, is more than a matter of law, policy and economy. As described above, spatial aspects are always present. For that reason, the territorial patterns of property must be of concern to any spatial practitioners interested in supporting them. Nevertheless, while there is marked interest in alternative models of ownership, designers seem to have been unhurried in taking on property as a ‘quintessentially spatial’ set of processes.\(^\text{18}\) Writing about scattering, ‘a fundamental rural spatial problem’, UK geographers King and Burton note that property has much to do with space and form, including ‘the size of the holding, the number of plots, the size of the plots, the size distribution of the plots, the spatial distribution of plots, and the shape characteristics of plots’.\(^\text{19}\) Property lines on a cadastral map, in other words, can be interpreted much in the same way as lines denoting walls on an architectural floor plan. Like buildings, aggregates of property and
their concomitant patterns of use and dynamics of reconfiguration are eminently spatial artifacts that [encode] the identities of particular societies.20

To more adequately appreciate the spatial nature of these formations of property, this section will highlight antecedents to the property scattering observed today. Scattering is not strictly a recent phenomenon and it has appeared in socio-spatial contexts that do not directly relate to the community land trust. We will draw from two such scenes of scattering, the early modern rural landscape and late twentieth-century urban homesteading in the US, to describe how the intentional dispersal of land was central to identified objectives, rather than being a mere outcome of other determinants. These two reference points will demonstrate how land scattering has figured into design decisions. Rural societies in particular have organised themselves according to scattered landholdings. This spatial pattern is prevalent across vastly different biomes, social structures, and time periods, and scattering persists in rural areas today. The common thread among these is the concerted and persistent efforts by villagers to prevent individual landholdings becoming undesirably large or unfairly positioned consolidations.21 The major contributions that legal theorists and geographers have made to this issue is showing that those efforts represent a form of spatial intelligence on the part of coordinated villagers. In some cases, scattering was a means of efficiently spreading risk: by locating one’s vineyards, for example, over an area of varied microclimates, solar exposures, and soil types, the burden of a poor season could be lessened and the spread of plant pathogens could be better controlled.22 In other areas, scattering was used as a device to facilitate ‘semi-commoning’, where private and common land claims overlap. In the early modern open-field system, for example, individual strips for cultivation were dispersed over several fields, the accumulated surface of which served as collective grazing. By making it difficult for a shepherd to readily recognise which plot might belong to whom (due to the scattering), the benefits (manure fertilisation) and costs (hoof trampling) of raising the herd were equally distributed across the fields.23 This allowed the villagers to undertake both collective grazing and individual cultivation on the same land.

While the above-mentioned scenes demonstrate certain efficiencies gained by scattering, the land pattern was also used as a measure of equity, or political virtue. For example, dispersing plots over the heterogeneous land of a village ensured that no single farmer was at a permanent disadvantage due to location. Moreover, while farming plots were physically dispersed, they were often socially unified in a way to replicate the proximity of neighbours in the village; it is suggested this was a measure to facilitate cooperation.24 Another case of scattering occurred on the Atlantic Ocean coast of the US in the late nineteenth century, where seabed properties of both common or individual use were scattered around the Long Island Sound.25 Allowing both open access lots for commoners and exclusive lots for commercial boats, legislators used spatial interspersing to negotiate countervailing lobbying from those two interest groups. This patchwork of properties ultimately produced a cumulative ecological effect, replenishing the oyster grounds.

These scenes are helpful for understanding the historical association of scattering with commoning. Suggesting that scattering is synonymous with practices of common property (or the other way around) would be overstating, yet there is some degree of correlation between the politics and the pattern. For an interrelated set of scattered properties not to devolve into disassociated fragments or uncooperative assemblages, some social contract and collective choice-making is needed. In the case of the contemporary CLT, this takes the form of the future interest embedded in the landholding scheme and the logic of community control embodied in the trust board.

Scattering is also found in urban contexts, albeit with incomparably different factors and purposes.
The major reference point is the ‘scattered-site’ public housing schemes that emerged in the late twentieth century and continue today. Unlike CLTs, scattered-site housing does not represent a resident-led landholding practice; its growth coincided with the marketisation of urban homesteading during the 1970s and 80s.\textsuperscript{26} Nonetheless, the example is relevant because, as will be shown, scattered-site housing is the closest spatial antecedent to the CLT, responding to the many forces of an urban location and proximity. Additionally, its spatial scattering was deliberate and tied up in political debates at the time.

Scattered-site housing, a policy that called for the spatial dispersal of publicly subsidised housing, can be understood as a reaction against US public housing projects in the late twentieth century. Until roughly the early 1970s, public housing took the well-known shape of concentrated apartment towers ‘floating randomly in a sea of green’.\textsuperscript{27} Exactly like the real estate developers today, public housing authorities used economies of scale to concentrate new housing units onto vast land parcels, which legally and spatially consolidated the finer grain of individual landholdings. The geographic siting of such projects in neighbourhoods that were deemed ghettos led to a racialised polarisation between the government-planned housing in central city areas and the government-subsidised single-family market housing in suburbs.

The solution to the conspicuousness and stigmatisation of public housing was found in scattering. Proponents of the policy argued that if subsidised housing could be dispersed and made indistinguishable from their surroundings, both racial integration and better urban design could be achieved.\textsuperscript{28} So-called ghetto dispersal called for securing a spatially deconcentrated array of subsidised housing units in low-density white-majority neighbourhoods such that Black and Brown residents would ‘blend into their surroundings’.\textsuperscript{29} This spatial atomisation corresponded well with the federal government’s post-1973 marketisation of urban homesteading: rather than providing concentrated, government-built housing, residents were given subsidies with which to find market housing on their own.\textsuperscript{30}

While scattered-site housing purported to offer economic efficiencies, it was not without a political dimension. In one of the few surveys of the policy and its outcomes, James Hogan notes that the scattered-site programme may have been aimed at mitigating civil uprising by African-Americans in the late 1960s. Indeed, Hogan’s literature review covers several authors that argue that spatial dispersal in the name of racial integration actually amounts to the disintegration of Black and Brown residents’ political power.\textsuperscript{31} Furthermore, by dispersing public investment across an entire city rather than concentrating it, the neighbourhoods with historically under-resourced infrastructure remain largely unaccounted for. Hogan ultimately concludes that the scattering policy is not a demonstrably better alternative to one that favours concentration.

Paradoxically, the public capital stream that was diverted to market-based scattered-site urban homesteading is the same one that today funds resident-led landholding models like the CLT.\textsuperscript{32} Nevertheless, the basis for such funding remains in notion of land as a populist imperative. The privatisation of the land market has meant that other organisations – such as non-profit resident-led land trusts – have had to substitute and redefine the federal government’s historic role as a land clearinghouse.\textsuperscript{33} Despite scattering having been used as a device to both socially empower and politically disband, CLTs today use the same device to reclaim a spatial agency that meets the aspirations of its residents.

**Strategic scattering**

Given the degree of contingency to several entrenched conditions described above, trust landholding patterns may appear formless and without intention. Yet, as virtually every CLT in the US consists of at least two properties in its trust, the
spatial relationship between those properties and between those properties and their surroundings is significant. Over time, spatial strategies are complicated by the fact that trusts tend to acquire more and more land as they establish their position in the non-profit financial ecosystem. Despite these factors, land trusts also design, proactively, urban strategies that impact their spatial formations. To introduce some of the range of possibilities, we will explain the spatial strategies of two CLTs, both of which consist of over 150 properties in trust, in the city of Minneapolis-Saint Paul. [Fig. 5]

The first favours an intentional scattering that aims to buffer as much as possible the proximity of lots within the trust. The service area of this CLT covers over 1300 square kilometres, allowing a sparseness of community control that is effectively imperceptible on the ground. Indeed, the trust, the mission statement of which prioritises ‘homeownership’, intentionally disperses its landholdings so as to reduce the chance that any of its ground leaseholders (beneficiaries of the trust’s financial assistance) might be stigmatised by their neighbours. In this case, involvement with the trust is seen as a liability to be mitigated – a measure that results in a median distance of 291 metres between the CLT’s properties. The second favours an intentional scattering aimed at a critical mass of landholdings in a given neighbourhood. While the trust operates in various parts of the city, its highest concentration of landholdings is in a neighbourhood covering forty square kilometres, where the median distance between CLT parcels is 145 metres. This comparatively high degree of clustering is aimed at what the CLT refers to as ‘neighbourhood revitalisation’, which aims to provide financial stability in places facing displacement. It is important to note that in fact, the political ambition behind each differs. In the first case, the trust aims more strictly toward an efficient delivery of individual homeownership, with little to no intended benefit to the conditions of a particular neighbourhood. The second case uses a denser pattern of scattering to influence a geographically-defined area, potentially providing some degree of social resilience to a wider constituency. These two examples demonstrate how a trust’s mission, and its orientation to economics and politics, has direct spatial implications. The spatial formation of a resident-led land trust, and the particularities of its scattering, can therefore be linked to its ambitions.

Fig. 5 illustrates the spatial implications of two different CLTs in the same city. One focuses on economic integration, which involves distancing the residents to the extent that they are not detectable in the host neighbourhood, to avoid being stigmatised for participating in the trust programme. The other focuses on neighbourhood revitalisation, which demands a tight clustering of lots that aims to financially stabilise a neighbourhood undergoing gentrification. These two examples demonstrate how a trust’s mission, and its political orientation, has direct spatial implications.

**Coordinated spatial action**

The coordinated action involved in property scattering is rooted in a known progressive political benefit gained from strategic dispersion – proposed here as a virtue of proximity. In order to achieve such virtues, trusts coordinate the position, distance, and relation of their properties to the surrounding urban field. When designed and implemented carefully, CLTs can bring proximate parcels of land into a larger scheme of agency and operation. Unlike economies of scale, where the concentration of investment may lead to greater efficiencies and lower costs, virtues of proximity may lead to a variety of different benefits and objectives. Whereas squatters in colonial society were atomised smallholders, CLTs accumulate smallholdings in larger gestures of coordination.

The spatial coordination observed in CLTs in the US draws from three formations: clustering, constellation, and consolidation. [Fig. 6] Clustering refers to a critical mass of scattered lots in a given geographic area; constellations use carefully
scattered lots to interact with a large-scale urban structure; and consolidation deploys directly adjacent trust lots to facilitate activity across property lines. Virtually all of the hundreds of CLTs in the US make use of such formations, and according to the goals and virtues of a proximity that a particular CLT has in mind, it will make use of one or more of them.

While the contribution of CLTs to the provision of affordable housing is documented and appreciated, their spatial agency in a broader urban field, beyond housing as such, remains relatively undocumented. Using the premise of virtues of proximity, the following case studies aim to fill this gap and demonstrate the specific spatial characteristics of this form of populist landholding. The following section shows how these formations are not just contingent realities, but purposeful, strategic designs that organise land in different ways. We will describe case studies for all three patterns and also some design schemes that create virtues of proximity.

**Clustering**

The English Avenue and Vine City neighbourhoods in Atlanta are positioned along the city’s north-south racial divide. [Fig. 7] The area has been subject to multiple plans and city branding projects, which have brought relatively few and questionable benefits to mainly African-American residents. Moreover, during the city’s urbanisation, several creeks were buried and built over. Due to their low elevation, several blocks of the neighbourhood are in the floodplain and the houses have deteriorated as a result. The Westside Atlanta Land Trust has intervened here since 2015 by strategically acquiring a cluster of parcels on higher ground. Swapping the land of residents in low-lying areas with new or existing houses nearby, the trust has relocated residents from the floodplain and allowed them to remain in the neighbourhood. The clustering formation operates here by deploying a sufficient quantity of lots in proximity to the residents’ current houses but at higher elevation. This is a virtue of proximity in which residents maintain their local social relations. Without involving economies of scale, the floodplain lots might even be used to renaturalise the buried creeks. The CLT mobilises the neighbourhood’s resources, instead of waiting for the municipality to implement some governmental response. Accordingly, the coordinated action addresses the floodplain issue while also building a resident-led programme for environmental justice. The trust’s mission ‘to organize the community’s power for self determination and to serve and preserve in-place residents’ is therefore implemented by coordinating its landholdings in relation to its environmental, social, and financial context.

City of Lakes Community Land Trust (CLCLT) is a resident-led trust in Minneapolis. Since its founding in the early 2000s, CLCLT’s spatial strategy has relied on incorporating property within specific neighbourhood boundaries, namely the two swaths of the city most affected by decades of discriminatory mortgage policies and racial covenants. The conditions in these neighbourhoods have led to a drastic inequity in the rate of homeownership between the city’s white population and people of colour. Although CLCLT’s scattered lots consist mainly of unremarkable single-family houses, the clustering formation of its properties has had an impact that transcends homeownership and the traditional benefits it carries. A group of researchers has determined through regression analysis that during the economic recession, house values stabilised the more proximate they were to trust land. The trust’s landholdings should therefore not be interpreted solely in terms of their provision of affordable housing. As a territorial intervention based on close proximities, the trust provides benefits to its members and neighbours alike. CLCLT thus uses its multiple lots clustered in the area to support the emplacement of existing residents, while producing an impact on land beyond its properties.
Fig. 5: Map of two example CLTs in Minneapolis-St. Paul. Map: Gabriel Cuéllar, Athar Mufreh, Xiaohan Gu.

Fig. 6: Three principles of property scattering. Drawing: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.
Fig. 7: Westside Atlanta Land Trust's clustering formation. Map: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.
Fig. 8: Atlanta Land Trust’s constellation formation. Map: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.
**Constellation**

The Atlanta Beltline is a city-wide revitalisation converting railroads into a large-scale recreational, transit, and ecological corridor encircling the city. [Fig. 8] As part of the new linear park passing through the city, the municipality has established a special tax district that encompasses the neighbourhoods along the beltline. Within the district, real estate development is incentivised and new parks are being constructed. As with many sweeping investment projects, the district will inevitably cause a rise in land values and property taxes not only within its boundary but up to a kilometre away from the trail, as adjacency to the new infrastructure becomes more desirable. In response to this unfolding situation, the Atlanta Land Trust (ALT) was formed in 2007 as a measure to mitigate displacement in the forty-five neighbourhoods included in the district. By strategically obtaining land for the trust near and inside the tax district scattered over 60 km, the CLT’s urban design aims to provide its members with long-term stability in the neighbourhoods and access to the new trails and parks. As property taxes and land values increase around the Beltline, a constellation of CLT parcels arranged along the infrastructure ensure that current tenants and landholders can remain despite the new investment.

The Bronx Land Trust in New York City consists of eighteen parcels used for community gardens. Its mission to ‘preserve, improve, and promote community managed open spaces for the benefit of all’ contends with the fact that the borough has historically been under-resourced in terms of park funding. While the density of parks per capita is not substantially different from other parts of the city, Bronx parks are not maintained to the same level as those supported by private organisations, such as the Central Park Conservancy. In a neighbourhood shown to suffer disproportionately from air pollution, the trust uses its land for gardens to support residents with social, nutritional, and recreational opportunities. Given the high cost of land in the city and the inability to purchase additional lots, the trust uses its relatively small footprint to its advantage. While there is significant distance between each of the trust’s garden lots, altogether they are constellated in the areas with highest population density in the district. This particular formation uses a small total surface area strategically deployed in order to reach as many residents as possible. In this way, the trust is arranged according to the large-scale geography of population density in order to partially offset the prevailing environmental inequities in the society.

**Consolidation**

Bright Community Land Trust (BCLT) consists of over 170 parcels dispersed over the metropolitan region of Tampa. [Fig. 9] The trust focuses on affordable housing and offers both rental units and single-family houses for purchase. When viewed at the scale of the city, the trust properties are scattered in clusters, but within those many are closely situated and even directly adjacent lots. In these cases, an economy of scale exists, but there is also a virtue of proximity, as several of its tightly organised landholdings are organised around community amenities. For example, one consolidated cluster of fifty-five parcels is organised around a YMCA community centre that offers recreational and social programmes to the neighbourhood. In this case, the position of the holdings creates a compact spatial relationship in which the trust benefits from the amenity while extending its patronage to the community centre. Unlike many purpose-built residential projects that include amenities within the building, BCLT facilitates the interaction of its members with community-oriented entities beyond, but in close proximity to its trust land. By concentrating its resources in this formation, more residents have access to the amenity.

In summary, the spatial formation of the community land trust can be understood as a balance between contingency (with finance, morphology, time, operations and so on) and an intentional design strategy. These cases show that while resident-led
Fig. 9: Bright Community Land Trust’s consolidation formation. Map: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.

Fig. 10: Designing virtues of proximity: popular checkerboarding. Drawing: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.
landholdings deal with many of the same constraints and opportunities as market-led development schemes, there is a consistent ambition that guides their design strategy, either intentional or unintentional. As shown above, these may range from environmental justice to widespread financial stabilisation, equitable park provision, and access to public transit infrastructure. These of course are only a selection from hundreds of CLTs across the US, all of which must consider how their spatial formation can support their mission statement.

**Designing virtues of proximity**
Observing how these CLTs deploy scattering in intelligent ways that contend with the dynamics of urban fields, architects ought to be able to support such populist landholding models through their spatial techniques and ways of thinking. More specifically, however, this task might not involve simply designing or renovating a trust’s buildings, but to contribute to the design of scattered property formations. To that end, the following section speculates on designs for each of the identified formations employing this kind of coordinated spatial action.

In US cities, commercial developers buy out several adjacent properties and merge them, creating larger parcels for bigger developments. [Fig. 10] This provides higher density, but it often contributes to the displacement of existing residents. Could a CLT coordinate its landholdings in a way to control real estate projects? CLT properties cannot be sold and their use is controlled by a community board. Using a clustered, checkerboard pattern in blocks that are slated for redevelopment, CLTs could disrupt commercial real estate patterns. Not able to achieve an economy of scale with land mergers, real estate developers would go elsewhere. The CLT might thus contribute to preserving the neighbourhood.

Many communities of colour in US cities contend with food insecurity due to the lack of supermarkets and space for agriculture. [Fig. 11] Could a CLT help resolve this conflict by coordinating property for urban agriculture? Farmers need an economy of scale, but in a city, large plots of land are hard to find. A CLT could assemble partial interests into a larger interconnected surface. This would provide urban farmers the economy of scale they need. Landholders who dedicate a portion of their parcel directly adjacent to where another landholder has done the same will receive a share of the harvest. As the land trust interests consolidate multiple yards on a single block, everyone gets a bonus.

The majority of land development in the US happens at the outer fringes of cities. [Fig. 12] In such areas, developers buy agricultural land and subdivide it into residential properties, extending the harmful environmental footprint of suburbs. How might trust land position itself in this frontier zone to suspend urbanisation? Organising themselves as a constellation of land interests following the peripheral edge of the urban frontier, CLTs could cooperate to acquire agricultural land and limit further development. As the availability of extension land decreases, outlying habitats are maintained and development might be refocused to existing urban areas, which could be densified for the benefit of local communities.

**Conclusion**
Virtues of proximity is a design premise that focuses on what traditional design tools tend to overlook. Masterplans and individual landmarks, the traditional architectural tools, do not account for contingencies and dynamic changes in an urban field. An urban playbook based on potential virtues of proximity, however, merges contingency and strategy while taking advantage of spatial intelligence. This approach reflects the conceptual ideas behind Keller Easterling’s terms ‘medium design’ and ‘infrastructure space.’ The matrix of underlying properties and the relationships it mediates are the subject of design here, shifting the focus from built structures to the infrastructures that condition any given urban context. Furthermore, in contrast to masterplans that perform largely as fixed, top-down instruments, the premise of virtues of proximity offers populist civil
Fig. 11: Designing virtues of proximity: yard consolidation. Drawing: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.

Fig. 12: Designing virtues of proximity: habitats on the urban periphery. Drawing: Gabriel Cuéllar, Athar Mufreh, Clare Coburn.
society organisations, such as CLTs, an opportunity to disrupt the framework of liberal, market-oriented landholding in the US.

The role for spatial practitioners in the context of a society organised around land populism cannot be understated. However, the spatial dimensions of CLTs cannot be apprehended strictly from an analysis or design of their respective buildings. The formation and support of a resident-led trust also requires a design intelligence that applies to the urban field in which economies of scale are rarely achievable. As such, a variety of forces and actors must be understood and negotiated with. Moreover, landholding formations, vis-à-vis their multi-dimensional contexts, must themselves be understood as a design project, much in the same way that the land trusts described above have done. To this end, we offer our articulation of scattered clustering, constellation, and consolidation as formal spatial concepts that may contribute to the generation of virtues of proximity. Lastly, for designers interested in supporting such programmes, the inherently spatial facets of property are essential. Beyond property’s relationship with law, policy, and economy, spatial practitioners have much to contribute by engaging with its territorial and material underpinnings.

In the US, the marketisation and racialisation of land have motivated civil society to reform prevailing landholding models. The emergence of CLTs, and the populist political movements before them, are evidence of the crucial role that land plays in self-determination and political identification. Nevertheless, these forms of landholding, and their accordant spatial manifestations, present their own challenges and risks.

The case of scattered-site housing shows that spatial dispersal can lead to justice just as much as injustice. While the scattered-site model continues to dominate public housing strategy, geographic deconcentration is a complex task, the results of which are difficult to ascertain. Similarly, despite the CLT model’s leftist orientation, the populist imperative for landholding – already established in the 1600s – is generally left untouched. As many community land trusts follow the spatial template of scattered-site housing, it is important to consider how the complications of ‘ghetto dispersal’ and an allegiance to US land populism might burden this model as well. Scholars have noted that although CLTs purport to create and reinforce ‘community’, often there is little sense of it among their members. If there is a possibility of more radical politics within the CLT model, it may require reconstructing the underlying cultural values and financing schemes currently relied upon.

Moreover, as the great majority of CLT lots in the US are single-family houses, the role of building design continues to have significance. As long as the unconditional belief in ‘homeownership’ and its social, environmental and financial implications remains unquestioned, CLTs will likely continue to proliferate this type of landholding. Therefore, in addition to the aspects of urban formation mentioned above, the refashioning of the single-family neighbourhood, a product of early property subdivision schemes, as a site of populist collective landholding is a vital task.

Lastly, there is the question of whether resident-led landholding could take on a role of ‘development’ so as to have a more significant impact on the dynamics and projects occurring in the urban field. A first step here would be to study how CLTs understand and act upon their perceived agency, and how financial dimensions relate to social, cultural and spatial aspects. If there is any doubt as to the specifically spatial agency of CLTs, we hope this study reveals some potential.

The dispersal of landholdings has long figured in territorial designs and these patterns are artifacts of spatial orders rooted in coordinated action and cooperation. Scattering represents the efforts of civil society organisations to organise and predispose environments according to some desired notion of a spatially just coexistence. Through this premise, spatial practitioners have a means of remaking territories to those measures.
Notes
1. In order to emphasise that actions and practices are associated with real property, through this paper we use ‘landholding’ instead of ‘landownership’, the more term more conventionally employed within architectural discourse.
3. Ibid.
5. Ibid., 5.
6. See item six in the Ocala Demands, History Resources at Mott Community College, ‘The Ocala Demands 1890’, accessible at https://history.mcc.edu/wordpress/history/2014/03/06/the-ocala-demands-1890/ (March 2014).
11. For example, One Roof CLT in Duluth, Minnesota, which has nearly three hundred lots in its trust, lists over forty funding sources on its website: https://www.1roofhousing.org/about-us/funders-partners/, accessed 28 October 2020.
13. One57, a condo tower in Manhattan, is the result of over fifteen years of strategic development rights assemblage; see Robin Finn, ‘The Great Air Race’, The New York Times, 22 February 2013, https://www.nytimes.com/2013/02/24/realestate/the-great-race-for-manhattan-air-rights.html. Hagan N. Dick also writes: ‘In order to assemble the land and to obtain the necessary entitlements for the proposed development to become a reality, it is necessary to structure a strategy to obtain control of the various parcels of land and to successfully entitle them while maintaining an acceptable level of risk for the Developer and involved third parties’. Dick, Land Assemblage and Multifamily Development, MS Real Estate thesis, Johns Hopkins University (2012), 21.
19. Ibid., 476.
23. Smith, 146.
25. Zachary C.M. Arnold, ‘Against the Tide: Connecticut Oystering, Hybrid Property, and the Survival of the...
Commons’, *The Yale Law Journal* 124, no. 4 (Jan-Feb 2015): 1206–50. Arnold’s argument against strictly economic interpretations of property has been relevant in the development of this article.


28. Ibid., 16–21.


31. Ibid. 17–20, especially the accounts from Labrie and Piven and Cloward.


34. Williams, ‘The Problem with Community Land Trusts’.


**Biography**

Athar Mufreh is a designer, urbanist, and educator. She received a Bachelor of Architecture from Birzeit University and Master of Integrated Urbanism and Sustainable Design from Stuttgart University and Ain Shams University. Athar worked as a designer and researcher at the Storefront for Art and Architecture, the New York City Landmarks Preservation Commission, the United Nations Relief and Works Agency for Palestinian Refugees, Decolonizing Architecture Art Residency, and the Bethlehem Centre for Cultural Heritage Preservation. In 2018–19 she was a lecturer at the University of Michigan Taubman College of Architecture and Urban Planning. At present, Athar is a lecturer at the University of Minnesota School of Architecture. She is focused on multi-generational housing, kinship relations mediated by ecology, and emerging modes of citizenship.

Gabriel Andrés Cuéllar is an architect and educator. Gabriel completed studies in architecture and urban design at Carnegie-Mellon University and the Berlage Institute. Prior to establishing Cadaster, a design practice with Athar Mufreh, he worked in the offices of Gramazio & Kohler, Philippe Rahm, Anne Holtrop, CDR Studio and Enter Architecture. Gabriel has contributed to exhibitions in the Canadian Centre for Architecture, the Netherlands Architecture Institute, the House of World Cultures, The New School Parsons School of Design, and the University of Michigan. Gabriel is a member of NOMA, The Architecture Lobby, and AIA. He was the Oberdick Fellow at the University of Michigan in 2018–19 and is currently Assistant Professor-in-Practice at the University of Minnesota School of Architecture. His interests include the spatial implications of real property and architecture’s role in mediating claims to land.