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Horizontal Holdings: Untangling the Networks of Corporate Landlords

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Since the capitalist and colonial enclosure of land-*qua*-property, the property parcel has served as the geographic foundation of land ownership. Bounded, self-contained, and mutually exclusive with all surrounding parcels, this geography is taken for granted in our contemporary understandings of property. As the ownership of land, property, and housing has become increasingly concentrated in fewer and fewer hands in recent years, however, it perhaps makes more sense to think of property not as isolated and individual, but as fundamentally networked and relational. Properties that are quite distant from one another are often connected through tangled webs of corporate property ownership, which are meant to deliberately obscure the true ownership—and concentration—of such property from public view. This article demonstrates the importance of untangling these corporate networks, using a case study of three large corporate landlords operating in metropolitan Atlanta, Georgia: Invitation Homes, Pretium Partners, and Amherst Holdings. The article shows how the true extent of these corporate landlords' holdings is hidden by these networks, and how researchers can untangle that to produce a more complete understanding of concentrated housing ownership. Through this method, we can uncover that these three firms control more than 19,000 single-family homes across the five core counties of Metro Atlanta, using an extensive network of more than 190 corporate aliases—registered to seventy-four different addresses across ten states and one territory—to hide their holdings behind a veil of secrecy and insulate themselves from liability. *Key Words: housing, institutional investors, mapping, real estate, relational geographies.*

Since the capitalist and colonial enclosure of land-*qua*-property, the property parcel has served as the geographic foundation of land ownership (Kain and Baigent 1992). From seventeenth-century agricultural estates to twenty-first-century luxury high-rise condos, ownership and exchange of real property has relied on this geographic unit to help organize information about land, improvements, and their economic value. Whereas real property ownership entails a diverse bundle of rights and responsibilities accorded to both the owner and the public, the parcel itself is predicated on an understanding of space that is precisely bounded, self-contained, and mutually exclusive to differentiate the ownership claims of different individuals and, increasingly, institutions (Blomley 2003).

Just as cadastral mapping's power perpetuates the expropriation of land from indigenous people and peasants, it can also be used to fight contemporary forms of property enclosure and exploitation (Shelton 2018, 2022). Like maps, data, and other geospatial technologies more broadly (Harley 1989; Wyly 2009; D'Ignazio and Klein 2020), parcel-level property ownership data is flexible in its political valence, and increasingly serve as a means of uncovering the extent of these enclosures and their effects, seeding the ground for resistance to the status quo.

At the same time as the utility of property data has been reworked, geographers and others continue to challenge the dominant conceptualization of space that this data relies on, increasingly conceptualizing space as networked and relational (Massey 1991, 2004; Amin 2002). This work has complicated the idea that distance in absolute space serves as the best indicator of relatedness, or that any given space can be defined in isolation from those it is surrounded by or connected to, possessing a singular character to all who encounter it. As the ownership of land, property, and housing has become increasingly concentrated in fewer hands in recent years, often drawing both near and distant properties together under common ownership, it has also

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become increasingly networked as corporations use opaque corporate structures to obscure the full extent of their holdings. So just as geographers have conceptualized space as fundamentally relational, rather than isolated and individual, we extend these conceptualizations to property as well. That is, treating any individual parcel, or its ostensible owner, in isolation from the broader ownership networks of which they are a part precludes the possibility of seeing the full extent of the expansive holdings of networked corporate landlords and their effects.

Bringing these two threads together, this article argues for the methodological and conceptual importance of conceiving of property and property ownership as networked to understand the full extent and impact of corporate ownership of housing in the contemporary United States.[1] Using an example of three of the largest corporate single-family landlords in the country—Invitation Homes, Pretium Partners, and Amherst Holdings—operating in the Atlanta, Georgia, metropolitan area—the single largest locus of investment by single-family rental companies across the United States (Seymour et al. 2023)—we outline a methodology for untangling corporate landlord networks to empirically document their reach. Through this method, we first demonstrate the ways that these ownership networks are constructed to shield corporate landlords from public scrutiny and legal liability. Second, we show that these networks obscure not only the full extent of any given company's holdings, but also their spatial concentration in particular places. Third and finally, we demonstrate the further importance of spatiality to our ability to untangle these ownership networks, as the addresses listed on ownership records provide one of the most important ways for us to link together entities whose connections might otherwise remain obscured. Ultimately, we show that by approaching property as part of an extensive network of people, places, and organizational structures, we can more fully ascertain the scope of contemporary changes in housing and property ownership being driven by large corporations and the imperatives of housing financialization.

Identifying Property Owners

Inequalities in land and housing ownership have long been treated as an information problem (Guldi 2022). From the bureaucratic idealism of the United Nations Food and Agriculture Organization in the postwar era to the activist-driven effort to document corporate and absentee ownership of land and mineral rights in Appalachia in the 1970s and 1980s (Appalachian Land Ownership Task Force [1983] 2014) and countless places in between, understanding who actually owns property has long been seen as a fundamental necessity for social change. As Haggerty et al. (2022) write, "Before its social, economic, political, ecological effects can be analyzed, however, land concentration must first be measured" (2). The problem with doing this is, however, twofold.

First, property ownership data tend to be some combination of inaccessible and expensive. Historically, individuals interested in knowing who owned a given property could visit the local tax assessor's office and look at the name in the deed register. Indeed, this is precisely the method used by the Appalachian Land Ownership Task Force more than forty years ago. These records are increasingly digitized, however, and one can often search for individual ownership records using a plethora of different platforms employed by county tax assessors across the country. The ever-growing scale and geographic spread of some owners' holdings, however, has simultaneously made large-scale data on these issues more necessary, but also more closely guarded. Because property ownership records are almost always maintained by individual counties rather than state or federal governments, there is a patchwork of different platforms for sharing the data, and policies around what might be shared and under what conditions. Ultimately, it is quite rare for full parcel data sets to be made publicly available without a special request, and some entities charge exorbitant fees for access. These difficulties in accessing property ownership data have led to the commodification of these data as real estate analytics firms like CoreLogic and ReGrid have created a market for collating, cleaning, and reselling these data for profit, locking out all but the most well-resourced from accessing such data at large scales (McElroy 2022).

Second, even where data is accessible, corporate landlords shroud their holdings in secrecy. In particular, these corporations use networks of interlinked limited liability companies (LLCs) to insulate themselves from legal and financial liability and scrutiny from tenants, researchers, and regulators who might seek to uncover the details of their holdings and business practices (Soener and Nau 2019; Travis

2019). It is important to note, however, that this practice is not limited to only the largest institutional investors. In fact, Montano (2020) found that in Los Angeles, one local landlord had purchased more than 170 different multifamily properties totaling more than 3,200 units in a span of more than twenty years, each using a different LLC that owned just that single property. In other words, without using this cross-referencing process, each of these 170 properties would have appeared at first glance to be owned by a unique owner and not a single large conglomerate. Arguably, the most comprehensive efforts at analyzing these ownership networks thus far have come from the activist community. Across the United States, housing justice and tenants' rights groups have developed Web-based mapping tools like Property Praxis in Detroit, Who Owns What? in New York City, and EvictorBook in the San Francisco Bay Area, among others, which allow users to select a given property and put it in the context of the larger web of ownership within which it sits. That being said, these Web-based tools are not available everywhere. In their absence, it is necessary for the underlying methods of analysis to be democratized so that anyone with access to the data can untangle these networks themselves, to further challenge these persistent inequalities in housing and property ownership across the country.

Untangling Ownership Networks

Approaches to untangling ownership networks typically take one of two forms: deductive or inductive. In deductive ownership tracing methods, one starts with a property owner of interest and searches parcel ownership or deed data for all properties owned or purchased by this party. Inductive ownership tracing instead typically begins with the corporate name and mailing address associated with one or several specific properties located in a specific neighborhood or municipality. In this case, one might not know who is the true owner of the property. Inductive approaches can also take the form of entirely data-driven attempts to use the ownership and address information contained in parcel records to assign properties to ownership clusters, an approach that has been especially common among academic researchers (Immergluck et al. 2020; Ashwood et al. 2022; Gomory 2022; Hangen and O'Brien 2022; An et al. forthcoming).

This data-driven approach has been adopted by researchers principally concerned with assigning all residential properties in one or more cities or metros to ownership clusters, for the purposes of constructing a data set for statistical analysis. Unlike with deductive methods, or inductive methods motivated by a desire to understand precisely who owns a given property, these data-driven approaches are not oriented to understanding precisely who owns a property, but rather their general characteristics, like the number of properties they own in a given city or whether their mailing address is located out of state. Having a precise linkage between all related property owners is less important than simply identifying entities as large property owners for purposes of statistical analysis, for instance, studying the association between eviction and the size of the property owner.

Our method blends these deductive and inductive approaches. On the one hand, we know the names, practices, and metropolitan geography of ownership of the nation's largest owners of single-family rental homes. Further, we can, with relative ease, find the corporate aliases used by some of these entities from their financial reports to seed a search for the specific properties they own in one or more jurisdictions. On the other hand, we are also concerned with identifying corporate owners who either might not already be known to us, perhaps because they operate in only one city or region, or because they are a private equity firm and therefore not compelled to publicly release their aliases. We might choose to investigate unknown LLCs owning large numbers of properties in a specific jurisdiction or seed a search with the LLC name and mailing address for a single address. This latter scenario would be suitable, for instance, for seeking additional information about a problem landlord or speculator using a corporate name to shield themselves from liability and public scrutiny. Our approach, therefore, is flexible and adapted to different purposes, but all with the primary objective of linking properties to specific owners and understanding precisely who these owners are.

To simplify this process of untangling ownership networks and make it more accessible to researchers without advanced programming skills, Figure 1 provides a schematic diagram of the process of cross-referencing the ownership network for Amherst Holdings, starting inductively from a single property and using methods that can be replicated more or

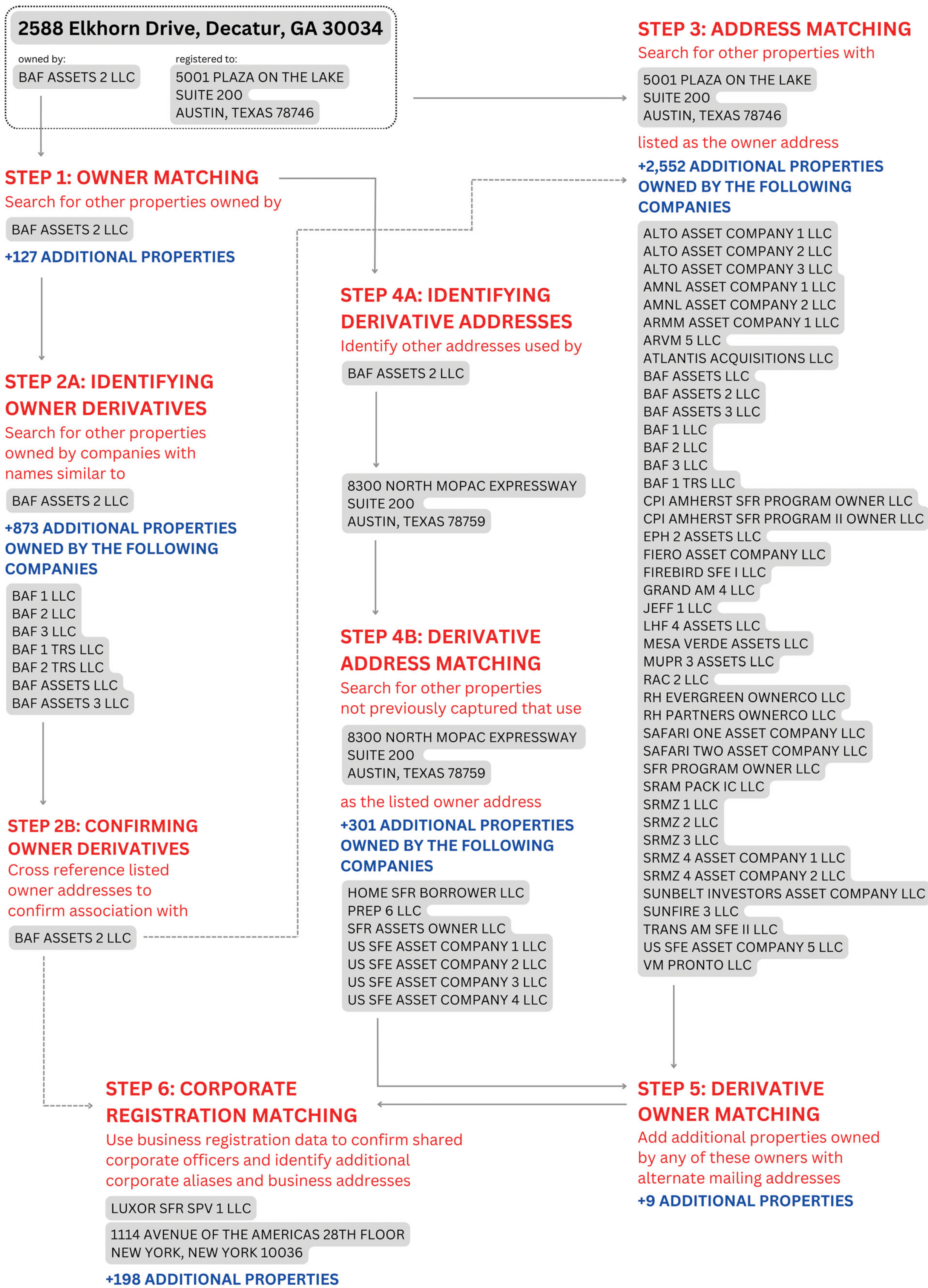

Figure 1. Schematic diagram of ownership cross-referencing process.

less manually. The property at 2588 Elkhorn Drive in Decatur, Georgia, is a small, low-slung ranch house nestled just inside the southwest corner of Interstate 285 (colloquially known as the Perimeter) in south DeKalb County, a supermajority Black area of Metro Atlanta. Using publicly accessible data from the county tax assessor, one can easily identify the owner of 2588 Elkhorn Drive as "BAF ASSETS 2 LLC," registered to an office at 5001 Plaza on the Lake Drive, Suite 200, in Austin, Texas. Learning who is behind BAF ASSETS 2 LLC and what other properties they own is a more complicated endeavor that requires following the cross-referencing process described throughout the rest of Figure 1. Alongside Figure 1, Figure 2 documents how proceeding through each step of the cross-referencing process produces an expanded understanding not only of the full scope of the company's holdings, but also their spatial concentration in certain parts of the metropolitan area.

Step 1: Owner Matching

If we wanted to identify the other properties owned by BAF ASSETS 2 LLC, arguably the easiest thing to do would be to search the owner name field in the assessor database for other properties where BAF ASSETS 2 LLC is listed as the owner. Performing this search on a combined database with parcel data for the five core counties of Metro Atlanta, this step alone identifies an additional 127 properties across these counties owned by BAF ASSETS 2 LLC.

Step 2: Owner Derivatives

In the case of corporate landlords both large and small, however, it is highly uncommon for them to own all of their properties under a single LLC, as was discussed earlier. To identify other LLCs associated with BAF ASSETS 2 LLC, we can search through the bulk parcel data for other owner names with similar naming conventions. Even using a simple process of alphabetically sorting all parcels by owner name can be of significant value here, as such a method would help us to identify at least eight other LLCs whose names begin with "BAF," followed alternately by "ASSETS," "TRS," or a number. After confirming an association between these eight other corporate aliases by checking that the listed owner address is the same as those properties

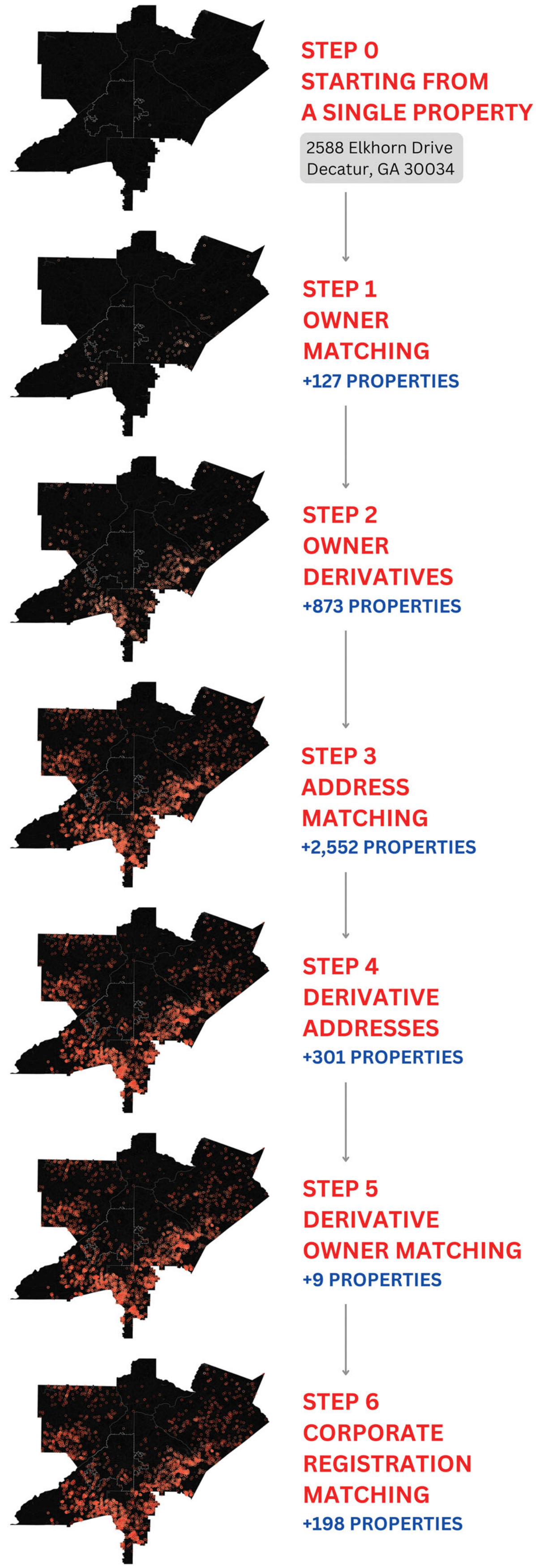

Figure 2. Increasing geographic concentration via ownership cross-referencing.

identified in Step 1, we can confirm another 873 properties being owned by the same umbrella ownership group that controls BAF ASSETS 2 LLC.

Step 3: Address Matching

After identifying properties owned by the same entity and related companies, the next step is to return to the listed owner address mentioned previously. In the case of 2588 Elkhorn Drive, that listed owner address is 5001 Plaza on the Lake Drive, Suite 200, Austin, Texas. Using a simple Google search, we can confirm that this address is associated with Amherst Holdings, and so can surmise that all of the other companies with this address listed are also associated with Amherst.[2] For Step 3 of our cross-referencing process, then, we want to identify all of those properties with this listed owner address that were not previously captured in Steps 1 and 2.

This step allows us to identify a total of 2,552 additional properties owned by forty-two different LLCs, not including those properties already identified as associated with BAF-derivative names in Steps 1 and 2. This number is particularly important because it points to the significant importance and utility of spatiality to the process of untangling property ownership networks. More than any other single step in the process, identifying shared owner addresses allows for the quickest and easiest matching of related entities. It is also arguably the step that is least obvious to those who are not trained in property ownership research, however, and so is the one most important for researchers to be sure to include in their own methods. As described later, however, it is also important to exercise caution when grouping together the properties owned by entities with a shared owner address, as there are some complicating factors for certain cases where such linking is not actually appropriate.

Step 4: Address Derivatives

The next step of the cross-referencing process also makes use of the geographic reference embedded in property ownership records, but returns us to Step 1 where we identified all of the other properties owned by BAF ASSETS 2 LLC. This is because among these properties we have not only the single owner address already identified in the assessor records for 2588 Elkhorn Drive, but also another address that is tied to a number of the other parcels owned by BAF ASSETS 2 LLC. This address, 8300 North Mopac Expressway, Suite 200, Austin, Texas, is another we can identify as being connected to Amherst Holdings and their various corporate aliases. We then perform the same process we undertook in Step 3 for this address, identifying any additional LLC names we had not previously found that use the 8300 North Mopac Expressway address to register their properties. This step yields seven additional corporate aliases that have no properties registered to the 5001 Plaza on the Lake address (although some do share common naming conventions with some of the companies tied to this address), owning a total of 301 properties across the five core counties. That said, it is worth noting that in other corporate property ownership networks, it is not uncommon to have more than just two or three different owner addresses. As is shown in what follows for the other two corporate landlords we have examined here, this process can sometimes necessitate repeating for anywhere from five to ten different owner addresses discovered in Step 4.

Step 5: Owner Derivative Matching

The penultimate step in the cross-referencing process involves returning to the list of corporate aliases identified in Steps 3 and 4b and identifying any other properties owned by these companies that might, for one reason or another, be connected to a different owner address that we have not already identified. Although the number of additional properties identified through this process is often small—only nine additional properties owned by Amherst were identified this way—these numbers could vary.

Step 6: Corporate Registration Matching

A final concern that this process raises, especially in cases involving smaller scale landlords operating within a given locality, is the importance of ensuring that the use of address matching is, in fact, grouping together entities actually owned or controlled by the same parent firm, as well as gathering the full totality of related entities. This is because the mailing address used in parcel records can be for a property management company, attorney, or other actors that otherwise act on behalf of multiple unrelated entities, or even a relic of a previous owner for whom a local tax assessor has not updated the relevant information. For this reason, it is usually best to cross-reference the firms identified throughout the earlier steps in the process with business registration data from state-level secretaries of state or publicly available online directories like CorporationWiki, which allow one to see the corporate directors and principal office address for a given firm and then reference the other firms with which an individual is associated. Hangen and O'Brien (2022) pointed to the particular importance of this additional step in developing the most robust picture of ownership networks. In our example of Amherst Holdings, the use of business registration data helps to identify one final LLC that is connected to a separate address not previously identified in the process we outline—LUXOR SFR SPV 1 LLC located on the 28th floor of 1114 Avenue of the Americas in New York City—and an additional 198 properties, bringing Amherst's metro-wide total to 4,061 properties held between fifty-two unique owners and across three primary business addresses.

One important methodological note is that although the process described here can be used for any property and any type of property owner at any scale, some shortcuts do exist for some types of owners. In particular, publicly traded real estate investment trusts (REITs) like Invitation Homes are required by law to publish financial reports, like Form 10-K filed with the U.S. Securities and Exchange Commission. These documents contain lists of all the different aliases used by the company in question. For example, the Invitation Homes Form 10-K from 2020 lists 174 separate subsidiary names, although most of these represent minor variations on a theme, as in the example of Amherst Holdings detailed earlier. Private equity firms, however, are under no such obligation to publish the list of aliases under which they operate, and can therefore be somewhat more difficult to track. Even still, some of these firms continue to use some aliases that are straightforward references to the parent firm name, such as PROGRESS RESIDENTIAL BORROWER for Progress Residential or FYR BORROWER for Front Yard Residential. These names, however, are never exhaustive of those used by these entities, and thus the process described previously should always be used to develop a more comprehensive accounting of a given firm's holdings.

Multiple Spatialities of Corporate Landlordism

Using the method just described to examine the ownership networks for Invitation Homes, Pretium Partners, and Amherst Holdings is instructive for both the substantive knowledge about these companies' activities that we can glean from such an analysis, as well as some of the kinks and quirks presented by this method. First, Table 1 highlights the basic findings from this analysis, including the total number of properties identified for each of the three firms, the number of owner names and addresses associated with each entity prior to doing any of the text-cleaning methods described in An et al. (forthcoming) or Hangen and O'Brien (2022), and the number of unique owner names and addresses. A list of the core addresses used by each company is also included in the right column, such that readers can work with parcel data in their own locality to identify properties owned by these companies.

Of particular note is the fact that despite the large number of unique owner addresses associated with each of these three firms, each firm tends to operate primarily with a much smaller group of core business addresses that are used to register their properties. In part this is because the address of a given property is often erroneously listed as the owner address even after acquisition by one of these corporations, creating unique owner addresses that show up only a single time in the data. This is the case for twenty-six of the forty-eight unique addresses associated with Invitation Homes, eight of the thirteen addresses for Amherst Holdings, and just two of thirteen for Pretium Partners. Apart from these properties, another 3,238 of the properties we have identified for these three companies are owned through local business addresses in the Metro Atlanta area. Because all of these companies are actually headquartered elsewhere, an analysis that took these listed owner addresses at face value would be substantially underestimating the extent of absentee ownership in the area (see also Ashwood et al. 2022).

Using the open source geographic information systems software QGIS, Figure 3 visualizes the relational networks that connect each individual property to its listed owner address and ultimately to the headquarters of its parent companies. The thickness of the lines connecting Metro Atlanta to the

Table 1. Summary of ownership cross-referencing results for three corporate landlords

Name	No. of total properties	No. of actual owner names	No. of unique owner names	No. of actual owner addresses	No. of unique owner addresses	Core owner addresses
Invitation Homes	7,861	126	43	142	48	1717 Main St. #2000 Dallas, TX 75201 8665 E Hartford Dr. #200 Scottsdale, AZ 85255 591 W Putnam Ave. Greenwich, CT 06830 PO Box 1226 Oakland, CA 94604 8601 Dunwoody Pl. #520 Sandy Springs, GA 30350 950 North Point Pkwy. #350 Alpharetta, GA 30005 901 Main St. #4700 Dallas, TX 75202 901 Johnston Oak Ln. NW Lilburn, GA 30047 10 Glenlake Pkwy. #400 Atlanta, GA 30328
Pretium Partners	7,171	156	96	89	13	PO Box 4090 Scottsdale, AZ 85261 3505 Koger Blvd. #400 Duluth, GA 30096 5100 Tamarind Reef Christiansted, VI 00820 1110 Strand St. #2A Christiansted, VI 00825 201 N. Franklin St. Tampa, FL 33602 36C Strand St. Christiansted, VI 00820
Amherst Holdings	4,061	106	52	124	13	5001 Plaza on the Lake #200 Austin, TX 78746 8300 N. Mopac Expressway #200 Austin, TX 79759 1114 Avenue of the Americas 28th Floor New York, NY 10036

various sites of ownership represents the number of properties connected to each location, effectively visualizing the flow of rents and corporate profits out of the Atlanta metro area and into other parts of the country, sometimes making intermediate stops along the way to their final destination. As is evident through the counts of unique owner addresses in Table 1, Invitation Homes—the country's single largest residential landlord—has the most diffuse spatial network of ownership, using multiple addresses across Texas, Arizona, and Georgia to register the vast majority of their properties, along with some less frequently used locations in California, Florida, and Utah. Meanwhile, Amherst Holdings has a fairly tight ownership network, relying mainly on just three primary business addresses, with two located a few miles apart from one another in Austin, Texas, being home to the vast majority of the company's holdings. Pretium's spatial extent sits somewhere between the two, with fewer unique owner addresses in use than Invitation but more unique owner aliases. Although it is interesting to note that, in contrast to Invitation and Amherst's networks, none of Pretium's properties are registered directly to their headquarters in New York City, instead using a combination of addresses in Phoenix, Atlanta, Tampa,

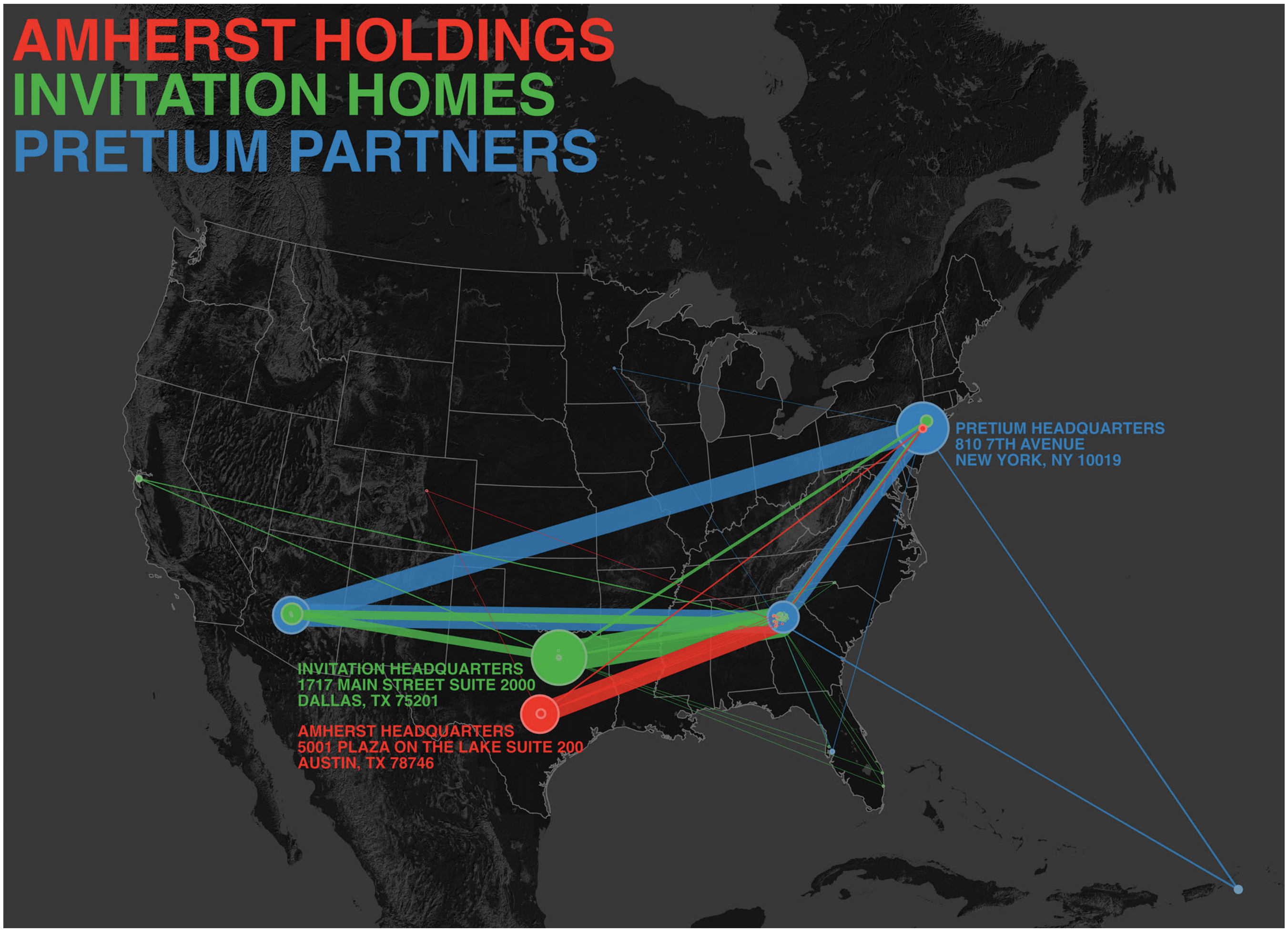

Figure 3. Relational ownership networks for three corporate landlords.

and the U.S. Virgin Islands, a common strategy for companies to take advantage of favorable state-level tax laws and looser corporate regulations.

Figure 3 visualizes the overlapping ownership networks of these three companies, but it represents only one of the two key ways that these networks are spatialized. Figure 4 visualizes this alternative spatiality by showing the concentration of properties owned by these three companies across Metro Atlanta. In this map, the size of the hexagonal symbols represents the total number of single-family rentals owned by the three companies examined here, and each symbol is shaded based on which of the three companies owns the most properties in that area. In addition to showing the general concentration of corporate single-family rental properties in certain parts of Metro Atlanta—especially the predominantly Black suburbs of south DeKalb, south Fulton, and Clayton Counties, along with the more racially diverse suburbs of Gwinnett County—and an almost complete absence from others like the affluent and White areas inside the Perimeter, Figure 4 also helps to visualize the spatial strategies of these different landlords, who tend to target distinct social and spatial submarkets within the metro area (Charles 2020; Seymour et al. 2023). Just as the decision to distribute the ownership of these properties across numerous LLCs and business addresses is one part of these firms' spatial strategies, so, too, is it part of their plan to be spatially concentrated with where these investments are actually targeted to produce local-scale monopolies, giving them greater control over both local rents and home sale prices (Tapp and Peiser 2023). Without first using our method described earlier for untangling each firm's ownership network, however, these results would look considerably different, both substantially undercounting the total number of properties each firm owns and potentially missing out on important geographic variations in where those properties are located.

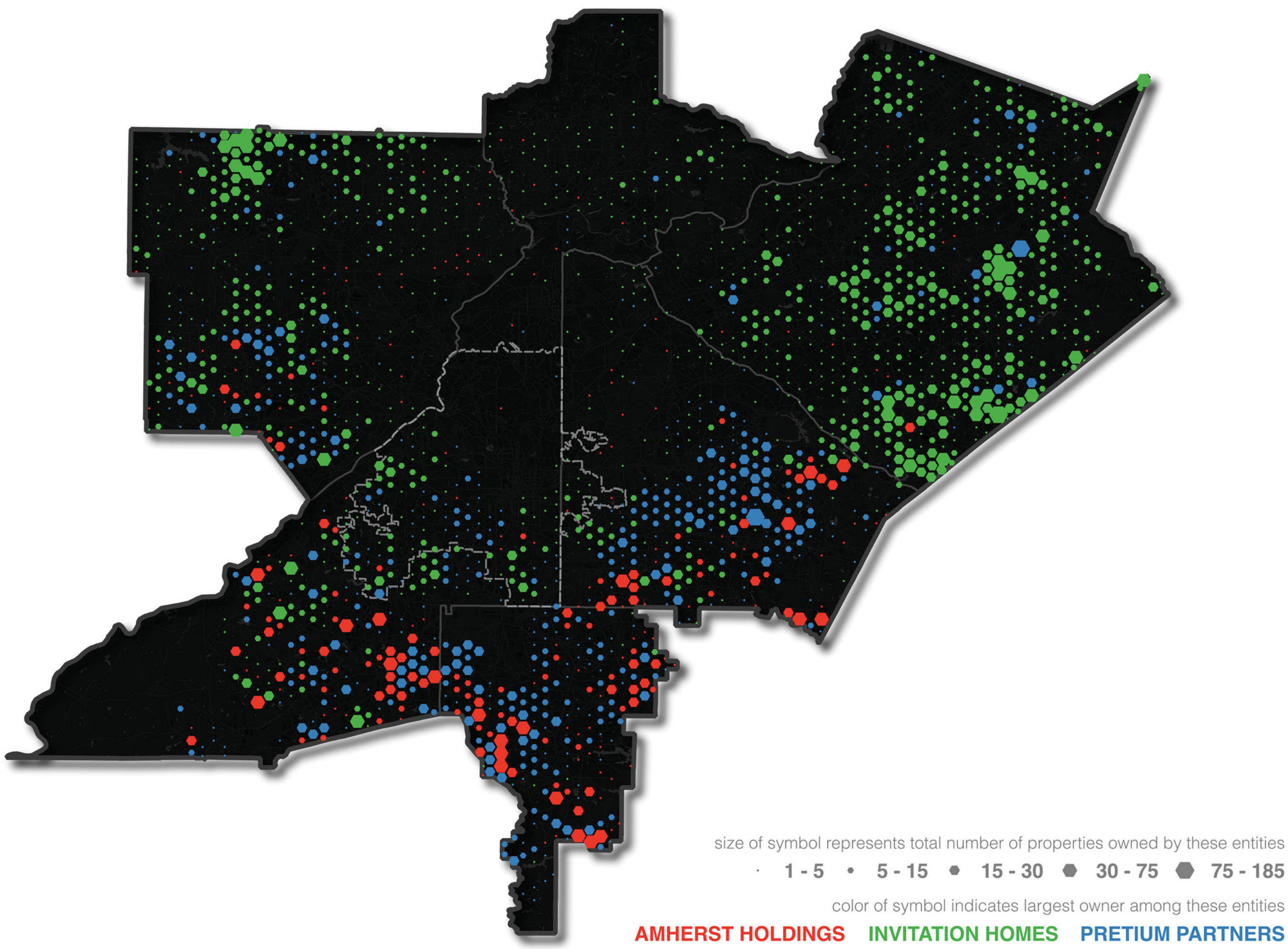

Figure 4. Geographic concentration of three corporate landlord portfolios in Metro Atlanta.

Conclusion

In this article we have outlined a simple methodology for reconstructing the ownership network for corporate landlords. Whereas other scholars have begun demonstrating the utility of automated methods for linking opaque ownership records, we have opted to provide a more foundational overview of how the different pieces of information contained within conventional property ownership data can be used to iteratively identify the full scope of corporate property holdings. By understanding these properties and their owners as nodes in a broader relational network, it is possible to trace each of the different links to establish the full extent of a given ownership network and the geography of its holdings, both in terms of where those properties are located and where they are owned. For example, as documented in Figures 1 and 2, without undertaking each of the steps in this method, the 128 properties held by BAF ASSETS 2 LLC would be treated in isolation from the additional 3,933 properties owned by Amherst Holdings under fifty-one other unique aliases, systematically underestimating the extent and significance of Amherst's role in the Atlanta housing market. Similarly, without undertaking this method of unraveling the full ownership network for each firm, any attempts at analyzing the geographic specificity of each firm's investments would be woefully incomplete, preventing us from identifying key differences in the spatial strategies undertaken by each firm. As our analysis in Figure 4 demonstrates for each of the three firms we have focused on here, large corporate single-family landlords tend to be fairly specialized in the kinds of housing submarkets they invest in, with companies like Invitation Homes targeting more upper middle-class and racially diverse suburbs in the northern parts of the Atlanta metro, whereas Pretium Partners and especially Amherst Holdings tend to be focused on lower middle- and working-class, predominantly Black suburbs in the southern portions of the metro area. Having this more complete information does not necessarily equate to tangible interventions to curb this kind of speculation or the host of other problems associated with corporate landlords, but it does serve as a necessary precondition for knowing who and where to target both organizing efforts and public policies.

Despite the importance of these approaches, there remain some crucial limitations. First, the landscape of corporate property ownership is constantly changing, particularly through corporate mergers and acquisitions. Two entities that at one point should be considered as entirely separate could shortly thereafter become one, even if they maintain separate naming conventions and operating addresses. For example, Front Yard Residential, who we have analyzed here as a subsidiary of Pretium Partners, was nearly acquired by Amherst Holdings in early 2020. After this planned acquisition was canceled due to the onset of the global COVID-19 pandemic, Pretium Partners announced their takeover of Front Yard less than a year later in October 2020, meaning that in less than twelve months three of the biggest corporate single-family landlords in the country entered into (and canceled) multiple acquisition agreements.

A second significant limitation, particularly when it comes to the use of business registration data, is that not all states require the same level of disclosure on incorporation documents. So, depending on where one is attempting to do this kind of research, certain companies can further obscure their ownership and limit the availability of information that would generally allow researchers to identify additional links between associated entities. Third and finally, even when we are able to identify ownership by an institutional investor like a REIT or private equity firm, there remains a level of opacity in the ownership due to the corporate structure itself. Although we know who controls and manages the properties in question, we do not know the identities or locations of the individual investors in these private equity funds and REITs.[3] Do we consider those individuals the ultimate owners or beneficiaries of these companies? Or is it the employees—both high and low level—whose salaries depend on the maintenance of such accumulation strategies?

Ultimately, in considering the methodological implications of the networked corporate form for understanding the ownership of housing across the United States, we have also pointed to a broader conceptual shift that aids such an analysis. Rather than only thinking about cities or nation-states or other spatial scales as being relational, we should also drill down to the scale of the parcel to understand the broader networks that extend beyond their individual boundaries to connect them to one another, to national and transnational corporations who own them, and then to global capital markets and investment strategies. Such a conceptual shift helps us to not only empirically document the full extent of contemporary corporate property ownership, but also better contextualize both the social and spatial structures and inequalities that produce and are produced by such networks.

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Notes

1. Although this article focuses only on the United States, it is important to recognize that concentrated property ownership by corporate landlords exists in other national contexts as well, often involving some of the very same corporations. In any context where ownership is similarly undergirded by dividing land into legally recognized parcels, researchers can use the method we describe for untangling and reconstructing these ownership networks, subject to the availability of parcel data like what we describe in the remainder of this article.
2. It is worth noting that in some cases the first address one identifies might not yield clear results when searching for the umbrella company's identity. In those cases, the use of the additional addresses identified in Step 4 of this process is likely to provide more certainty to the ultimate owner of the properties in question.

3. In the case of publicly traded REITs, Aalbers et al. (2023) made an initial effort at uncovering who the primary investors and shareholders are, pointing to the largest index exchange-traded funds and public pension systems as major players fueling these companies' investments. That said, the ultimate beneficiaries of these investment vehicles remain opaque, and strategies for uncovering these investors are not always possible for privately held firms.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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