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Article

Dead Grass: Foreclosure and the Production of Space in Maricopa County, Arizona

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Abstract
A wide variety of economic, social, political and moral explanations have been given for why the foreclosure crisis of the late 2000s occurred. Yet many of the tensions provoked by the uptick in foreclosure proceedings, their resolution during the foreclosure recovery process, and the insight they provide into the function of American space remain unexplored. This article uses Lefebvre's *The Production of Space* as a framework to explore the spatial and ecological contradictions of suburban development in Maricopa County (Phoenix), Arizona, USA, and the ways those contradictions were drawn into relief by the foreclosure crisis of the late 2000s. Analysis through this Lefebvrian lens uncovers symbolic meanings assigned to urban ecologies and their ruliness as a means of drawing legal devices such as nuisance laws and housing codes into a more-than-human frenzy. This article follows a growing tradition of scholarship that employs Lefebvrian insights to identify and explicate urban planning dilemmas.

Keywords
Arizona; foreclosure; Henri Lefebvre; Phoenix; suburban development; *The Production of Space*; urban ecology

Issue
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1. Introduction

This article examines the urbanization and foreclosure experiences of Maricopa County, Arizona (USA) through the dialectical framework of Henri Lefebvre's (1991) difficult but highly-influential 1974 work *The Production of Space*. The aim of this article is to understand the unfurling of the foreclosure crisis of the late 2000s in the context of a growing, arid urban region through three essential contradictions of the production of space. These contradictions are: absolute/abstract space, use/exchange value, and appropriation/domination. We present a brief examination of Lefebvre's perspective on urban planning before discussing how each of the contradictions became profoundly visible during Maricopa County's experience with the foreclosure crisis of the late 2000s both through the actions initiated by foreclosure rates and their relationships to urban ecology. Phoenix and the other cities comprising Maricopa County, Arizona had been in a period of rapid population growth and (sub)urbanization leading up to 2006. Beginning in 2006, economic downturn and the maturation of subprime loans contributed to Maricopa County having among the highest rates of foreclosure filings in the county. In the aftermath, investors who lost the most through foreclosure were re-investing in real estate as a recovery

strategy while neighborhood demographics and vegetation underwent substantial and sometimes surprising changes. Thus, the maturation of the foreclosure recovery allows for deeper engagement with the production of space as a result of creative tensions among three key contradictions.

2. The Production of Space and Urban Planning

Throughout *The Production of Space*, Lefebvre disdainfully and consistently groups planners with other purveyors of abstracts space: architects, urbanists, politicians, scientists. Lefebvre (1991, p. 364) explicitly identifies with Jane Jacobs in referring to planned spaces as "destructive", and with Robert Goodman's critique of suburban automobility as a "vicious circle". Lefebvre (1991, p. 375) implicates the organizational tools of planning like cadastres and zoning in creating a conflation between "public space and the private space of the hegemonic class…that in the last analysis retains and maintains private ownership of the land and of the other means of production". Almost half a century before the international trading of securitized mortgages brought the global economy to its knees, Lefebvre noted that planning guidelines and national plans link localized spatial actions to global social and political practice (Lefebvre, 1991, p. 378). He saw abstract space as a "fraudulent" world of signs where talk of art refers to money, "talk of beauty refers to brand images", "talk of city-planning refers to nothing at all" (Lefebvre, 1991, p. 383). Lefebvre's response was a revolutionary Jacobian call to "grass-roots opposition, in the form of counter-plans and counter-projects designed to thwart strategies, plans, and programmes imposed from above" (Lefebvre, 1991, p. 383).

However, it should be noted that *The Production of Space* was written in the early 1970s when planning as a profession was still coming to grips with the legacies of rationalist modernism and the spatial contradictions between the discursive aims and material results of mid-20th-century urban renewal (Leary-Owhin, 2016). *The Production of Space* was explicitly framed as a quest for a theory of space rather than a clear methodological guide for the analysis of space, much less the domination of that space. Lefebvre (1991) points out that Marx's response to the rationalist growth in productive forces simultaneously included a critique of growth's exacerbation of existing social and political problems, a detailing of new possibilities opened by growth, and a set of new concepts for organization and planning "whose import would only become apparent later" (Lefebvre, 1991, p. 82). Therefore, it seems that we should interpret Lefebvre's critique as less of a timeless professional indictment than a methodological call for us to critically seek the contradictions and syntheses unique to our own time and space.

Lefebvre's antagonistic tone also projects the urban contradiction of his own life. Although Lefebvre's academic appointment was in the provinces, he maintained his permanent residence in Paris—the romantic and romanticized 'city of light' meticulously rebuilt for capitalism in Baron von Haussmann's seminal urban renewal project (Merrifield, 2006). His apartment at *rue* Rambuteau in the 3rd *arrondissement* was adjacent to the ultramodern Pompidou Centre. Indeed, the rich intellectual contributions he made were facilitated by an academic life made possible by the capitalist system he so charismatically critiqued. These contradictions persist at both emotional and material levels for many of us today.

In spite of Lefebvre's negative view on urban planning, urban planners have drawn significant insight from applying and extending ideas from Lefebvre to the work of the urban planners (e.g., Allegra, 2013; Carp, 2009; Leary-Owhin, 2016), and to understanding how declarations of what is 'urban' shape knowledge itself (Brenner, 2014; Brenner & Schmid, 2015). The making of suburban landforms, like those that dominate urbanized Maricopa County, are among the everyday spaces of urban planning that both urban planners and Lefebvre have had great interest in and are the spaces in which we least understand how capital, nature, and politics continue to interact to reform space once the template is in place. This is a frontier that eludes both urban planning efforts based on positivist science, where land change from non-urban to urban or to changes in zoning, and a critical theory of explicit places and modes of resistance enacted by humans.

Contradictions represent important processes that reveal the mechanisms of capitalism and ruptures in its processes that inform the spatial arrangement and meaning of urban areas. If urban planners aim to understand and plan for differential space at a city (or regional) level, then the interplay of neighborhoods and homes are a critical to identifying how global urbanization informs conformity, stability, and change. Looking to vegetation and wildlife in cities as an indicator of the contradictions embedded in urban life provides a lens capable of evaluating the projects that serve capitalist patterns of creative destruction and those that perforate neoliberal spaces more radically. These perforations become particularly visible when political, economic, or environmental conditions stress the capacity of an urban region to continue the status quo. One such time was the foreclosure crisis of the late 2000s, which threatened prevailing assumptions about urban growth, decline, and the infrastructure sustaining nature and city. Revisiting Lefebvre provides an opportunity to re-evaluate some of the key factors in the production of space to make sense of rapidly growing urban regions, like Maricopa County, that are dominated by large expanses of single family homes.

2.1. Absolute to Abstract Space

One of the most prominent features of the transition to capitalist modernity that Lefebvre explores in *The Pro-*

duction of Space, is the transition from what he calls absolute space to abstract space. This transition is a historical foundation that underpins current socio-spatial arrangements and relationships.

'Absolute space' is "fragments of nature located at sites which were chosen for their intrinsic qualities (cave, mountain top, spring, river), but whose very consecration ended up by stripping them of their natural characteristics and uniqueness". In time, "the forces of history smashed naturalness forever and upon its ruins established the space of accumulation (the accumulation of all wealth and resources: knowledge, technology, money, precious objects, works of art and symbols)", producing *abstract space* (Lefebvre, 1991, pp. 48–49).

In contrast, 'abstract space' is comprised of material representations of wealth and power that enable and reproduce social practices. Therefore, abstract space is more than just absolute space paved over in a transformation from 'primary nature' to 'second nature' (Lefebvre, 1991, p. 229). "Abstract space functions...as a set of things/signs and their formal relationships: glass and stone, concrete and steel, angles and curves, full and empty" (Lefebvre, 1991, p. 49). It is an inherently social product of an inherently social process and can be fixed only through legal means.

2.2. Use and Exchange Values of Neighborhoods

Absolute space is the concrete space of use-values while abstract space is the space of exchange value. Since all commodities have both use-value and exchange value, Lefebvre argues capitalized agriculture, minerals extraction, etc., will occur in both absolute space and abstract space. The transition from absolute space to abstract space therefore reflects the transition from pre-capitalist to capitalist modes of production. However, this transition alone is an insufficient explanation for the emergence of differential space, which is transitory, and arise from the inherent vulnerabilities of abstract space (Leary-Owhin, 2016). Differential space results from a reassertion of use value in a system that otherwise privileges exchange. Following the Marxist tradition, Lefebvre asserts that use and exchange value form an interrelation constitutive of the capitalist system.

Lefebvre is deeply critical of the suburban project, and that project can be can be understood dialectically as the (unstable) synthesis resulting from the contradiction between the use and exchange values embedded in Jeffersonian and Hamiltonian visions for America. Both ideologies have been present since the founding of the federal state. Their negotiation inherently encompasses the tension between use and exchange, as well as between country and city, that is essential to suburban neighborhoods. Individual suburban homes are a miniature Jeffersonian pastoral within a Hamiltonian capitalist neighborhood framework. Lefebvre presents this as a contradiction with clear hostility toward these "illegitimate hybrids of city and country" and "bastard forms" as simulacrum that promise security but "thrust both [of these forms] into a confusion which would be utterly without form were it not for the structure imposed by the space of the state" (Lefebvre, 1991, pp. 386–387).

The unstable synthesis between the home as Jeffersonian use value and the parcel as Hamiltonian exchange value results in a fetishization of single-family residences as abstracted exchange value that reduces use value to quantifiable demand, and to thematic signifiers and symbols for marketing campaigns. The fetishization of commodities hides the labor relations, environmental costs, and violence associated with their production. The suburban synthesis of use and exchange value in housing hides use behind exchange.

2.3. Appropriation and Domination

Lefebvre (1991, p. 165) echoes the definition of absolute space in declaring 'appropriated space' to be "a natural space modified in order to serve the needs and possibilities of a group". He gives examples of peasant houses, villages, and igloos recounting "the lives of those who built and inhabited them" (Lefebvre, 1991, p. 165). But despite the relationship to primordial nature and absolute space implied in these examples, Lefebvre points out that act of appropriation represents a relationship between the inhabitants and the space rather than between the space and the earth. This makes it possible to speak of otherwise abstract built structures like monuments, streets, buildings, or in the case of residential home interiors, as appropriated space, although "it is not always easy to decide in what respect, how, and by whom and for whom they have been appropriated" (Lefebvre, 1991, p. 165). Lefebvre differentiates appropriated space, or the spaces of use-values produced by working *with* nature, whereas a dominated space is a space of exchange value working *against* nature, including human nature. It is akin to his distinction between absolute and abstract space but understood through labor and power relations.

Lefebvre specifically cites Marx as the source of this concept of appropriation. Lefebvre (1991, p. 325) notes that Marx (1894) in the unfinished third volume of *Capital* (chapter 48) began to explore the addition of Earth (*madame la Terre*) to capital (*monsieur le Capital*) and labor (workers). Marx's focus on labor and technology reflects a view of ecological crisis as one embedded in capitalism (Foster & Burkett, 2016; Saito, 2017). This formulation of Marxian economic theory seems fitting to both contemporary conceptions of society-environment relations and rising concentration of power over environmental resources inherent in the globalized, financialized economy (Angelo & Wachsmuth, 2015; Ekers & Prudham, 2017; Resnick & Wolff, 2010).

In contrast to appropriated space, 'dominated space' is "a space transformed and mediated by technology, by practice" (Lefebvre, 1991, p. 164). Examples are the constructed works of abstract space that introduce "new

form into a pre-existing space—generally a rectilinear or rectangular form such as a meshwork or chequerwork" (Lefebvre, 1991, p. 165). Dominated space (like dominated social relationships) requires violence to suppress existing characteristics and ecosystems. This results in a space "closed, sterilized, emptied out" in contrast to the meaning-rich spaces of appropriation.

3. The Contradictions of a Desert (Sub)Urban Development and Foreclosure

Although the entire developmental history of Maricopa County cannot be summarized in a single article, we introduce a few points of synthesis between abstract and absolute space that illustrate how suburban development in Maricopa County is a continuation of an established production of abstract space. It is transformed by the homogenizing effects of suburbanization. It is resisted by patchy local rainfall and other biophysical challenges to the imposition of suburban landscaping preferences over a desert template.

3.1. Desert Suburbs as a Contradiction of Absolute and Abstract Space

The (sometimes) violent and (often) unstable negotiation between abstract and absolute space provides insight into the urban planning condition leading up to the scenario of rapid growth in Maricopa County in the late 2000s. Maricopa County is located in the southwestern United States. The climate is dry, with approximately 22 cm of rain annually (Maricopa County Administration, 2018). Geopolitically, the county is located in the center of the state and is one of 15 counties in Arizona. The total land area is 14,806 square kilometers (9,200 square miles) (USCB, 2018). The county is home to a number of cities, including Phoenix.

Prior to European settlement, the indigenous Hohokam people inhabited an absolute space along the perennial rivers flowing through the region (Gober, 2005, pp. 13–16). The Hohokam constructed thousands of miles of irrigation canals to support a complex civilization until the disappearance of that civilization around 1450 (Gober, 2005, pp. 13–16).

The arrival of significant numbers of European-Americans in the 19th century facilitated the capitalist transformation of Maricopa County to abstract space through the primary economic activities of agriculture and minerals extraction. However, the region remained relatively undervalued by homesteaders and farmers contending with long dry summers. In the 1930s, Banker George Leonard referred to Phoenix as "probably as close to Hell as you could be while being on Earth" (as cited in Shermer, 2013, p. 17).

The region was part of the massive post-WW II national project of automotive suburbanization that resolved the capitalist growth crisis of the Great Depression. The advent of air-conditioning and the disappearance of physical space elsewhere (cities in the California, and the Eastern and Midwestern United States) further increased the symbolic weight and value of the region to capital. Consistent with Lefebvre (1991, p. 335), the mass movement of people destabilized "capitalism's delicate self-regulating mechanisms" and often necessitated the intervention of the state. Agents of mobility like the automobile and air conditioning allowed people to circumvent the contradiction between climate and urban form, changing the 'spatial code', and making Maricopa County newly suited for exploitation by capital in the era of debt-financed post-war suburbanization (Gober, 2005, pp. 1–10). By 1988, Barron's reporter Jonathan Laing quipped that Phoenix had become a one-industry town, with that industry being growth (Shermer, 2013, p. 336).

The flight of capital into real estate was a response to the lack of profitable investments in productive industry. This emptying contradiction of use and exchange value in suburbia necessitates the creation of a synthetic illusion of appropriated space that masks and contradicts the environmental domination that makes suburbia possible. Lefebvre (1991, p. 93) notes that although the house with its durable materials and stark outlines has an "air of stability about it", the "thin non-load-bearing walls...are really glorified screens". The house is a machine, "permeated from every direction by streams of energy which run in and out of it by every imaginable route: water, gas, electricity, telephone lines, radio and television signals, and so on". The contradictory transposition of an urban form developed in temperate climates to an arid climate was facilitated by political and technological innovations that permitted domination of the environment.

Suburban development was supported through the renegotiation of abstract and absolute space through nature. Under the euphemism of *reclamation*, the state built vast irrigation projects in the late 19th and early 20th centuries to tame area rivers—capturing sporadic rainfall for the benefit of commercial agriculture and mitigating flooding that had vexed earlier acquisitive inhabitants (Di Taranto, 2015). Heat had been an impediment to development prior to the widespread availability of affordable air conditioning. Ubiquitous sunshine was a major attractant in the siting of Air Force facilities in the area during the Second World War, paving the way for high-tech industrial development following the war (Shermer, 2013, pp. 71–90). The dry, sunny climate and associated landscape was a major attraction for tourists throughout the 20th century and an attractant to migrants (retired and not) fleeing cold winters (Logan, 2006, p. 84–108). In accordance with Lefebvre's writings, the mass migrations of tourism consumed (and, ultimately, destroyed much of) the produced rustic spaces that attracted those tourists. In a 1980 survey, 22% of respondents cited the desert climate as the primary reason for their migration to Phoenix. However, capitalist economic imperatives in job opportunities were actually more dominant at 29%, with personal issues like health concerns and distance to family rounding out the rest (Logan, 2006, p. 162).

The deleterious effects of sprawl in the American Southwest on traditional lifestyle amenities, the traffic, pollution and crime associated with growth represented an inherent spatial contradiction (Brasuell, 2014).

The low-density development of Maricopa County is emblematic of suburban landforms. House size, parcel shape, and yard vegetation are all similar across individual developments, often with homeowner's associations enforcing codes and rules restricting grass height, tree density, and other elements of the neighborhood ecology in the name of property value (Fraser, Bazuin, & Hornberger, 2016). These conventionally have been counter to guidelines for "water wise" landscapes and a desert aesthetic (Martin, Peterson, & Stabler, 2003; Sisser et al., 2016). Produced nature is a symbolic tool in the resulting synthesis. Whole identities form around residential subdivisions, with institutional landscaping signatures becoming more prominent in higher-income neighborhoods (Blake & Arreola, 1996). Single family homes are suggestive of individualism in form, but such individualism contradicts emergent forms of collectivism designed to generate identity. Thus, suburban landscapes demonstrate Lefebvre's analysis of how spaces encode and reproduce ideology. The distributed boxes of suburban housing and high-rises alike have a spatial fixity that precludes new forms of space able to encode forms of existence outside the established order. As with the sale of other commodities, conformity is value.

3.2. Use and Exchange Value Get Out of Phase: Reasserting Use Value in Neighborhoods

The vast tract housing developments that became ubiquitous in Maricopa County by the early 2000s are a material expression of how suburbanization emphasizes exchange value through interchangeability. The political climate of Phoenix allows the use and exchange value of suburban development to persist through a contradictory synthesis of libertarian American-West mythologies overlaid on suburban spatial form made possible by collective investment (Sheridan, 2007).

Over the 2000s, unsustainable increases in the exchange value of properties led to low affordability with respect to income, price-to-rent ratios, and other indicators (Belsky & Richardson, 2010). In Arizona, the inflation-adjusted home-price appreciation from 1998–2006 was among the highest in the nation at >80% (FHFA, 2009), further exacerbating the contradiction between homes as use value and houses as exchange value. This was fueled by a dominant discourse of population growth (Gober, 2005). Housing completion data suggests the region has urbanized in wide bands, rather than as a more narrow "front-line" offensive typical of other suburbanization patterns (Gober & Burns, 2002). Instead, urban patterns indicate densification and urban infill had de-coupled in the Phoenix Metropolitan area (Atkinson-Palombo, 2010). Additionally, parcelization (subdivision) outstripped population growth beginning in the mid-2000s (Figure 1).

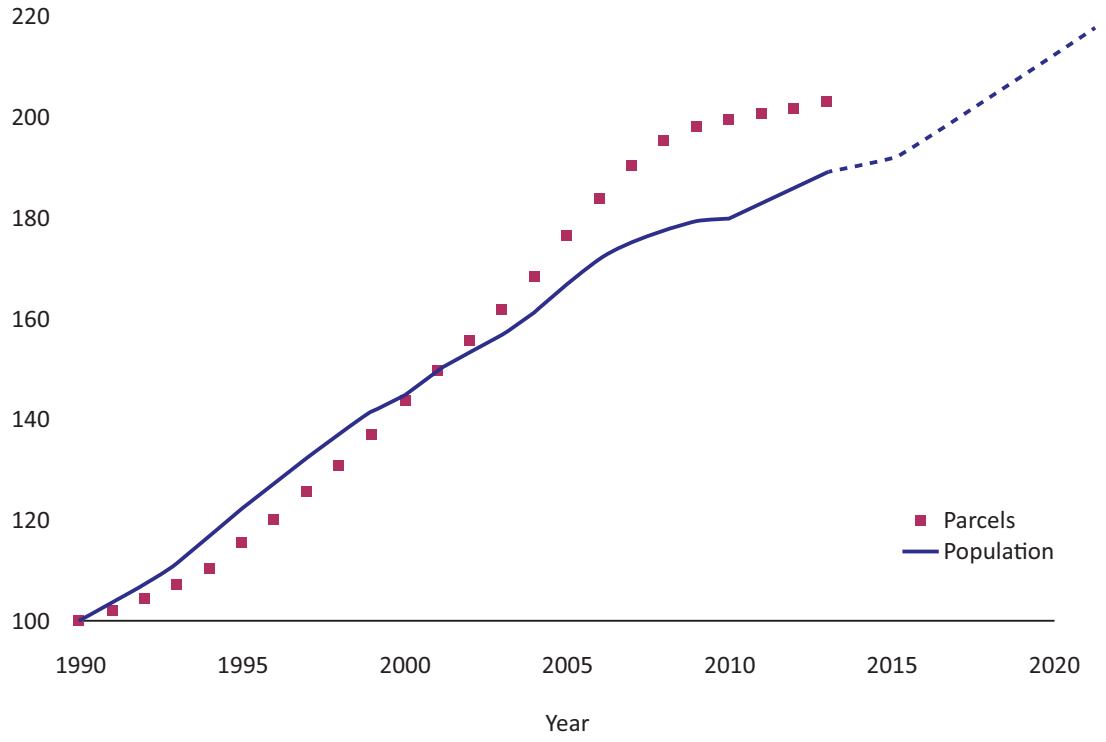

Figure 1. % growth (y-axis) in population and residential parcels across Maricopa County since 1990 (1990 levels = 100%). Data from: ADOA-EPS (2014), MCAO (2013) and USCB (2014).

The emphasis and seeming dominance of exchange value can be further abstracted to speculative real estate markets. Global financial practices privileged exchange value by aggregating and bundling mortgages into securities and trusts. The users of those structures were hidden from financial capital that saw them only as abstract, aggregated numbers on a balance sheet (Fields, 2017). This depersonalized relationship obscured the moral dimensions of foreclosure (and housing practices in general), facilitating collective participation by the broader society in these processes of violence with little awareness of its effects for humans or nature.

Even during the so-called housing bubble, foreclosure had been a substantial feature in defining suburban spaces. As Figure 2 illustrates, mortgage foreclosure in Maricopa County during the housing boom was common even during the boom and remained common after the bust subsided (The Information Market, 2013).

Foreclosure became a crisis when it became a crisis of global capital. Complex tensions between use and exchange values were unearthed at the neighborhood scale. For example, investors purchasing foreclosure homes had the surprising effect of keeping long-time occupants in their homes (Pfeiffer & Lucio, 2015). Without a dialectic view, planners might come to false conclusions about the potential value and challenge associated with this transference of capital and its role in facilitating neo-liberalism by conserving community and reducing monthly housing costs through leases rather than mortgages.

The dialectical relationship between use and exchange value is further dramatized in the analysis of neighborhood ecology. Historical syntheses of urban spaces accumulate to shape biodiversity and ecological function (Essl et al., 2015). Many studies support the hypothesis that urban biodiversity and greenness is governed by a luxury effect, where higher biodiversity and more complete tree canopies are present in regions with higher income (e.g., Schwarz et al., 2015). This is consistent with Lefebvre's (1991, p. 366) observation of the contradiction between symbols of absolute nature like gardens and parks that often form a vital component of some of the most effectively dominated abstract spaces.

However, the ways ecological patterns and processes relate to urban spaces is contradictory. Synthetic valuation of greening as produced nature is contingent on domination, as noted by the absence of correlation between high income white communities and signals of ecological richness in cities like Baltimore (Boone, Cadenasso, Grove, Schwarz, & Buckley, 2010) and Cincinnati (Berland, Schwarz, Herrmann, & Hopton, 2015). The Baltimore case highlights the importance of history—and whether neighborhoods were built for affluent residents—as a predictor of tree canopy. The Cincinnati case illustrates the significance of maintenance in some urban ecotypes, where unmaintained spaces can lead to (undesirable) urban forests at the same time careful management constructs a forest of prestige in another area of the city (Berland et al., 2015; Heynen, 2006). These examples contradict the findings of earlier studies that highlight how and where differential space may be produced through negotiations between humans and nature are carried out through maintenance and order.

In Maricopa County, legally enforceable covenants, codes, and restrictions (CCRs) and homeowners' associations (HOAs) dictate management on private lots. The specificity and frequency of yard-management clauses

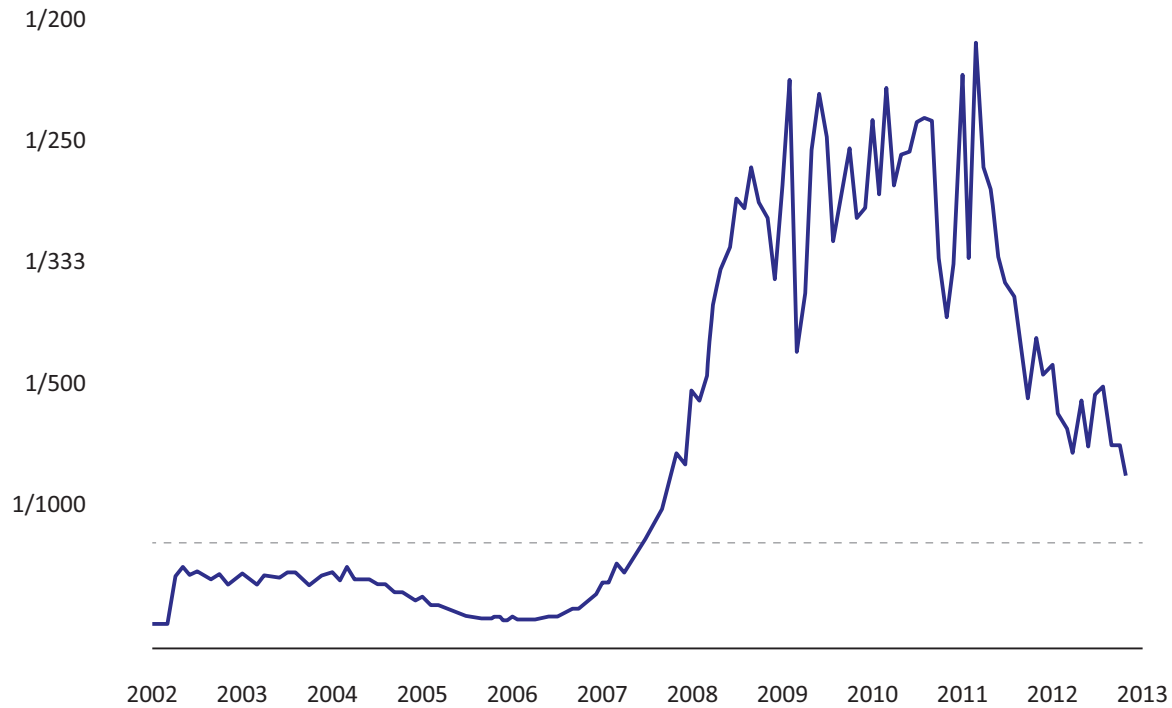

Figure 2. Maricopa County monthly foreclosure rate: 2002–2012. Data from: The Information Market (2013).

appearing in CCRs has been increasing over time (Lerman, Turner, & Bang, 2012; Martin et al., 2003). HOA institutions often encourage management behaviors that oblige people to maintain properties in accordance with a group standard (Fraser et al., 2016; Nassauer, Wang, & Dayrell, 2009; Sisser et al., 2016). This suggests that under conditions of foreclosure, neglect, or vacancy, neighborhood institutions may 'fill in' for absent homeowners. This response is consistent with the strong evidence that foreclosure introduces spillover effects on neighboring property values and upkeep (Zhang & Leonard, 2014). However, many homeowner associations (HOAs) suffer a loss of revenue due to the financial stresses upon their member properties and, therefore, ability to enforce green lawns through traditional means of prescribed planting, pruning, watering schedule, and sod inspections (Perkins, 2010). In areas of Maricopa County where remnant agricultural infrastructure continued to deliver water, citrus trees became overgrown and created a canopy for rats to traverse neighborhoods and exact damages on home wiring (Inglis & Thompson, 2009). In areas without irrigation, sod died. In neighborhoods without sod, annuals infiltrated the mulch used to xeriscape (Ripplinger, Collins, York, & Franklin, 2017).

3.3. The Secret Lives of Plants: Appropriated and Dominated Spaces following Foreclosure

Lastly, the domination of suburban abstract space is most clearly evident in parcelized landscapes and the subtle ecological aspects of domination were made evident during the foreclosure crisis. Robbins (2007) notes homeowners are often dominated into reproducing the political economy of American lawn care, with the vegetation itself actively participating in a system of coercion to stave off weedy displays and unmanaged growth or, in unirrigated spaces of the Southwest—unwanted death.

During the foreclosure crisis, use value and exchange value got out of phase, with use value a durable product of capital investment, while exchange value was mediated by a volatile market pricing mechanism. The bubble was a bubble in terms of both the home quantity based on per capita number of parcels (MCAO, 2013) and pricing (S&P Dow Jones Indices, 2014). Prices peaked at almost twice what would be expected based on the rate of inflation, before falling in half, and then returning to equilibrium rates by the beginning of 2013. The logic of the spatial fix in the 'production of nature', is one in which labor power (commodified human labor) renders biophysical processes amenable to accumulation (Smith, 2008). The result is a socially produced 'nature of foreclosure' that mingles biophysical with political economic processes. Urban tree canopies and lawn monocultures boost (or degrade) property values and ordinances and neighborhood stabilization activities aim to control them.

Although one might expect widespread home desertion and neighborhood vacancy rates to lead to declines in vegetation management and vitality, mortgage delinquency and distress is not entirely synonymous with vacancy (Lambie-Hanson, 2015). The effect in Phoenix during the foreclosure crisis was muted and spatially uneven (Minn et al., 2015; Ripplinger et al., 2017). Biodiversity increased as weedy species invaded and horticultural assets demurred (Ripplinger et al., 2017). Distinct spatial processes made and re-made lawns and neighborhood vegetation during the crisis, establishing new regimes of species distributions and abundance likely to resist re-colonization by 'lawn people' through their seed banks.

Foreclosure has not been equally visible across neighborhoods, in part because of how nuisance laws were enacted. By aestheticizing a particular material condition as an experience of disgust, it becomes discursively rendered as a threat to public welfare without having to engage with the underlying property relations that explain why the material condition arose (Ghertner, 2015). Aestheticizing material conditions and disconnecting them from social-ecological context allows nuisance laws and other codified norms of bourgeois civility to implicitly place blame on marginalized residents for maintenance issues in spaces they inhabit but cannot fully control. For example, the claim that 'blight' threatens 'neighborhood stability' was used to legitimate redlining, a racialized housing policy that entailed systematic denial of credit to neighborhoods with historically that were home to racial and ethnic minorities, reinscribing racial segregation in US cities (Kelly, 2014). Because of this history, legal devices linking aesthetic incivility to public welfare may not benefit residents in spaces of disinvestment, particularly when legal action reinforces existing property relations.

A framing of *madame la Terre* as an actor in the process of class reproduction turns a focus on unruly urban ecologies produced through neglect to questions of environmental justice. Incompletely dominated environments burden residents with an array of costs, risks, and sources of stress deeply bound up in the habitual expressions of social inequality in urban landscapes. Unmaintained vegetation obstructs lines of sight, eliciting fear of violence and reinforcing patterns of exclusion, particularly exclusion of women and children, from public space (Brownlow, 2006). Neglected buildings can give rise to indoor 'ecologies of injustice', where animals appropriate and modify space, forcing residents to contend with physical hazards and social stigma (Biehler, 2013). The daily experiences of confronting widespread dereliction may constitute an 'ordinary environmental injustice' that compounds social disadvantage by undermining capabilities of vulnerable residents with limited social and spatial mobility (Whitehead, 2009). Residents respond to the spatial contradiction between use and exchange value by organizing lawn mowing on unmaintained vacant properties as, literally, a grassroots reclamation and defense of space (Kinder, 2014) or through public protest to shame neglectful property owners (Kerr, 2011).

4. Conclusions

The insights revealed through synthesis are essential to understanding neighborhood, municipal, and regional efforts toward neighborhood stabilization and their long-term impacts on the production of foreclosed spaces. Maricopa County's arid climate makes it unique among major suburban areas in the United States. This uniqueness has yielded distinctive manifestations of suburbia's ecological contradictions that were drawn into focus by the foreclosure crisis. The resulting analysis uncovers meanings assigned to urban ecologies and their ruliness as a means of drawing legal devices such as nuisance laws and housing codes into a more-than-human frenzy.

In contrast to a positivist perspective that seeks explanations in logical coherence and equilibrium, the Marxian dialectic employed by Lefebvre throughout *The Production of Space* looks for contradictions. These contradictions are opposing forces (thesis and antithesis) that cannot permanently co-exist in space. The resolution of these contradictions results in synthesis. However, synthesis ultimately proves unstable, resulting in new contradictions and a continuous historical process of change (Harvey, 2014). Rather than looking for things that make sense, dialectical analysis looks for the things that don't make sense.

This mode of analysis is non-deterministic and, therefore, primarily valuable for a posteriori explanation rather than a priori prediction. However, such narrative-building is useful for providing a historical grounding for urban planning decisions. Critical consideration of new contradictions will help understand what makes such synthetic decisions incomplete and mutable.

Conceiving of human and non-human actors as having a dialectical rather than Cartesian relationship permits a rich conception of these actors as co-constitutive. The contradictory relationships between human actors, and between humans and non-human forces (soil, water, sun, wind) under capitalism results in a process of rule and ordinance enforcement changes that requires continuous resynthesis to reproduce class relationships. Aesthetic markers of dereliction are pathologized as 'blight', an infraction against bourgeois norms of civility correctable through legal action.

Finally, both the theoretical constructs of space and the methodological implications of these constructs have become increasingly relevant to the work of urban planning since the time of Lefebvre's writing. The positivist science that dominates study of the non-human domain has been exceptionally powerful in facilitating both human understanding and domination of the environment. However, accepting a Cartesian worldview uncritically can blind the analyst both to the ideologies hidden behind that worldview, and to the Heraclitan flux that makes all ideologies, problems, and solutions impermanent. A dialectical focus on a continuous process of contradiction and synthesis can better equip the analyst to identify and address the unique human and non-human challenges facing the future of urban planning.

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Conflict of Interest

The authors have no conflict of interest to declare.

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