CONFLICTS OF RESIDENTIAL LANDSCAPING:

OVERVIEW, FRAMEWORKS, AND THEMATIC ANALYSIS

By

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A THESIS

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THESIS ABSTRACT

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Residential landscaping is a focal point of academic observation regarding design, ecology, sociology, and geography. Previous studies often have conflictual dimensions, yet rarely is the focus of studies regarding residential landscaping centered around conflict. This exploratory thesis seeks to create a multidisciplinary framework, built upon Conflict Resolution studies, with which to analyze conflicts of residential landscaping in the United States. It includes numerous case studies of relevant conflicts. The final chapter contains a thematic analysis of 12 structured interviews conducted with participants who have been party to residential landscaping conflicts. Four overarching themes were discovered. The connection to the preliminary framework included in this thesis is connected to the thematic results and leads to suggestions for future research.

This Thesis contains previously un-published co-authored material.

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TABLE OF CONTENTS

Chapter Page

LIST OF FIGURES

Figure Page

LIST OF TABLES

Table Page

CHAPTER I

INTRODUCTION: WHY LANDSCAPING CONFLICTS ARE IMPORTANT

"I believe a leaf of grass is no less than the journey-work of the stars."

-Walt Whitman, *Song of Myself (31)*

Whitman's description of a single blade of grass is meant to expose the transcendental nature of the cosmic in the mundane and minute (University of Iowa, 2021). While the following thesis does not link grass to the entirety of the cosmos, it does attempt to show that grass, and the seemingly banal and ubiquitous residential landscapes in which it resides, are astoundingly complex objects with countless meanings. In addition to being the journey-work of the stars, a blade of grass in the average lawn is likely the culmination of centuries of landscape design, symbolic shows of status, biotechnical advancement, and the progression of capitalism in the United States. Whitman's belief that grass is composed of stardust has essentially been scientifically agreed upon. Conclusions over the importance of landscapes as societal objects, on the other hand, are matters of rich, lively, and cross-disciplinary debate.

By focusing on the conflictual side of residential landscapes, this paper attempts to provide another tool for synthesizing their various roles and meanings. The basic aim is to use the lens and framing of "conflict resolution" or "conflict management" to construct a multiscalar and interdisciplinary mapping of the ways we interact with our yardscapes. A study involving perspectives of parties to landscaping conflicts was conducted, and its findings help to provide a relief to this mapping. As observed throughout, conflicts over residential landscaping have serious social, political, personal, financial, and environmental

consequences. This paper also explores what it means to "scale" this conflict to larger landscape conflicts and to what are sometimes referred to as "Culture Wars". Certainly the focus of these discussions is the landscape which has been called "The American Lawn" (Teyssot, 1999), or the "Industrialized Lawn" (Weigert, 1994). While a vast number of landscaping schemes exist throughout the United States, scholarship and popular discourse tend to center on the lawn.

Establishing a Multidisciplinary Framework

The purpose of the first eight chapters of this thesis is to establish a cross-perspective framework that can be integrated with a conflict studies lens. The framework established has two layers. The first is the "skeleton" of Conflict Resolution (CR) studies as defined in this paper. As explained below, this framework is broken down into elements such as parties to conflict and types of communication. This paper also explores ideas like "interests" and "values" in case studies and interviews while providing contextual nuance to these interests and values. The concepts included have been deemed as highly important in understanding conflicts of residential landscaping from as many perspectives as possible. Establishing "Conflict Resolution" as a lens leads us into the important historical and conceptual literature. The various hypotheses, theories, research, and observation of other fields which look at human interaction with residential landscaping are the "organs" within the CR skeleton.

The information in the first part of the thesis forms the initial method for finding codes in the interview and survey portion of the thesis, Chapter X. The study conducted used structured questions which were conflict-centered, though they were open-ended enough to allow participants free reign to express themselves. Because CR studies are so open-ended, there is no accepted "code-book" for themes to use, though the paper uses an explicit set of CR designations

and markers. Therefore, the final thematic analysis was hybrid "inductive-deductive" method, whose benefits and drawbacks are discussed in the methodology and discussion sections. Two researchers coded the interviews and agreed on general themes, while the principal researcher wrote the conclusions. The final chapter is co-authored by Janette Avelar. This process hopefully allowed for a good comparison of what might be expected to take place based on the preliminary thesis chapters compared to what were found in the interviews.

CHAPTER II

THE "CONFLICTUAL LENS" AND LANDSCAPE CONFLICTS

Why Use the CR Lens?

Practitioners and scholars of Conflict Resolution (CR) must answer the question, "Why center the observation of a particular event or occurrence through the lens of conflict?" In a negative light, centering conflict runs the risk of entrenching zero-sum games and us vs. them mentalities (Spruyt et al., 2018, 17). Though residential landscaping conflicts certainly occur, the outward manifestation of conflict in landscaping is arguably not the most common reaction to disagreement. Even though neighbors with wildly different landscaping norms may grumble about it privately, we are not generally are not attacking our neighbors outright over the height of their grass or the types of flowers they choose. Why, then, would we want to take a harmonious neighborhood with homogeneous landscaping and go rooting around for conflict? The answer is that this analysis is not just using a "conflict" framing, but a "conflict resolution" or "conflict management" lens.

Fields from international relations (Rothman & Olson, 2001) to the medical profession (Wang et al., 2020) have used a conflict study lens that incorporates several common elements. The "conflict orientation" has been explicitly used to study the sociology of landscapes, with the idea that the culture of landscaping is a conflictual space between "life" and "form"(Weigert, 1994, p. 81-82), and landscaping conflicts have been studied as examples in CR case studies (Merry, 1990, 17). Conflicts over front yard landscaping are common tropes in popular culture. Never truly, however, has there been an explicit analysis of what conflicts over residential landscaping mean when considering

the cross-disciplinary nature of both CR studies and studies concerning residential landscaping. This despite the fact the disciplines that observe the human interaction with residential landscapes (sociology, political ecology, human geography, landscape design, and community planning to name a few) arguably have "conflict" as an overlapping theme. This paper is also intended to explore how central the notion of conflict is to residential landscaping.

A core element to this paper is that the CR lens asks us to look at the interests and values of conflicting parties, that which is beyond the outward literal discursive expressions (positions) they make. The notion of "interest based bargaining" was popularized by Fisher and Ury's "Getting to Yes" in 1981, and since then, interest-based conflict management has become central to many CR theories (McCorkle & Reese, 2018, pp. 33-35). To briefly explain, positions are our demands for a particular outcome, interests are the underlying reasons we make those demands, and values are the moral or ethical reasons that lie behind our interests and positions. Interests are often categorized as substantive, procedural, and psychological (McCorkle & Reese, 2018, pp. 33–35). Substantive interests are tangible things we value, procedural interests are our views on the right way to go about doing things, and psychological interests are those who boost our psyche or spirit. In our discussion, substantive interests might be property values, procedural interests might be whether we call the "lawn police" or talk between neighbors, and psychological interests might include aesthetic satisfaction, or even a sense of security and belonging.

Any framing of an issue, or any lens used to observe an issue, is like a pair of secret decoder glasses. A single lens will bring certain elements into the focus of our observation while slightly obscuring others. As one environmental CR scholar puts it, "Any way of seeing is also a way of not seeing," (Daniels &

Walker, 2001, p 103). In a positive light, "conflict thinking" offers those who have perceived an injustice against them a way to vocalize their grievances in an environment with power dynamics that often enforce silence (Spruyt et al., 2018). Landscaping is a communicative or "vernacular" act for many, if not all, yard tenders (Feagan & Ripmeester, 1999; Kimber, 2004; Mustafa et al., 2010). Using a CR framing is useful in any communication, even ones we may not consider conflicts, because it allows us to look at underlying issues that may not be obvious from the literal meanings of used language.

The CR Lens and Landscaping

The CR lens necessitates that we observe multiple simultaneous realities in any given interaction (Augsburger, 1992). Problems of landscaping can benefit from looking at the realities of the landscaper, the homeowner, the yard tender, the passers-by, and any others in society all at the same time. A single frame may yield one component of a potential solution, but it might also only center solutions in one discipline. For instance, solutions to problems of landscape disputes in Landscape Architecture are often focused on design (Hill, 2015; Nassauer, 1995), while solutions in Political Ecology and Landscape Psychology are often centered in human-behaviors solutions (Neel et al., 2014; Robbins, 2007). Studies discerning why we have landscape preferences are well-explored, and the implications for agreement or disagreement on design will be explored further in this thesis. While this paper draws on these frameworks, it attempts to see their elements not in a hierarchy ranking disciplines by importance, but by the importance of different elements of interest to those who "speak" through landscapes.

Disentangling motive, intention, and impact is difficult in the case of socially visible landscaping because there are countless vectors of social and

biophysical input. These are all displayed in an object, the "yard" or "residential landscape". As Andrew Weigert puts it, "The physical and social realms are simultaneously realized in a single object, a 'lawn.'" (1994, p. 81). They are products of our performance as well as a stage on which many of us perform (Casid, 2011; Lang, 2014). Because of this, at least one scholar has viewed landscaping through a "dramaturgical" lens (Weigert, 1994,. p. 83). Dramaturgy is a sociological framework which employs the theatrical metaphor, and sees human interaction as actors on a stage performing to the world (Goffman, 1978, 44-61). While this paper is rooted in CR theories, the notion that our yardscapes are simultaneously performance and a stage on which one performs should be in the back of our mind when analyzing the meanings of landscaping.

Interest-based negotiation theory is integral to this paper's CR framing. For this reason, it seems important to ask, "To what extent are discursive landscapes negotiations?" Just as literal negotiation happens over the landscape design of infrastructure projects (Hill, 2015), front yard landscaping can be seen as a conversation attempting to settle on a design which both reflects the values of the landscape owner while not causing conflict or disharmony with neighbors. Even if we do not hear verbal language about landscaping from our neighbor, there is evidence to suggest that people landscape in a certain way because of what they think about their neighbors' preferences in home landscaping (Nassauer et al., 2009). For this discussion, negotiation must include at least two parties in discourse, who are attempting to get some sort of benefit from something that the other party has (Ehlich & Wagner, 2011). If residential landscapes are the signifier of an intentional communication, and if this communication is sufficiently similar to verbal communication, then negotiation ought to be considered a possible form of its expression.

Landscapes are "technonatural". That is, they are in communication between humans, their technologies, and the natural world (Mustafa et al., 2010, p. 601). Yards are also subject to laws, codes, and regulations, which may restrict allowable input levels, yard sizing, and the allowable plant species and growth patterns in a yard. The space for conflict to arise clearly exists between tenders of yards and government entities, and this paper will analyze many cases where citizen-government conflict exists regarding residential landscaping. Homeowners' Associations have captured a large slice of the discourse on landscaping conflicts (Turner & Stiller, 2020), which will also comprise a portion of our case studies. Landscaping conflict, then, can at a minimum be considered on the interpersonal, environmental, technological, political, and community scales.

Scales and Types of Landscape Conflict

A multidisciplinary analysis with multiple scales may run the risk of seeming boundaryless in its scope. Preventing the analysis from being unending is especially important because this framework does not have a strict definition of "conflict" beyond parties self-identifying that they are in a conflict, or when two or more parties are deemed to be in clear and outwardly manifested disagreement. To constrain a CR framing of landscaping conflicts it is useful to look at the definitional boundaries of "landscaping", how far the present discussion may extend on what scales, and the expected types and intensities of possible conflicts over residential landscaping.

The Similarities and Differences of the terms "Landscape" and "Landscaping"

"Landscaping" is a word deeply intertwined with notions of "Landscape" in the United States. It was as recent as 1930 that US residents introduced the term "landscaping" as a noun to the English language (Steinberg, 2006, p. 21) which is a derivative of the verb "to landscape" (OED, Landscape, v.). The verb "to landscape" was used in the late 17th century, but its primary meaning was a visual or conceptual depiction of the landscape until the early 20th century, when the verb more often meant the inclusion of harmonious design in infrastructural development (OED, Landscape, v.,). Perhaps due to the cultural and commercial explosion of landscaping as an industry the two terms seem to be interchangeably used in modern parlance. There is no doubt that "landscaping" (i.e. the human process by which landscape architecture is implemented) is a crucial part of this study of "Landscape Architecture", though as seen in the section on the disciplinary lenses, "landscaping" is vulgar, or vernacular, while "Landscape" is generally used on a more grandiose scale. Put in theory jargon, "Landscape is landscaping. This is not a tautology. Landscape's effect of a continuous present should not occult landscape's action as a form of the progressive present (Casid, 2011, p. 103)."

Scales of Landscape and Landscaping Conflict

The words "landscape" and "landscaping" may be interchangeable in many peoples' daily vocabulary, but their difference is important when attempting to scale the meaning of landscape conflicts. If landscaping were purely the realm of traditional landscape design, then we might only be able to use scales from landscaping conflicts that apply in the vernacular, parcel-specific realm, such as the commonly used scales of orderliness and messiness. If the view of landscaping is broadened to include any intentional interaction where human agents transform the physical characteristics of their world to suit their

psychological needs, then one could perhaps use scales like "value reflection" to analyze landscapes. Landscaping must then have at least the elements of "intentional design" (even if that design is intentionally hands-off) and of serving the psychological needs of the designer (or commissioner of design).

Multiscalar analysis has thus been tagged as an appropriate way to look at residential landscaping and social interaction (Cook et al., 2012; Roy Chowdhury et al., 2011). That is, there is not simply one "scale" by which we measure the ways people interact with their environments. Take a public rain garden. It is can be measured based how well it mitigates flooding or filters chemicals; it can be measured by its social value, how well it integrates into the desires and needs of the community around it; it can be measured by its political value, as an indicator of a policy "win" for a particular group; it can be measured by the general opinion of the beauty of its plants and design; and it can, perhaps, be measured by its symbolic value to identity groups. The need to observe each of these scales is crucial to discerning the reasons we choose to dispute the existence or design of landscapes.

Geographically, conflicts of landscaping can exist on a spectrum from the quotidian to international politics. If one were to equate "landscape conflict" and "landscaping conflict", they might find that it scales up to the international. For instance, we might wonder if we can exclude a conflict such as the "Great Renaissance Dam" from our discussion. The conflict over the Ethiopian decision to build a hydroelectric dam on the Nile has become a top-level matter political conflict between Ethiopia, Sudan, Egypt, and the international community. It meets the definitional requirement that it alters the existing design of the land in a way that tailors to human use or aesthetics. However, the Dam has such a clear and pressing utility purpose which so heavily outweighs the need for any

aesthetic design, that to call it a "landscaping conflict" would be a stretch. On the other hand, the project itself, and the physical object at its center, is surely becoming a nationalistic symbol enmeshed with the psychology of millions of people, which may link it to our discussion of the symbolic conflict that landscaping represents (Drake, 2016). Despite that the Dam is certainly not "residential landscaping", one might hope that some takeaways from conflicts over residential landscaping resonate on a larger scale such as this.

Politically, consider the intertwined role of infrastructure with landscaping in the United States. As highways were expanded, medians with green space became the ward of governments to decide on which designs and plants to use (Steinberg, 2006, p. 34). The sanctioning of government contracting in landscaping, as in warfare, might be seen as part of an "industrial complex". In this case, the "landscape-industrial complex" is highly intertwined in a strikingly similar system to the military-industrial complex, where the government subsidizes a particular goal for university researchers to study, which in turn enhances the financial success of private sector industry (Jenkins, 2015, pp. 35-61). The political landscaping conflict is most often exemplified at a local level with the municipal weed enforcement body, who in some cases uses privately-contracted companies to enforce compliance with landscaping laws.

Types and Intensities of Landscaping Conflict

Because our study analysis will deal with an open-ended, self-selected definition of conflict, the framework requires us to establish a preliminary typology to identify conflicts. The historical and theoretical view below will lead us to at least five types of landscaping conflict. The first is "neighbor to neighbor", where the conflict originates, or involves direct contact or communication, between two parties next door to each other or on the same

block. The second is HOA conflict, where an individual is in conflict with their homeowners' association. The third is "municipal or state enforcement", where an individual or household is in conflict with a city or county agency. The fourth is "Human vs. Nature", which is a conflict some perceive as existing between humanity and non-human elements as parties to conflict. The fifth is "formal political conflict", which involves lobbying groups, citizen councils, and/or government agencies using or changing code in response to residential landscaping.

Many different types of intensities may be expected. Elements that increase intensity include litigation, violent communication, the degree of negativity in relationship perception and emotion, and the short and long-term, singular and cumulative impacts of the conflict on the parties' lives. Intensity may also be measured by how repetitive or cyclical the conflict is. For instance, a one-time minor argument with "no hard feelings" between a couple over the flowers in their front yard may be low intensity, a neighbor-to-neighbor conflict with verbal jabs and occasional passive aggressive arguments may be medium intensity, and a citizen-city conflict which draws national attention and includes tens of thousands of dollars in fines, significantly affecting the day-to-day life of the individual, may be deemed high intensity.

CHAPTER III

MODERN AMERICAN RESIDENTIAL LANDSCAPE PREFERENCES: THE ROOTS OF VALUES AND INTERESTS

Surveys and studies have thoroughly documented what elements certain groups of people prefer in their landscaping (Herzog, 1989). A host of researchers have found that spaciousness (Woodcock, 1984) , mystery, orderliness, and signs of human care (Nassauer, 1995) are valuable to the common observer of landscapes. Almost invariably, research about design preference in residential landscaping must leave purely essentialist discussions in order to grapple with the human, sociocultural element in landscape preference and design. Design elements are a debatable mixture of nature and nurture (Woodcock, 1984). Preference also changes in a number of ways based on regional climate, socioeconomic class (Robbins & Sharp, 2003), ecological awareness (Mustafa et al., 2010), the way your neighbors set up their yards (Nassauer et al., 2009), and even what our major is in college (Zheng et al., 2011). As renowned social archaeologist Christopher Tilley puts it, "Landscapes are contested, worked and re-worked by people according to particular individual, social and political circumstances (Tilley, 2006)."

Notably, however, several of the factors listed above which might be expected to have the greatest impact on landscaping choice, especially bioregion and ecological awareness, are surprisingly tempered by the influence of the American Lawn (Robbins & Sharp, 2003; Yabiku et al., 2008). To properly observe the interests and cultural values involved with residential landscaping, and to parse those out from innate preferences, we must at least have a cursory understanding of the sociohistorical lineages of landscaping in the United States. The residential landscape which has undoubtedly captured the central focus of

scholars, the American Lawn, is also the focus of the historical survey of American landscaping. Nearly all of the literature which examines landscaping choices focuses on the lawn and its counterpoints, with the exception of some modern human geography (Lang, 2014). Alternative landscaping is often portrayed as the landscape of the "other", and the wealth of research on lawns makes them the centerpiece of most discussions. Whether or not this lawn-focused narrative is warranted, it is the centerpiece of the academic discussion on human interaction with landscaping with the United States.

Origins of Open Space Planning and the "Savanna Hypothesis"

The ubiquity of the American Lawn has been largely regarded as a byproduct of human evolution and humanity's intrinsic psychology (Steinberg, 2006). Some argue that open space coincides with our evolution as grassland dwellers (Balling & Falk, 1982; Falk & Balling, 2010). Others note the inherent safety provided by having a viewshed (Mustafa et al., 2010). This is complicated by the theory that humans prefer "mystery" in a landscape (Herzog, 1989, p. 29), which means that we prefer landscapes which invite us in to discover more "information". One logical argument against the Savanna Hypothesis is that the tallgrass environment as we originated in Eastern Africa has little to do with the design of a low-cut lawn, which may be more similar to a "green desert". As many observers have pointed out, if the lawn were a natural extension of this innate biological presence and nothing more, it would exist in landscapes across the globe. As is, the United States-style lawn is common in only a handful of countries (mostly white-dominant British colonies like Australia and the US), and so sociohistorical origins must be considered.

The story of "landscaping", especially regarding lawns, is usually traced to a European design lineage, such as the French architects of the 1600's or English aristocratic designers (Jenkins, 1994, p. 13; Wild, 2013, p. 238) . When discussing landscaping's origins in the United States, it is often placed within the "Frontier Myth", which has embedded into it "The Pristine Myth". That is, landscape historians see the European dominance of landscape as a change from the dominant philosophies of many Native American peoples. However, in the pre-Columbian era, "landscaping" for the purposes of agriculture, ecosystem enhancement, and even ease of residential living was perhaps more widespread than it was at the birth of the United States (Denevan, 1992). The very mindset that is explored below, of a misplaced sense of wildness and nature, is due to the misunderstanding of the Americas as a wild place to be landscaped (Robbins, 2011). While many indigenous people have lived on the savannas of the Great Plains, many have also continuously lived in every type of landscape in the United States.

One local example is the interpretive historical site at Dorris Ranch in Springfield, OR (see Figure 1). When white settlers and traders arrived in the area, the Winefelly

Figure 1: A replica Kalapuya plank house, with camas in the foreground and European grass species dominating the rest of the landscaping.

Kalapuya had been creating open space on the premises for their own purposes for centuries, if not millennia (Zenk, 2020). They did so with specialized controlled burning in order to build settlements, but primarily to encourage important edible and medicinal forbs such as Camas (Lewis, 2016). As European settlement rapidly destroyed the Kalapuya population with conflict and disease, it saw the centuries of landscape transformation not as a way to live in symbiosis with the environment, but as a perfect place to import cattle and set up shop. After the Kalapuya were down to 400 members, they conceded their territory in the controversial Willamette Valley treaty, being forced into the Grand Ronde and Siletz reservations, where most descendants (around 4000) live to this day. While the Dorris Ranch site has a replica cedar plank house and mentions the Kalapuya, there is no indication of any sort of inter-cultural violent conflict, though it seems likely that the original homesteaders on the site did so illegally. Today, while camas, white oak forests, and other important native plants still exist, the grounds are dominated by the vast filbert orchard and European turfgrasses.

Figure 2: Modern Landscaping at the Cahokia Mound Site, including lawn stripes. (Retrieved from Wikimedia Commons)

Another telling example of the displacement of indigenous landscape architecture are the Cahokia Mounds in Illinois (Figure 2). At one point, it was the largest population center in North America, with a design that many historians consider on par with other great

historical civilizations (Young et al., 2000, pp. 1–3). Clearly, the Mississippians did some clearing out and flattening of space for the use of sport and activity, including the game of Chunkey, which was explored in another CRES master's thesis at the University of Oregon (Gregory, 2021). Today, if you visit the Cahokia Mound site, although the staff has tried to bring life to its native origins, the landscaping there is clearly of European-American origin; imported oaks and mown fescue, the Europeanized version of the native American savanna (Barnett, 2016). Whatever the residential landscaping of Native Americans before European contact, it has been plowed under, bulldozed over, and replaced not only in design, but in philosophy of land management.

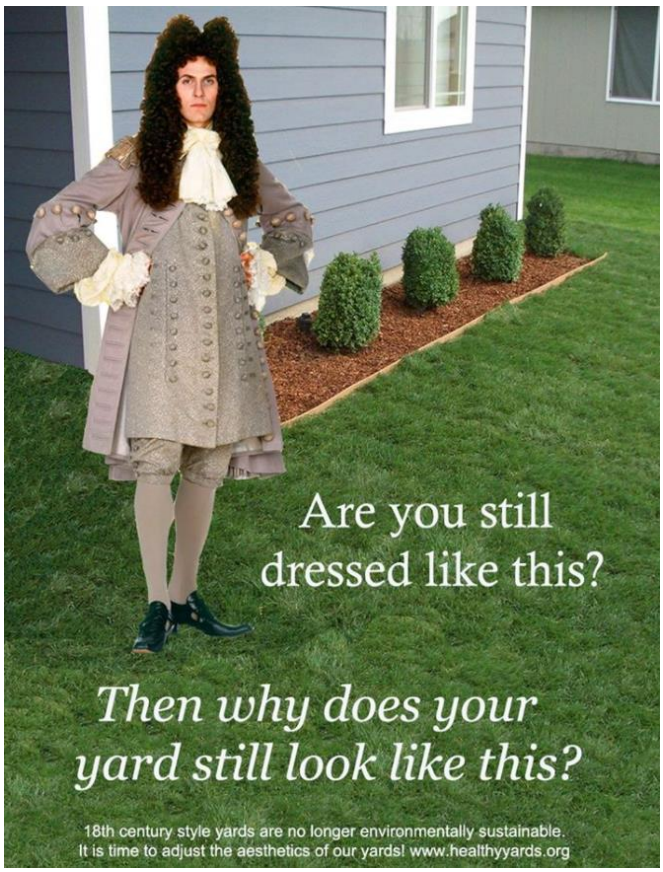


Figure 3: Lawn-reduction groups such as Healthy Yards often draw on the colonial history of the lawn to prove it is "out of touch". (Used with permission by Healthy Yards)

Europe and Colonial America

A Facebook post circulated from a page called *Healthy Yards* in 2019 featured a man dressed in Georgian-Era British aristocratic clothing and a wig, standing in a perfectly cut monoculture turf landscape (Figure 3). Next to the aristocrat, the caption reads "Are you still dressed like this?" while the text overlaid on the lawn reads "Then why does your yard still look like this?" (*Healthy Yards,* 2019). There is truth in this anti-lawn propaganda. The lawn was

a new landscape fashion sweeping England and Europe, which meant that they found use in the landscapes of Thomas Jefferson and others still highly influenced by English fashions (Jenkins, 2015, pp. 14-16). Private European aristocratic lawns were indeed a laborious luxury afforded only to the nobility (Teyssot et al., 1999, p. 5), and were featured in the revision to Palace of Versailles (Thompson, 2006). However, the American Lawn took things a step further. While the British Lawn was cut from wild grasses, laid out like sod, and often rolled or hammered until soft, the American Lawn was a product of turfgrass bred for its "velvety" quality, deemed the most desirable aspect of a landscape (Teyssot et al., 1999, p. 5).

The origins of the lawn in the United States also stem from an anti-aristocratic notion, that of the Village Green. Early New England towns almost all featured this communal space, though the early American "Town Common" was rarely more than a muddy expanse cut through by wagon tracks and animals (Jenkins, 2015, p. 17). In fact, when replacing this space with lawns became the norm, some designers of the early 19th century lamented the loss of productive space to a green and unproductive landscape (Bormann et al., 1993, pp. 22-23). As the United States expanded and the economy slowly shifted away from almost all agriculture, village greens became more in line with idyllic English styles (Jenkins, 2015, p. 17). Still, the invention of turfgrass as we know it is essentially borne out of the need to replace old-world grasses with those suitable for livestock forage (Steinberg, 2006, p. 10). Thorstein Veblen contended in his seminal treatise *The Theory of the Leisure Class* that the lawn is a vestige of the cow pasture (Veblen, 1899). The new grasses that were introduced were ones whose value was nutritive, but which also responded well to particular grazing and management patterns (Casler & Duncan, 2003). Horticultural grass breeding

for landscape use flows out of this botanical lineage, leading to the merger of government and golf in the 20th century.

The Rise of Suburbia through WWII

As the earliest form of suburbs began to take shape in the early 19th century, the idea of a home which was an escape from the city but also a step above farm living began to take shape (Hayden, 2004, pp. 23-25). These new types of properties had the first real "front yards", and since they were cut from old agricultural fields, a rudimentary lawn was a natural design choice (Jenkins, 2015, p. 20). In the early 19th century, European observers noted the unkempt nature of early American landscapes (Jenkins, 1994, p. 19). By the pre-Civil War era, however, Americanized versions of the European landscape became popularized by a wealth of famous architects, popular writers, and even utopian religious communities (see figures 4 and 5) (Hayden, 2004, pp. 21-40). Suburban planning began to take shape in the mid-19th century, and the design lineage of this period firmly established lawns as a dominant landscape in a few ways.

Figure 4: Thomas Edison's mansion at Llewellyn Park. The lawn-heavy designs of this early suburb were highly influential. (Open Source, Library of Congress)

Popular architects such as AJ Downing espoused a well-kept, velvety lawn as ideal for home landscapes (Downing, 1849). Downing's ideas were not necessarily original or considered brilliant, but his *Treatise on the Practice and Theory of Landscape Gardening* was one of the most

influential texts for the American homeowner in the 19th century (Bormann et al., 1993, p. 25). His ideas were carried over by his partner AJ Davis in Davis' designs for Llewellyn Park, widely considered the first major attempt at suburban planning, in 1858 (Hayden, 2004, pp. 54-60). Following temporary success at private suburban planning, FL Olmstead, at the same time he was designing Central Park, also helped design Riverside, Il (Hayden, 2004. pp. 60-65). This development helped set an important precedent in suburban design that would lead to the large expanse of lawns we know today, establishing minimum yard setbacks from the curb (Hayden, 2004). One landscape historian remarked that Riverside was, "…a culmination of romantic idealism, begun in 18th century England and translated into North American idiom with 19th century technological advancements super-imposed,"(Tobey, 1973. p 165).

Figure 5: An aristocratic American lawn circa 1860. (Digital Image Courtesy of the Getty's Open Image Program)

Until the late 1800's, design guides were still encouraging the use of the residential yard to tend animals, but this began to change as lot sizes became smaller and industrialized food became available (Jenkins, 2015, pp. 25-26). As many midwestern cities began to expand, mail-order suburbs and streetcar

suburbs incorporated a similar, if more democratized landscape designs (Hayden, 2004,). One of the most interesting origins of the "perfect" lawn landscape may have been due to a public misunderstanding. A pristine lawn, perhaps with a few shrubs, was included in architectural renderings as a way to showcase the physical features of the houses, not as actual design suggestions (Jenkins, 1994). In fact, one author's note read that the use of a pristine, well-trimmed lawn used in the sample picture was not, "…scenery to be sought, or strictly imitated. This would be generally impossible (Cleaveland et al., 1856, p. 74)."Whether or not this misplaced design imitation was a significant influence on the proliferation of the lawn, the "impossibility" of maintaining such a lawn would help keep it as a landscape only for the most wealthy well into the 20th century (Jenkins, 1994, p. 32).

Those seeds that produced prolific unwanted populations are often called "invasive species" or "weeds". The term weed extends to native plants as well and is historically rooted in the types of plants that interfere with agriculture and horticulture (USDA, 1971, p. 1). The American Lawn's exclusion of weeds, plants whose seeds usually arrived with colonization and immigration, is partially rooted in late 19th century politics. The first weed control ordinance in North American was in colonial New York City in 1691 (Falck, 2002, p. 616). Two hundred years later, twenty-five states had weed control ordinances, mostly linked to reducing crop losses (Falck, 2002, p. 616). By the early 1900's, weeds had become linked to social causes. As industrial development moved onto agricultural land, the same weeds that were controlled in agricultural fields exploded in the cities (Falck, 2002, p. 619). The idea of weeds became bigger than agriculture. To the progressives of the early 20th century, weeds were an evil

scourge, representative of poverty, crime, disease, and neglect (Falck, 2002, p. 613).

During the first and second World Wars, even the lawns of the wealthy were suggested for food production and victory gardens(Lawson, 2014). However, keeping lawns and gardens well-kempt and blooming was also seen as part of the war effort. It was a way to boost public morale and also a low-cost activity that did not require the use of crucial war infrastructure (Teyssot, 1999, p. 136). It is perhaps during this time period that the American Lawn, and the duty of landscaping, became firmly entrenched as a patriotic and nationalistic motif. Despite the fact that gas-powered lawnmowers were becoming more user friendly during the WWII era, the collective toll of the war meant that, in reality, lawns were not well kept during the period (Jenkins, 1994). The postwar rebuilding period would see countless exhortations to get the lawn back in shape for the good of the country, and the rise of the white suburban middle-class would ensure that this occurred.

Postwar Suburbia and the Hegemony of the American Lawn

The strong foothold of lawns as a residential landscapes is due mostly to the rise of leisure time in upwardly mobile segments of American society (Teyssot, 1999, p. 149). From the original settler-colonialists up through the early 20th century, maintaining such an anti-utilitarian space would have seemed unconscionable, or at least impracticable. As the white middle-class gained a strong foundation in the post-WWII era that afforded more leisure time, the lawn became accessible to the average suburbanite. Mowing, weeding, fertilizing, and chemical application became not only part of the upkeep of this status symbol, but became seen as leisure activities in and of themselves (D'Costa, 2017). For soldiers returning home, the rigor and routine that a lawn demanded, mixed

with a rising advertising industry that questioned the masculinity and patriotic credentials of a family with an unkempt yard, made lawn care a seemingly mandatory activity (Steinberg, 2006, 30).

As suburbs expanded, so did the lawn. William Leavitt, the architect of the "sitcom" suburb (the "Henry Ford" of housing), also encouraged a pre-fabricated parcel design, which was copied by hundreds of thousands of American homes in copycat suburbs (Hayden, 2004, pp. 128-148). Leavitt, who is famously quoted as saying, "No man who owns his own house and lot can be a communist; he has too much to do," inspired Nixon to say a similar phrase in the Khrushchev-Nixon "kitchen debate" (Hayden, 2004, p. 148). The model of the suburban home in the United States was firmly tied in with winning the cultural side of the Cold War, and the lawn was a central symbol in this image. Simultaneously, a well-kept lawn began to signify higher property values (Sisser et al, p. 17). Finally, the Lawn became a symbol of suburban prowess, largely wrapped up in an image of socioeconomic mobility (Teyssot et al., 1999, p. 6). Notably, these neighborhoods were notoriously racist and segregated. At the height of Leavitt's most famous suburb "Levittown", not a single person of color was registered as living in the 82,000 person town owing to its explicit segregation code, making it the largest all-white community in the United States (Hayden, 2004, p. 135).

This lineage of white, upwardly mobile, nationalistic landscaping was both reinforced, and taken advantage of by, advertising and the emerging lawncare industry (Jenkins, 1994, pp. 91–115) . During the war, synthetic nitrogen fertilizers for home lawn use had been developed by the USDA, improving efficiency of home lawncare, but requiring an expanded market (Jenkins, 1994, pp. 107–108). Lawnmower sales postwar exploded (Steinberg,

2006, p. 33), and without them, advertisers would label you a bad neighbor, anti-American, or unable to care for your family, a tactic that persists to the modern day (Jenkins, 1994, pp. 74–78; Robbins, 2007, pp. 90–93; Steinberg, 2006, pp. 41–42). Furthermore, the rise of golf courses saw the USDA take interest in turfgrass breeding and management as an important industry to invest in, setting use on golf courses as the main "test" of newly bred turfgrasses in different climactic regions (Baxter & Schwartz, 2018; Jenkins, 1994, pp. 56–57, 136–137). The aesthetics of golf became also deeply intertwined with white suburban patriotism and a symbol of not only socioeconomic, but cultural mobility, while women and African Americans who also widely enjoyed the game struggled to be allowed into golf clubs (Kirsch, 2009, Chapter 7). The Industrial Lawn remained rooted in notions of English nobility (mostly through advertising), patriotism, and cultural prowess, but it also became "democratized" for anyone able to afford its upkeep.

The transition of the lawn to residential landscape ubiquity has culminated in Exurban development. Exurbia is the space outside of suburbia, exemplified by expensive homes on massive green acreages. Exurban attitudes are highly reflective of the "naturality-beauty" paradox in lawn maintenance. They reflect a desire to escape the unnatural confines of the suburbs, but in doing so, dominate previously agricultural or wild landscapes with massive expanses of monoculture grass fields (Cadieux & Taylor, 2013, p. 5). If the landscape of the suburb is "the negation of negation" as one aesthetic observer put it, the Exurb is a "negation of the negation of negation," (Mumford, 1921, p. 45). From the British Aristocracy of the 17th century to the village green to the symbol of Exurbia, the Lawn reflects the story of the European-American settler. Still, the status of the Industrial Lawn as supreme ruler of landscape has been hotly

contested since the 1970's, perhaps owing to the success of Rachael Carson's "Silent Spring"(Carson, 1962).

Recent History and Trends in Residential Landscaping

Much of the literature and scholarship on lawncare has been focused on changing behaviors regarding inputs and plant composition. Just as Kenneth Jackson's work "Crabgrass Frontier" (Jackson, Kenneth T., 1985) was slightly off in predicting that suburbia was on its way out, Jackson and his allies in ecology and planning were wrong about the lawn's swift death. Infamously, a 2005 study found that lawns were the most widely-grown irrigated crop in the United States (Milesi et al., 2005). It is difficult to say what exactly the trend since then has been. Lot sizes are indeed smaller than they have been historically (Realtor Magazine, 2020b) but the recovery from the housing crisis, and a surprisingly strong willingness to purchase housing further from city centers, means that Exurban development is not going away (Kusisto, 2019). Very recently, cities like Las Vegas have decided to mull over banning ornamental grass (Metz & Ritter, 2021) and xeriscaping (intentionally drought resistant native landscaping) has become an increasingly acceptable option (Mustafa et al., 2010).

The cornerstone work since the mid-2000's has been Paul Robbin's "Lawn People" (Robbins, 2007). This work established the idea that the Lawn is an object that has control over people as subjects, and Robbins' other works continued the tradition of Rachael Carson and traced the impact of lawn inputs. This has spurred counterarguments that lawns are not maintained homogeneously (Harris et al., 2012) and that there are other ways to grow a lawn (Mustafa et al., 2010), but the core idea of "lawn people" has stuck around in the academic discussion. Michael Pollan wrote a now famous anti-lawn piece in the New York Times (Pollan, 1989), and 16 years later, the Atlantic penned a

"eulogy" for the American Lawn (Garber, 2015). As drought becomes a more perennial feature in the United States, and as environmental awareness continues regarding the dangers of pesticides and biodiversity loss, one might expect that the death knell has indeed been rung for the industrial lawn.

However, the modern lawn care industry still rakes in $105 billion annually (IBIS World, 2021). In fact, the industry grew at a rate of nearly 5% from 2020 to 2021, a sharp increase from average growth (NALP, 2021). Nearly 90% of that business is from lawn care and chemical application (Lawn and Landscape Magazine, 2021). Demand for lawnmowers continues to rise (The Fredonia Group, 2017). While movements such as "Food not Lawns", xeriscaping advocacy groups, and the work of urban ecologists have firmly entrenched a counterpoint to the industrialized lawn, there is scant evidence that the "obsession" with lawns in the US is dying. As the largest lawncare company in the United States points out, millennials are increasingly hiring third parties to do maintenance such as lawncare, and the hope is that this investment will pay off big for the lawn industry (Abraham, 2017).

CHAPTER IV

UNDERSTANDING THE MODERN LAWN

Paradoxes of the Modern Lawn

The pristine lawn is an intersection of two paradoxes. It is both communal, ala the village green, and elitist, always as more affordable to those with spare time. It is also an attempt at replicating nature while being highly dependent on technology. Pastoral agrarians and arcadian utopians have historically had both reverence for the land alongside a deep fear of "wildness" in domesticated landscape, preferring a vision of tamed wilderness as natural (Henne, 2005, p. 256). The American conceptualization of the lawn landscape, historically, added a couple of factors to this. One was the obsession with "velvety green" quality and the other was homogenization of species. The lawn, according to this line of historical theorization, is a representation of the cattle pasture, which has supplanted more diverse ecosystems as a representation of nature in the Euro-American psyche.

The twin paradoxes of exclusivism/communalism and naturality/dominance are reflected in the perceptions of lawn care enthusiasts. They often see their private front lawn as an untouchable space, simultaneously meant for interaction with the outside world (Ode, 2015). In addition, they often see the endless rows of green lawns in their neighborhoods as a frontier-like, borderless landscape design, albeit with clear, yet invisible, borders. One stark reflection of the naturality/dominance paradox is that those who apply the most environmentally damaging chemicals to their lawns are most likely to also be those who understand and value environmental risks due to chemical exposure and runoff (Robbins & Sharp, 2003, p. 442). Although the identity politics of the

lawn are complex and hard to discern, theory, history, social psychology, marketing tactics, and anecdotal observation seem to firmly place the green, perfect lawn as associated with the sort of nationalism that sprang from European settlement of North America.

Definitional Debate

Not only is the definition of a "lawn" contingent on who is providing it, the definition of "American Lawn" and "Industrialized Lawn" might even be divergent. Weigert (1994, pp. 82-83), considers a "good" lawn one that has "lawn grasses" as well as one that, rather broadly, signifies the lawn tender as a good neighbor and community member. The "industrial lawn" is one with many, pre-packaged inputs and programs, highly mobilized by industry forces, and the term is often used with pejorative undertones (Bormann et al., 1993, pp. 84–85; Teyssot, 1999, p. 7; Weigert, 1994). Bormann's definition is as follows: "The industrial lawn…is composed of grass species only; free of weeds and pests; continuously green; and kept at a low, even height (Bormann et al., 1993, p. 62). That definition might even be further amended to particular grass species.

On a related minor definitional note, it should be noted that the term "monoculture" does not apply to every lawn, even the industrialized lawn. Because turf grasses are highly limited by their environment, a mix of grass species, and occasionally legumes and sedges, are included in lawn mixes. For instance, a mix of zoysia and bluegrass can keep the lawn green all year long in certain climates (McNeill, 1985). There are true monoculture lawns, and these require all the more care and input because they are less diverse. Fescue and Zoysia, though they create a green homogenous carpet (and are somewhat similar in growth habit) are found in different phylogenetic clades. The difference between these two clades is that zoysia's photosynthesis process (C4

carbon fixation) makes it more tolerant to heat and drought while the photosynthesis process in Kentucky Bluegrass (C3 carbon fixation) adapts it as a cool-season grass. To maintain a true monoculture grass landscape, a lawn tender would need homogenous inputs and conditions throughout (e.g., the same amount of sun, moisture, soil composition, pH levels, and a similar microbiota).

The true nature of the industrial lawn is, as mentioned, technonatural. While there may be ways to create a self-sustaining landscape that meets common social convention, for the industrial lawn, this is an impossibility. As any lawn grower quickly discovers, unless chemical inputs and/or a lot of labor are applied, a lawn of turfgrass will soon find its way back to a polycultural composition. Theoretically, a lawn tender could use a ruminate animal to keep the lawn cut and fertilized without advanced technology and inputs (as was historically the case). However, the amount of manure and patchy levels of grazing would almost certainly draw the ire of an HOA, not to mention the complaints likely drawn due to the goats on the front yard. A monoculture lawn could also grow without any inputs whatsoever for a while, although it may take the appearance of an abandoned house and would certainly violate the height element of Bormann's definition.

The Public Facing Front Yard, Private Backyard Concept (AKA "Landscape Mullets")

Important to the conceptualization of residential landscaping is the discussion of the front and back yards as "outdoor rooms", or extensions of the household (Schroeder, 1993, p. 156; Steinberg, 2006, p. 27), a concept which may have originated with Harriet Beecher in the 1840's (Jackson, Kenneth T., 1985, p. 62). More recently, focus on human interaction with landscaping has given

nuance to this view, seeing the front yard more as the parlor while the back yard is more like a kitchen. Numerous studies have shown that backyard and front yard plant composition is markedly different, including in vegetative cover (Richards et al., 1984), the presence of productive gardens (G. D. Daniels & Kirkpatrick, 2006), and intentionally habitat-centered design (Belaire et al., 2016). Most recently, this concept has been rebranded as the "Landscape Mullets" concept: business in the front, party in the back (Locke et al., 2018). Locke and company found that, throughout Baltimore at least, the social pressure to keep up a front yard for public appearance while having a more individualistic or productive and messy backyard spanned across neighborhoods (Locke et al., 2018, p. 1169).

In Defense of the Lawn

Because the background of the author is positioned in a heavily pro-biodiversity, pro-freedom-of-expression stance when it comes to residential landscaping, it seems likely that subliminal motivational information selection will be biased toward "alternative landscaping". To imagine the full spectrum of possible interests and values dealing with landscaping, it is necessary to explore the positive aspects of a landscape like the lawn. The following is an acknowledgement of eight arguments in favor of the lawn:

1. The industrial lawn may be a time and resource intensive endeavor, but the basic maintenance requirements for a green, flat, front yard is perhaps one of the easiest landscapes for a yardtender to maintain. One simply needs to mow every couple of weeks, and eventually the species which survive the mowing will become a lawn of sorts. Bormann and company dub this the "Freedom Lawn". Maintaining flowers and vegetable gardens or replacing the lawn with a native landscape are highly time intensive activities, often requiring more labor

than even an industrial lawn. A low input lawn, especially on a small parcel of land, may take little to no work during most months. Finding a relatively inexpensive lawnmower, though certainly a cost burden, is not a tall order for most people. For a utilitarian landscape that is easy to use, the "Freedom Lawn" represents a democratized landscaping that most people with limited means can achieve without making them stand out to society.

2. A spotless neighborhood-wide lawnscape is a project that elicits a sense of community pride. Even as a purely symbolic gesture, having a street full of pristinely mown lawns, lush and bright green, shows that every neighbor, either by their labor or wealth, has contributed to a singular community effort. A neighborhood of well-kept lawns, with no fences between them, is a powerful show of the material resources in a community. An endless perfect green lawn is a monument that memorializes the triumph of its participants.

3. Alternative landscapes, especially with thick vegetation, are in fact better habitat for a variety of animals. Some of these animals are unpleasant to many people, such as snakes, opossums, racoons, rodents, and foxes. Ticks also thrive best in areas of tall grass. Keeping short, well-kept landscapes reduces the nuisance that animal life poses to humans. As will been seen in the Kenmore case study, the notion of safety due to tallgrass and wildflower yards is controversial.

4. Grass is an alternative to concrete, and therefore better for local heat reduction and carbon sequestration. At least two studies have established that lawn care, even high input laws, act as carbon sinks, even with other "hidden carbon costs," such as chemical manufacturing and lawn mower use, taken into account (Selhorst & Lal, 2013; Zirkle et al., 2011). (A more rounded discussion of the carbon footprint due to lawncare will be discussed later.)

5. Public lawns provide a wide variety of public services. They are where we gather for outdoor concerts, play a wide variety of community sports, picnic, and play with our pets. In a neighborhood where neighbors allow for property line crossing during social events, the effects can be similar.

6. There is a strong argument that a flat and continuous turfgrass lawn is the safest type of playing field for a variety of turf-based sports (Beard & Green, 1994; Chivers, 2007). This issue became one of the main causes championed by the US Women's Soccer team in 2015, asserting that more injuries, such as ankle sprains and ground impact related injuries, occurred on artificial surfaces (Macur, 2015).

7. Even anti-lawn advocates often admit that it is an attractive landscape in many ways. It is a calming sea of green.

8. The US landscaping industry, mostly geared toward turfgrass, employs over 1 million people worldwide (NALP, 2021). It also provides an industry with low startup costs entrepreneurship if someone is willing to do the (often very difficult) physical labor.

Lawn Grasses vs. The Rest

The turfgrasses that we most often recognize are specialized in part by natural selection, but their ability to survive in such an array of climates and circumstances is due to over a century of well-funded scientific research (Goldin, 1977, Chapter 13). They are nearly all non-native species, with the exception of Buffalo Grass, which is highly drought-tolerant and has much deeper roots, but only appears green for five months (Schild et al., 2009). In the north, ryegrasses (Figure 6), bluegrasses, bentgrasses, and fescue species dominate the landscape, while in the south, industrial lawns are most likely to use bermudagrass, zoysia,

or St. Augustine Grass (NC State Extension, 2020). Some, like bluegrasses, were brought over as animal forage, while others, like St. Augustine Grass, are tropical imports whose sole purpose in the United States is to allow for a lawn in a particular climate (Duble, n.d.). Many agricultural grasses, like brome and timothy grass, are considered weeds in cultivated lawns (Brown & Elliman, 2020, pp. 85, 154). Turfgrass seeds like ryegrass, commercially cultivated in Oregon, might become weeds in a native plant setting (UC IPM, 2016).

Figure 6: A field of ryegrass grown for turf seed outside of Walterville, OR

CHAPTER V

BASIC OVERVIEW OF ENVIRONMENTAL ISSUES

In both the academic literature on landscaping and popular conflictual discourse, the environmental impact of lawns compared to their alternatives holds center stage.

The Origins and Destinations of Chemical Inputs

The granules that millions of Americans spread across their lawns are produced by a process that extracts chemical resources and diffuses them across millions of acres. The main chemical inputs are fertilizers (with high concentrations of nitrogen), and pesticides of varying toxicities, aimed mostly at broadleaf weeds, fungi, and insect pests. One EPA report detailed that chemical inputs for lawns offset or increased chemical inputs compared to the agricultural land they had replaced (Robbins & Sharp, 2003, p. 430). Another EPA report detailed that 11% of pesticide use is "non-agricultural", whose market is primarily residential landscape services (Atwood & Paisley-Jones, 2017). Sales metrics show that, while residential fertilizer use is low compared to agricultural use, it is a significant market, predicted to bring in $3.2 Billion in 2022 (Atwood & Paisley-Jones, 2017).

The landscape fertilizer market is large and growing, and its sources are often the same as agricultural fertilizer. Urea and ammonium nitrate production is linked to environmentally destructive factories in the United States and abroad, such as source-point pollution in Indonesia that contaminates drinking water and air quality (Cribb, 1990). It is primarily produced using methane, whose already intense demand is further heightened by fertilizer use (EIA, 2015). Because of this demand, natural gas, and thus nitrogen fertilizer production, is

heavily linked to fracking, which in turn is creating a rise in atmospheric methane, affecting global warming to a significant degree, in addition to increasing earthquake potential (Zalewski, 2020). Fertilizer plants have been found to produce 100 times more methane than they report to the EPA, adding a covert way to increase global warming (Cornell University, 2019). Specific companies, like Scotts Miracle-Gro, have factories geared primarily toward fertilizer production for lawn care (Saar, 2018). Such plants produce various toxic byproducts, such as ammonia, and while it is usually processed and remediated, at least one case in Ohio saw Scotts' ammonia byproduct dumped into a river, killing thousands of fish (Zachariah, 2013). On the supply side, Scotts' supplier of rare earth metals recently stopped attempting to get permission to dump salt water from its mining operations into the Missouri river after massive public outcry (Bergin, 2016).

Not only is nitrate production a significant problem on the production side, the endpoint destinations of nitrate run-off pose a serious risk to human health. Nitrates are one of the most common substances in violation of US clean drinking water regulations, and high concentrations have been linked to four kinds of cancer, birth defects, and other birth complications (Schaider et al., 2018). Nitrate pollution disproportionately affects Latino populations, and that includes populations in both urban and rural communities (Schaider et al., 2018). In addition, the more expensive your home, the less likely you are to have nitrates in your water (Schaider et al., 2018). Often, a main origin of non-source point nitrate pollution comes from in urban areas is fertilization of landscapes (Law et al., 2004). Lawns are not only the most common type of nitrate intensive home landscaping, they are also frequently bordered by driveways and other impermeable surfaces that lead to heavy runoff of excess nitrates. In addition to

nitrogen, phosphorous runs off in this slurry of chemicals, causing harmful algal blooms to explode (Chislock et al., 2013, p. 10). Essentially, fertilizer is doing exactly what it was meant to do on a lawn but for algae: making it monolithic, green, and rapidly growing.

As with most large-scale monoculture crops, the turfgrass lawn requires significant pesticide application to maintain. The most common lawn weed killer, 2,4-D, is a broadleaf herbicide, making it effective against plants like dandelions while being harmless to most grass. However, many weeds have developed resistance to the substance due to widespread use, causing turfgrass managers to increase their application rates (Allen Press, 2012). Concentration of runoff is much higher than application concentration, causing waterways to become toxified by the substance. One Minnesota study found that 100% of their urban surface water tested positive for 2,4-D. (Minnesota Department of Health, 2016). 2,4-D toxicity has caused the death of innumerable aquatic animals, especially around golf courses, and is linked to liver disease and cancer (Minnesota Department of Health, 2016). Grubs, which are the most common lawn pest, are often controlled using high amounts of trichlorfon, which is highly toxic to humans, birds, and aquatic species, as well as carcinogenic. It is particularly useful because of its water solubility and ability to permeate soils, making it a likely contaminant in urban drinking water (Oregon State Toxicology Network, 1996).

In 2012, Scotts Miracle-Gro, the most dominant lawn care company, was ordered to pay $12.5 million in fines for violating toxic substance labeling regulations, in addition to putting pesticides on their bird food that are toxic to birds (OECA US EPA, 2017). Scotts has since reshaped its image as a bio-friendly company, and won an award for donating money to bioremediation and

increasing its environmental stewardship, although $2 Million of their fines were ordered to go toward such projects by a court (Scotts-Miracle Gro, 2016). This coupling of an environmentally friendly image with a company who produces, sells, and markets potentially toxic products fits well with their consumer base. Notably, those who are most aware of the environmental hazards of lawn chemical application may also be the most likely to use lawn chemicals (Robbins & Sharp, 2003, p. 442). It seems that the love of green, weed-free grass is a powerful enough motivator for many that they will ignore the knowledge of harms that the inputs necessary to the lawn pose.

Environmental Justice

The environmental injustices of lawn care may be particularly subtle. One neighborhood's aesthetic preference, symbolically rooted in an American obsession, is maintained at the expense of the others in the ecosystem, often by immigrants (Campbell, 2016). Chemical inputs are ultimately applied to uphold an aesthetic preference, as well as the quest for increases to property value. The effects of these inputs are largely unseen, with the exception of the thick green substrate that occurs in waterways caused by the eutrophication process. Even this stark visual reminder has become commonplace in areas liked the heavily fertilized suburbs. After all, the modern American lawn is so ubiquitous in some areas, and tending to it has been so socially ingrained, that its effects on our urban water systems are sometimes taken for granted.

While safety of migrant agricultural workers has been a site of conflict for years, the injustices borne to landscape workers are not as public. Now that the landscape industry is the second-largest employer of foreign workers (Campbell, 2016), perhaps more attention will be paid to how certain safety regulations are followed. The Bureau of Labor Statistics tells us that the incident rate in the

landscape industry for non-fatal injuries is 4.2%, a percentage point higher than the national average (Bureau of Labor Statistics, 2019). Without widespread publicly available statistical analyses, we cannot know exactly how bad problems like heat stroke, mechanical injury, and pesticide exposure are to migrant landscape workers. If the same, widely documented trend of maltreatment and neglect befalls migrant landscape workers as other migrant workers in the agriculture industry, there is plenty of room for fear of discrimination.

Lawn care industry groups contest that harms from chemicals like 2,4-D, RoundUp, and nitrates are overblown, and toxicity reports for workers are relatively low compared to other industries. 178 cases of pesticide poisoning were reported from 1998-2005 in the landscape industry (Calvert et al., 2008). As discussed, many of the substances found have links to long-term illnesses like cancer and liver disease, so these reports may not fully appreciate the long-term impacts of exposure to these chemicals. On the plus side, access to a growing landscape industry has provided opportunities for Latino business owners as a low cost but high "sweat equity" enterprise (USHCC, 2011). Whatever upward mobility this opportunity provides, the industry should face the real possibility that there could be a serious multifaceted health crisis among its workforce.

Biodiversity and Homogenization

Residential landscaping's impact on biodiversity and ecosystem homogeneity is of serious concern to landscape ecologists and human geographers. To clarify, "homogenization" can refer to "biotic homogenization"(Olden & Poff, 2003), where different ecosystems' species composition becomes more similar , or "spatial homogenization", where two different ecosystem "patches" become more similar in physical and dimensional characteristics (Chapin et al., 2002, pp. 305–330). Importantly, biotic

homogenization is not synonymous with the reduction in total number of species, a measure of biodiversity known as "species richness" (Olden & Rooney, 2006). The difference is that biotic homogeneity looks at the replacement of species representing a wide variety of taxonomic or genetic groups with a less "phylogenetically diverse" biota (see Figure 7). Decreased spatial heterogeneity, such as the replacement of native ecosystems with relatively homogenous landscaping, has major impacts on biotic heterogeneity (McKinney, 2006, p. 248).

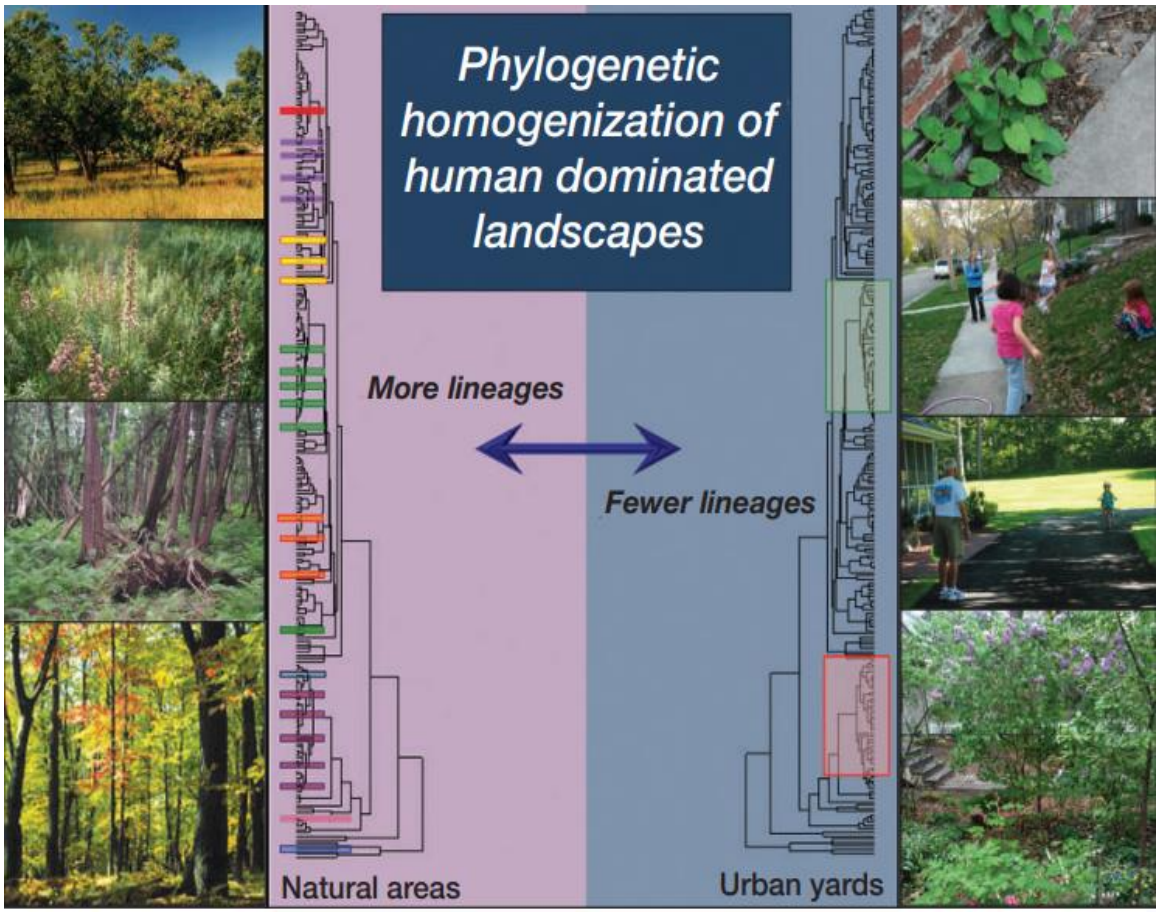


Figure 7: While urban yards may contain more species in some cases, the pool they are drawn from is less diverse from a taxonomic standpoint. (Used with permission by Jeannine Cavender-Bares)

Biodiversity, on the other hand, may look at several different measures beyond taxonomic diversity. Perhaps the most common use of "Biodiversity" in

popular culture is species richness, but the conversation also often takes on implications of increasing native plants and animals (Ponsford, 2020; Tallamy, 2011; Whiting, 2019). Less intensive mowing practices have been positively linked to biodiversity (British Ecological Society, 2019), and just as a matter of definition, the more monoculture the landscape, the less diverse in species composition. The trendiest biodiversity issue regarding landscaping is almost certainly the preservation of pollinator species (Xerces Society, 2021). The benefits of diversified insect life, which native plantings and less industrial landscaping provides, are usually presented under the umbrella of "Ecosystem Services" (Vihervaara et al., 2010).

Ecosystem Services

Ecosystems services are the material, social, and psychological benefits that humans enjoy as a byproduct of the environment (Daily, 1997). The study of these services is particularly important in urban areas, because they solve problems of infrastructure and social welfare, but also because urban ecosystems can play a part in maintaining a healthy global ecosystem (Bolund & Hunhammar, 1999). Landscaping's primary classical ecosystem services are in the human visual and psychological enjoyment aspect. These are known as "cultural ecosystem services", and include a wide array of positive effects (Ernstson, 2013). The value of aesthetics as an ecosystem service has been identified as a potential "wicked problem" in environmental planning (Dronova, 2019). That is, the effects on property values and human preference for aesthetics in ecologically-beneficial yards cause unpredictable conflicts with difficult solutions.

One ecosystem service is the role pollinators play in human food production. Pollinators are crucial for pollination-dependent crops, and the

overall rate of decline in important pollinator species is alarming (Brunet, 2019). Effects on pollinators are directly related to residential yard care because of both the loss of native species and increase in impervious surfaces in urban landscapes (Bennett & Lovell, 2019) as well as the heavy use of neonicotinoids and other lawncare chemicals (Larson et al., 2013). Increasing spatial heterogeneity and blooming plants may aid in boosting important pollinator species (Plascencia & Philpott, 2017), and specifically adding native plants which are not bred for landscaping may be even more beneficial to pollinators (Hayes & Langellotto, 2020). Establishing diverse native plant communities in urban landscaping has been adopted as a widespread planning policy goal (Maartensson, 2017).

Urban heat island (UHI) mitigation is also a major ecosystem service provided by landscaping (McPherson, 1994). On this point, the lawn provides an effective service. For instance, including grass in parking lots reduces the UHI effect (Takebayashi & Moriyama, 2009), while converting to drought-tolerant "xeriscaping" in Phoenix increased UHI effects and local discomfort (Chow & Brazel, 2012). Much of the positive effect that lawns have is due to watering, which has obvious environmental tradeoffs. At least one study recommends using a diverse mix of landscaping in order to mitigate UHI (Gober et al., 2009). In the recent announcement that Las Vegas would ban useless turfgrass in public infrastructure, much of the negative reaction from similar desert city planners has to do with the reduction of UHI mitigation (Associated Press, 2021).

Municipal and county governments have used lawns to provide the ecosystem services of erosion control and runoff absorption. Los Angeles adopted a Green Hills Law in the 70's, mandating that contractors plant grass in slopes or divots after construction (Goldin, 1977, p. 157). Turfgrasses are

stoloniferous, and so may spread quickly, with the tradeoff of having shallower roots. Native grasses and forbs, with much deeper roots and absorption capability, might be better suited to erosion control, though their propagation is more difficult due to germination complication, particular soil biology, and different scarification techniques.

Perhaps the most globally important ecosystem service related to landscaping is carbon sequestration. Simply put, carbon sequestration is the process of taking carbon compounds from the air and placing them in storage, in this case in the soil via "biologic sequestration" (USGS, 2021). Nutrient inputs, such as those found in fertilizers, are critical to proper photosynthesis and the conversion of atmospheric carbon into various forms that become Soil Organic Carbon (SOC) (Jansson et al., 2010). Sequestering greenhouse gases compounds into "sinks" is crucial in the battle against climate change, in addition to reducing emissions (OAR US EPA, 2021). Similarly to the UHI effect and urban pollinator ecosystems, landscaping is increasingly being put under the microscope for its effects on emissions and sinks, and lawns are, again, the focus (Lerman & Contosta, 2019). The matter of the net atmospheric carbon produced by lawns is itself a matter of scientific debate.

Calculating the total carbon sink effect of a lawn turns out to be quite complicated. Hidden Carbon Costs (HCC) in lawns can range from the straightforward, like mower emissions, to the more subtle, like effects on soil microorganisms whose ability to convert carbon is important to sequestration (Lerman & Contosta, 2019). Several studies have shown that lawn equipment use has an impact on CO_2 emissions (Banks & McConnell, 2015; Gabele, 1997; Priest et al., 2000), but the overall carbon capture due to the sink effect of lawns is contested. At least two studies have attested to the fact that net carbon

sequestration, even with HCC accounted for, is positive in lawns (Selhorst & Lal, 2013; Zirkle et al., 2011). Self-reported limitations of these studies include the fact that there is inherent difficulty in generalizing lawn care inputs, and that local studies may not fully account for homeowners replacing and reseeding their lawns.

Emissions and Climate Change

The fact that two-stroke engines have such high particulate matter emissions is responsible for the common argumentative line by anti-lawn advocates that "Running your lawnmower for one hour equals 100 miles worth of auto pollution." (American Chemical Society, 2001) This true statement about air pollution is sometimes conflated with carbon footprint in polemic writings (Only Natural Energy, 2018), but lawn and garden equipment has been estimated to contribute only around 0.3% of all carbon dioxide emissions (Banks & McConnell, 2015, p. 7). Though mowing more often increases local CO2 emissions, it does not necessarily affect carbon stored in lawn soils (Lerman & Contosta, 2019, pp. 118–119). However, lawn and garden equipment accounts for 12% of carbon monoxide emissions in the US (Banks & McConnell, 2015, p. 8). Carbon monoxide, while only weakly contributing directly to the greenhouse effect, is important in that it reduces hydroxide in the atmosphere, which is a crucial compound in reducing the lifetime effects of powerful GHGs such as methane (Banks & McConnell, 2015, p. 8). Notably, the evidence on the value of lawn as a carbon sink uses "hidden carbon costs" in the calculation but does not account for some other direct or indirect GHG emissions from lawn care, such as methane, nitrous oxides, and carbon monoxide.

CHAPTER VI

CURRENT SCHOLARLY FRAMES FOR VIEWING HUMAN INTERACTION WITH RESIDENTIAL LANDSCAPING

This paper's inventory and mapping of potential interests in the Conflicts of Residential Landscaping utilizes a two-pronged approach. The first is to connect the historical record to the existing literature, and the second is a thematic analysis of interviews with parties to residential landscaping conflict. This synthesis connects the historical overview with the literature by viewing the different disciplines by which the interaction between society and landscaping can be framed.

Disciplines which study landscaping are spread across a wide intellectual landscape. The same is true of Conflict Resolution studies. The following are by no means exhaustive lists of disciplines that could be discussed.

Settler-Colonial Studies

"Landscaping" is a product of the European-American lineage. Even lawn-alternative concepts such as permaculture and front yard gardens are arguably part of the settler cultural lineage. While most Native American tribes seem to have strong traditions of native plant knowledge (Nelson & Shilling, 2018), white American culture, even alternative cultures, are highly disconnected from the cultural, practical, and spiritual importance of most native plants. Settler-colonial Studies seek to look at the unique way that settlers dominate a landscape. As opposed to traditional colonialism, which withdraws mass occupation after achieving dominance, settler colonialism is rooted in mass occupation (Veracini, 2011). The ubiquity of the lawn mirrors the expected result of the settler colonial state from this lens. That is, it has been advanced as a

narrative which is taken for granted as the norm, even though it is a super-imposed pattern on a native landscape. Though the lawn on Cahokia or the former Kalapuya village was not consciously planted as a measure of erasure, the very fact that landscaping on top of a sacred or historically important site is taken for granted is a measure of the pervasiveness of settler-colonialism in the United States.

Human Geography and Sociology

Human Geography, "…the branch of geography that deals with the activities of mankind as they affect or are influenced by the landscape," (OED, "Human, Adj.") , is probably the leading discipline to examine the common person's landscape or "landscaping". While other disciplines observe the botanical or artistic element of landscaping, Human Geography maps the reasons and effects of the collective terraformation that is landscaping. Kimber's 2004 work (Kimber, 2004) firmly established a scholarly line of study focused on the social interaction between plants and humans. This includes the cultural study of edible landscaping (Kortright & Wakefield, 2011), alternative landscaping (Mustafa et al., 2010) (Feagan & Ripmeester, 1999) and the effect of landscaping on a dystopian future (Macleod & Ward, 2002).

The important contribution of the Geographical perspective adds is that it helps us understand landscaping in its cumulative effects, and that it seeks the origin of these effects. Much of the debate over human effect revolves around to what extent inputs and species composition in yardscapes are more heterogenous or homogenous (Groffman et al., 2014; Harris et al., 2012; Polsky et al., 2014). Feagan and Ripmeester (1999) suggest the "Ideological naturalization" the lawn, and establishes landscaping as a part of a cultural negotiation (p. 618). Commoning, Ursula Lang's concept of the interplay between private and public

yard construction, is a unique contribution that Human Geography has given to the landscaping discussion (Lang, 2014). Lang's idea is powerful: Landscaping that we have control over, even private property, is interstitial and therefore a negotiation between what is private and what is public. It is therefore one "nodal point" in the construction of urban commons (Lang, 2014, pp. 855-857). For Human Geographers, vernacular private landscaping is influential in its cumulative effects, including the way that private and public space are used in an urban environment.

Land Use Planning and the Privatization of Greenspace

Land use planners think of green space as a social resource (Shen et al., 2017), the utility of this resource being psychological and physical health. Access to greenspace itself is linked to stress reduction (Wolch et al., 2014, p. 136), lower mortality rates (Villeneuve et al., 2012,), and even healthier pregnancies (Dadvand et al., 2014, p. 101). In any given urban area, this resource has a scarcity like any other. As the US grapples with how to deal with sprawl and urban growth, it also has to deal with losing public green space (Finley, 2019). When a city expands outward and the percentage of new land use favors private lawns more than the status quo, the lawn begins to create a reservoir of green space which has, by means of human geography, become privatized (Robbins & Sharp, 2003). Even well-intentioned land use planning decisions often result in the loss of public green space (Colding et al., 2020). As observed with the rise of suburban planning, the idea that the American Lawn should be included as a planning concept is difficult to extract from the development of single-family detached housing. The industrial lawn is important in some measurements of urban sprawl (Cutsinger et al., 2005, p. 243).

Land use planning policy restrictions, or lack thereof, dictate the dimensions and possibilities of a particular piece of land. The larger the lot, the more difficult implementing a resource and labor-intensive landscaping scheme will likely be. In addition, zoning policy is accompanied by design codes, and therefore the scope of the enforcement of landscaping is highly dictated by land use laws. Certainly, any two spaces of equal dimension and features may be differently landscaped based on the preferences of the landowner and landscaper compared to one another. If other theories of landscaping are correct, however, the effects of neighborhood influence based on the target demographic developers intend to attract to an area might be expected to have a large impact on the landscaping of the area. Zoning and land use ordinances are often intended to attract a certain class, and the design possibilities that go along with these class expectations are peculiar.

Political Ecology

Paul Robbin's work "Lawn People" (Robbins, 2007) is the theoretical centerpiece to the most influential work of Political Ecology regarding landscaping. Beyond doing extensive work mapping the origins and endpoints of lawn-related inputs, Robbins contends that the industrialized lawn is a product of more than simply the historical lineages of its design (Robbins, 2007, p. xvii). In the way the economy of lawncare and its corporate sponsorship have influenced the average lawn consumer, the lawn for Robbins is a way of controlling people. This assertion has been critiqued because lawn tenders use heterogenous inputs (Harris et al., 2012). The lawn people concept has been given further nuance to include inter-neighbor emotions (Harris et al., 2013). Human Geography and Political Ecology clearly have a very similar framework

focus, looking at the factors of human society, terraformation and its effects, and the reasons for the interactions between humans and their landscapes.

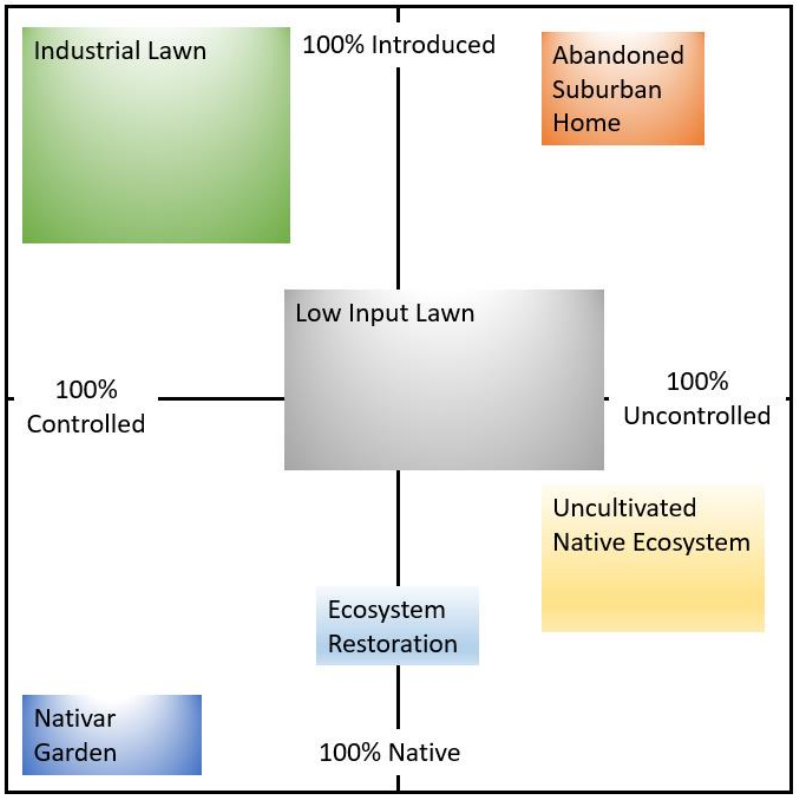
Landscape Architecture and Landscape Design

The OED calls Landscape Architecture, "The planning of parks or gardens to form an attractive landscape, often in association with the design of buildings, roads, etc." (OED, "Landscape, n."). (It is important to note that "garden" in the UK is synonymous with "yard" in the USA.) Joseph Porter's 1930 "Landscaping the Average American Home", one of the earliest promulgators of the term "landscaping", frequently invokes the idea of architecture into the landscape, but is notably a professor of Horticulture writing a sales guide for nurserymen. This bias toward "architecture" as a greater discipline than "design", a term more often reserved for home landscapes, has become less differentiated in modern Landscape Architecture. The Princeton Architectural department's "The American Lawn", published in 1999, helped create a nexus between the vulgar landscape of homeowners and the high-brow study of architecture.

Benefits of this focus are that it can allow us to understand the design implications of human use and that many modern Landscape Architecture studies programs encourage the incorporation of ecological elements. From the central focus of Landscape Architecture or design, the reasons why people might be in conflict over landscaping are that it is not useful or that it is not aesthetically pleasing. Certainly, these elements are crucial parts of the discussion. The importance of these also plays a balancing role to other disciplines that look at residential landscaping as mainly a sociological, psychological, or ecological phenomenon. The converse shows the limitations of the Landscape Architecture focus, though it would be unfair to say that Landscape Architecture never incorporates other disciplines into its study of

residential landscaping (Swaffield & Deming, 2011). Though the lens of Horticulture may be plant-centric, its overlap with human preference may inevitably lead to discussion of the social.

Figure 8: A loose rendering of the conceptual space taken up by landscaping on two possible design axes



One area where landscape design and conflict resolution dovetail is the area of design preference matrices. For instance, Kristina Hill looks at a sea wall adaptation planning process in San Francisco from a multidimensional perspective. Between two scales, static vs. stationary on one axis and walls vs. landforms on the other, Hill found that there was a large area of "unexplored solution space" where a collaborative design could be agreed upon (Hill, 2015). Theoretically, this idea of using two design scales as axes could apply to residential landscaping. One could conceive of many axes such as wildness vs. control, native vs. introduced species, and few inputs vs. many inputs (Figure 8).

Gender and Queer Theory

Gender has a firm place in the history and culture of landscaping in the United States. Jenkins (1994, pp. 117-132) details how men's and women's visions

of frontier gardening differed in aspects of dominance and plant compositions and details how the proliferation of the lawn was a heavily male-dominated domain. Even the modern debate over wildflowers vs. lawns can be traced to style guides geared toward women and landscaping (Teyssot, 1999, p. 97), and vegetable gardening has often been seen as the domestic domain of the woman (Gowdy-Wygant, 2013). Because women's purchasing power has been so important, much advertisement has been geared toward women, albeit often in condescending ways (Jenkins, 1994, ch. 5). The connection to postwar masculinity, competition, and male-oriented sports fields cement gender as an important aspect of this discussion.

Judith Butler's discussion of "performing gender" and "performativity" might be a fitting way to analyze the actions taken around yard care. Gender, for Butler, is "constituting the identity it is purporting to be," (Ton, 2018). Therefore the doer is defined by the action, not by essentialist characteristics (Salih, 2002, Chapter 3). If we can steadily rely on the notion that landscaping is, at least sometimes, a sort of language, then queer theorists might state that gender identity is made up by the speech act of landscaping, meant to convey a certain gender expression. One queer theory observation of the landscape looks at the object from a visual culture study. "Landscape's isness does not just make up the setting, stage, space, or frame of the performative but supplies its very condition (Casid, 2011)."

"To landscape is not just to take place or shape matter: it is perhaps most conventionally a process of spatial arrangement, the laying out of perspectives and views, creating relationships between humans, plants, and the land that supports them" (Casid, 2011). A home landscaper may also be constructing a landscape which, as opposed to merely reflecting their identity, is a part of the

construction of their identity. Discussing landscaping with traditional linguistic communication includes the "periperformative", that is, speech acts which cluster around performance, intended for an outside observer to give meaning to (Sedgwick, 2003, Chapter 2). "I plant this seed" is similar to the act of "I do". We attempt to make something so by an illocutionary act (Nash, 1993; Stobbelaar & Pedroli, 2011). If landscaping is part of a person's identity, they will into reality meanings in their landscaping, such as gazing across a well mown lawn and saying aloud, "This is the finest lawn on the block."

Social Psychology: Identity Politics of the Front Yard

Front yards, much like your choice of clothing, are an outward expression of how we wish to be perceived (Ode, 2015). They are in that sense performative, but they are also a space we perform in for others to see (Casid, 2011; Jenkins, 1994, p. 36). The front yard provides a place to prove what kind of neighbor we are, and the symbols we place therein, as well as the rituals we partake in, are part of this (Makse et al., 2019; Nassauer et al., 2009). It also is a place where we show our support for sports teams or display patriotic symbols. Even the types of inputs we use on the yard are a reflection of how we wish to be perceived (Neel et al., 2014). "Curb appeal" is related to property value, undoubtedly, but the price one is willing to pay for a home says a lot about what kind of future they envision in that home, based off the signals of aesthetics (Lindenthal, 2017). These realities all point to the front yard as a reflection of our identity.

What, then, are the identities most associated with the lawn or its alternatives? The identities and cultures associated with the Lawn are greatly varied. One, it is a vestige of British colonial sensibilities, which in turn are split into a somewhat paradoxical set of ideals between communal green space and the individual desire to mimic aristocratic status (Jenkins, 1994, pp 15-19). The

other is the Jeffersonian pastoral ideal of the Yeoman, coupled with the Frontier Myth, which essentially makes the lawn a simulacrum of the cow pasture (Teyssot et al., 1999, p. 13). The deep identity connection with the lawn can also be traced to the mid-19th century intelligentsia while still being a reflection of pastoral symbolism (Bormann et al., 1993; Jenkins, 1994; Steinberg, 2006; Teyssot, 1999). This discussion makes sense from a socio-historical perspective and elicits *a priori* agreement from researchers in their introductions to studies about landscape preference and chemical lawn inputs. Similarly, it is assumed by some that the nucleus of these sentiments is upper-middle-class Midwestern homeowners, with a special focus on exurbia and suburbia (Blaine et al., 2012, p. 259).

Although academic literature has made these connections in sociohistorical terms, there is little empirical disambiguation of what exactly the symbol means psychologically and for whom. One well-established theory is that people fashion their landscapes in ways they think their neighbors will like, and that will be perceived as useful for the commonly-held values in the neighborhood (Lang, 2014; Mustafa et al., 2010; Nassauer et al., 2009; Neel et al., 2014). Much of the psychological work about landscape presence is around innate, essentialist preferences. However, studies have established clear indicators of group-influenced preferences in certain landscapes (Van den Berg et al., 1998). In addition, the study of "Landscape Identity" has revealed its complex dimensions along the axes of "spatial-existential" and "personal-cultural." However these studies are often focused on the large-scale notion of "landscape" instead of "landscaping" (Tilley, 2006).

Social Identity Perspective and The Conformity of the Lawn

Tajfel's Minimal Group Paradigm theory, the basis for Social Identity Theory, gives us a conceptual starting point to observe why one neighbor might value conformity in landscape (Abrams & Hogg, 1990). The Paradigm states that even in an arbitrary grouping, our self-worth becomes wrapped up in the worth of our group, causing us to uphold the norms and standards of that group and negatively stereotype out-groups (Hornsey, 2008, p. 207). Excluding all other factors of neighborhood selection for simplicity's sake, one could view the neighborhood as an arbitrary group and expect its residents to uphold the relevant norms and values. If, in a vacuum, neighbors are placed in a lawn-heavy neighborhood, there might exist a predictive model in the Minimal Group Paradigm for why, as research suggests, people prefer what their neighbors appear to prefer. Social Categorization Theory (SCT), an explanatory offshoot of Social Identity Theory (SIT), can help fill in holes in reasoning as to why one might choose a neighborhood outside of a vacuum.

As opposed to SIT, which sees interaction between individuals (interpersonal) and interactions between groups (intergroup) as "opposite ends of a bipolar spectrum", SCT sees identity as multi-layered and primary identity as changeable, moderated by situational dynamics (Hornsey, 2008, p. 208). SCT proponents say we do this as a result of *fit* ("the extent to which (social categories) are perceived to reflect social reality") and *accessibility*, that categories are more or less accessible based on stimuli and motivation (Hornsey, 2008, p 208). Any given person, when seeking a new neighborhood, has an array of options before them. Beyond that, by the time a person or family is ready to buy a house or move into a neighborhood, they already have a multiplicity of identities, and each of these has contributed to strengthening stereotypes and myths about their own groups and others. Everybody, especially by race or class,

has differing ease of access levels when it comes to neighborhood accessibility, as well as differing motivations (e.g. safety, prestige, and proximity to workplace).

Landscape preference, from the social identity perspective, might be a reason for self-categorization leading to neighborhood selection, because the dominance of a landscape type might indicate certain stereotypes that fit with the perceived social reality of our salient in-groups. Landscapes might also, under the social identity perspective, be a way to show positive distinctiveness between one's neighborhoods and other neighborhoods in order to reinforce one's self-worth. In other words, from one end, a person might choose a neighborhood because they believe it will reflect their preferred in-group. From the other, one might hold "neighbor" as the most salient in-group to consider when it comes to landscape, because our yards are the most apparent symbolic representation of our commitment to neighborhood pride, and not see the landscapes of a prospective neighborhood as symbolic at all.

At this point, it is beneficial return to the discussion of what the lawn has historically meant to group identity. One could start with the premise that neighborhood isolation by ethnicity has been shown to strengthen ethnic and cultural identity among immigrant groups (Rendon, 2015, pp. 166–167). Following the trajectory of identity and lawns, it appears that there are multiple layers of identity and circumstance that might entrench certain landscape norms. As European immigrant identities morphed throughout time into white American suburban identity, the surrounding identity content may have become entrenched by group isolation. White, upwardly-mobile suburbanites, had to choose *something* to put in their front yards, and lawns, as a result of their socio-historical context, were an excellent fit (Jenkins, 1994, pp. 35-61). Maintaining this symbol with lawn mowers, fertilizers, and pesticides then became naturally

important to the self-worth of this group, and therefore integral to group identity (Neel et al., 2014). The various fortunes of white suburbanites over time have caused many to move either to exurbia or back into urban areas (Chang, 2018; Parker et al., 2018). It holds that, if the lawn were a firmly ingrained and hierarchy-enhancing mythological symbol among these suburbanites, that the landscape would follow these groups wherever they went, which is somewhat supported by the evidence of ecological homogenization in cities and exurbia (Cadieux & Taylor, 2013; Groffman et al., 2014)

As Livingstone and Haslam contend, pieces of social identity content are "as much a product of intergroup relations as they are predictive of them (Livingstone & Haslam, 2008, p. 4)." Their study shows that wearing a polarizing sports jersey not only predicts what group one belongs to, but that strong adherence to those symbols will predict identity content and intergroup interaction. What kind of piece of identity content is the lawn? Perhaps there are parallels in meanings of the lawn and the American flag, both noted to be symbols of patriotism. Researchers found that the flag is both instrumental and symbolic; that is, it solidifies our attachment to the glory and righteousness of our historically-embedded groups and larger senses of meaning, but also provide us with a way to performatively display our attachment to our groups in public (Schatz & Lavine, 2007). Mowing the lawn and waving the flag are similar in this way, albeit with slightly different sociohistorical in-group meanings.

Group Authoritarianism as a Reason for Conflicts of Landscape

It is worth considering an individual trait which might make someone more prone to social landscape conformity, the enforcement of those norms, and deference to a set of unelected officials who are tasked with maintaining these rules. Right Wing Authoritarianism (RWA), as originally posited by Altemeyer,

consists of three basic traits: uncritical subjection to authority, a strong penchant for conformity to norms, and tendencies to desire punishment of norm violators (Rattazzi et al., 2007). The monoculture turfgrass lawn is a landscape whose industry and design are tailor-made for conformity, both in plant composition of the yard and in conformity of the neighborhood. It is perhaps an "authoritarian aesthetic." Suburbs, the focus of lawn proliferation, were traditionally bastions of conservatism, although this has now changed (Parker et al., 2018). While not all conservatives are authoritarians, we might still expect a higher concentration of RWA personalities in these neighborhoods, at least historically.

This might account for a portion of the large volume of complaints that lawn enforcement authorities receive, but the degree to which they turn in their neighbors to the lawn police would depend on what norms the authoritarian individual prefers and the norms that the neighborhood they are in adheres to. No research exists as to the correlation between authoritarian personality and landscape norms, so how could we use RWA as a meaningful way to observe lawn care conflict? The answer lies in the interaction of social identity and authoritarian tendencies. What norms individuals try to adhere to and enforce, as well as which bodies of authority they submit to, will relate to their situation and their internalized identity components.

Reductionist interpretations of both the Social Identity Perspective and disposition-oriented approaches like theories of Authoritarian personality have often positioned the theories as mutually exclusive (Stellmacher & Petzel, 2005, p. 246).The work of Stellmacher and Petzel has sought to show that RWA is moderated or activated by the same forces at work in the social identity perspective. They conducted studies to corroborate John Duckitt's theoretical merger of the two approaches in a measure called "Group Authoritarianism"

(GA). The idea behind GA is that generalized authoritarian beliefs, which are latent to some degree in almost everyone, are activated and heightened by threats to in-group identity, which is moderated by strength of group identity, causing individuals and groups to shift focus toward conformity, obedience, and intolerance, thus resulting in authoritarian behavior (Stellmacher, 2005, p. 249). If you believe quite strongly that your neighbor's dandelion-ridden, brown-spotted, tallgrass lawn is a threat to your in-group, you would probably want to see the offending neighbor swiftly punished in the GA model. Likewise, an alternative landscaper might feel their authoritarian urges heightened by seeing a divergent lawn in their eco-neighborhood, one that, for instance, violates irrigation regulations.

Threats to The Lawn and Identity Content

To figure out what threats to group dynamics heighten authoritarian tendencies, we have to parse out the various group identities involved with lawn conflict, what threats to these identities might be, where they might come from, and what the implications are. As discussed, a lawn-heavy neighborhood that holds the lawn as a piece of neighborhood identity content will see threats to the aesthetic as threats to the group. The aesthetic, being one that is contingent upon a sort of borderless architecture of pastoralism, will be threatened if there is a break in continuity. If one neighbor decides to let their grass grow long, changes their lawn to a weedy garden, or even puts up a non-uniform and obstructive fence, it might threaten the cohesion of this borderless and uniform approach. Dandelions, the famous scourge of the lawn care aficionado, are a menacing force because when they go to seed they float across property lines and upset the uniformity of a neighbor's lawn. Dandelion ordinances might be a good place to explore authoritarian activization by threats to identity, because, like lawn

heights, they exist across entire cities, are perceived threats to those beyond next-door neighbors, and cannot possibly be uniformly enforced upon (Kessler, 2020).

Dandelions are a classic example of a lawn weed that has been used to heighten perceived threat to the identity of lawn care enthusiasts for years (Robbins and Sharp, 2003, p. 430). These sorts of threats play out in the extensive advertising campaigns for lawn care products. Marketing since the 1950's has told the white, well-off Midwestern homeowner that they are constantly under threat from the weed menace, tall grass, pests, and brown patches (Jenkins, 1994, p. 82). These threats are notably positioned as a threat not just to your lawn's appearance, but as threats to the unity of family, status, and neighborhood (Robbins, 2003, p. 435). Scotts Miracle-Gro's advertising campaigns specifically attempt to "burnish the lawn's place as an American institution where people grill, play whiffle ball, fall in love, get married and raise children (Neff, 2016)." Scotts' advertising campaign combines frightening music with supernaturally fast-growing weeds and frequently associates the health of the lawn with the value it holds as a "safe place" for children to play, in addition to a respectable venue for other symbols and rituals of American normative cultural identity.

Viewing someone who holds the lawn as a piece of identity symbolism, we can see why, under GA theory, one would feel threatened enough in their identity when their neighbors violate these norms to call in a lawn enforcement authority as a result of the advertising barrage they are subjected to. This might be true no matter what the lawn-owner's connection to the socio-historical dimension of the monoculture turfgrass landscape. So, what does a GA model say about someone who might hold the lawn as a piece of identity symbolism intertwined with a post-agrarian, post-WWII, White, pseudo-nationalism? If the

relationship with this in-group identity and the lawn holds true, we might expect a more sinister, racialized, and xenophobic conflict to occur.

The discussion about white identity feeling threatened by demographic change has dominated discourse around reasons for the increase in white nationalism and the election of Donald Trump (Resnick, 2017). As a result of this perceived threat, those who feel that lawns are an identity symbol of whiteness might feel more motivated to call the lawn police on those who are of differing ethnicities, races, and national origins. In one of President Trump's tweets, a day after the 4th of July, he invoked the front lawn itself in conjunction with the threat of immigration. The tweet read: "Tell the people (undocumented immigrants) 'OUT,' and they must leave, just as they would if they were standing on your front lawn" (Berger, 2018). When non-white people or immigrant families move into a neighborhood, we might expect to see heightened threat from this direction, and thus a heightened response to lawn ordinances. As the American obsession with the industrialized lawn (at least in the front yard) is fairly unique in the world, many foreigners and immigrants find the lawn useless and difficult to grasp from a cultural perspective (Jenkins, 1994, p. 3). An immigrant who fails to adhere to lawn norms might not only be likely to get called in to the weed control authority, but their lack of understanding about the peculiar cultural embeddedness of the landscape might further reinforce the lawn as a feature of positive distinctiveness for American nativists.

While the connections between lawn and White and nativist identity need corroboration, there are certainly real examples of the lawn being an excuse to police racial boundaries. Arizona's nativist 2010 immigration enforcement law specifically included overgrown lawns as a reason why police could check the immigration status of an individual (ACLU, 2010). In Ferguson, Missouri, part of

the Justice Department's findings of police discrimination by arbitrarily fining black citizens involved exorbitant fees for violating weed and height ordinances (Martinez, 2015).

CHAPTER VII

THE CONFLICT MANAGEMENT FRAME

Weeds, the Lawn, Politics, and the Law

The Federal Noxious Weed act of 1974 made the eradication of undesirable plants a federal environmental mandate (*Federal Noxious Weed Act*, 1974). In addition to creating a list of weeds considered so harmful to the economy and environment that they should be eradicated, the 1990 Farm Bill amended the act to require cooperation, support, and even financial assistance to individual State weed control programs (USFWS, 2013). As a likely result of this law, state level weed regulation exists throughout the country (Quinn et al., 2013) . Anyone found to be transporting a noxious weed or its seeds is committing a misdemeanor (7 USC Ch. 61: NOXIOUS WEEDS). The legal authority to enter property to enforce lawn height ordinances in at least one of the cities observed was contingent upon their legal authority to inspect for noxious weeds (*Nebraska Revised Statute 2-961*, 1965).

A vast number of cities and towns, many concentrated in the Midwest, have a lawn code ordinance of some sort (Sisser et al., 2016) (Appendix B). The definition of a weed is sometimes specific in the language of laws but is often simply presented as a vaguely unpleasant or undesirable plant. This subjectivity has been ruled on in court. Justice Richard Posner remarked in a Circuit court ruling that differentiating between weeds and ornamental flowers may be difficult based on standards like beauty, and affirmed that plants have expressive power under the First Amendment, but also that they must pass the "minimal expression" test (Sullivan, 2015). That is, the intended expression must be clearly understandable by its intended audience. Property nuisance laws are common in

municipal code, even if there are not explicit lawn care codes. Cities enforce a multitude of laws related to aesthetic norms, often citing public health, crime prevention, and property values as reasoning. On the other hand, cities also enforce landscaping laws meant to minimize irrigation and, if state law permits them to, reduce harmful chemical inputs (see the Montgomery Co. case study).

Severe restrictions on lawn height (see Appendix B) and the forbiddance of plants such as dandelions create laws that are likely to be broken by so many homes that enforcement on every violation would be nearly impossible without an extremely well-funded enforcement body. The most significant study on municipal lawn code enforcement finds that the enforcement bodies they were in contact prioritized and put a central emphasis on a complaint-based approach, and that people are generally unaware of the specifics of these policies (Sisser et al., 2016, p. 21). Even if individuals are aware of the regulations, keeping dandelions out of a lawn might be impossible even for ardent lawn people, and the rapid growth of warm-season grasses in summer may mean that the 8 inch height limit is quite easily reached (Sharp & Rayburn, 2019). During a week of warm rains where landscape tenders cannot get out to mow the lawn, entire neighborhoods might violate this ordinance. In this context, it makes sense that visible properties, and properties with neighbor-to-neighbor conflict history, might be the ones to qualify for specific targeting, as is the case with complaints against urban agriculturalists (Schindler, 2012, pp. 259–260).

Implications for Resolution of the Municipal Lawn Enforcement Conflicts

The serious risk for misuse of lawn care ordinances highlights how a seemingly banal conflict can turn into a real problem, as seen in Ferguson. Further empirical explanation of the connection between neighborhood identity, race, class, ethnicity, and landscape perception might provide a springboard for

addressing these issues. Showing that lawn care is enmeshed in prejudicial in-group attitudes and presenting these findings to weed control authorities like those in Lincoln, Nebraska could help to change the way in which these ordinances are enforced. Especially with the current national focus on prejudicial policing, shining a light on how lawn codes are harming certain people disproportionately could sway the way enforcement is carried out. However, there are serious questions as to the efficacy of this approach.

First, the enforcement bodies have significant motivation to reason away such connections. The livelihoods of these officials, in addition to the connection with contracted lawn care industry professionals, provides motivation to continue the operations as long as they continue to receive government funding. Furthermore, in anecdotal research, these enforcement bodies are largely controlled by White men who hold the industrial lawn in high regard as an indication of community health. Convincing them to take problematic complainant motivations seriously might be difficult. Finally, the violations of these ordinances are likely to be so widespread in many communities that a nuanced approach that deals with individuals is likely to be viewed as impracticable. Even if implicit bias training was conducted with the inspectors, it seems unlikely that such a body could or would find meaningful ways make exceptions for non-white and immigrant violators.

Another potential problem to reformation can be found in the frequent appeal to protecting "property values". Although property value is an important component of many people's retirement strategy, maintaining property values and order as a reason for law enforcement of lawn aesthetics seems to have similar premises to "Broken Windows" policing policies. That is, crime and disorder is a function of locality and is predicted by signs of disorder (Jefferson,

2016, p. 1272). The fear that unkempt neighborhoods will be a threat to public order seems to be a particularly resilient idea, despite the public outcry against the racist results of such policies (Jefferson, 2016, p 1271). If this perceived threat to order is coupled with nativism and the perceived threats that go along with it, lawn enforcement might be a particularly insidious and persistent force, especially if we ignore it for its seeming harmlessness.

In this light, the obvious choice for resolution would be a pressure campaign to change the ordinances to truly reflect public health concerns, or the abolition of such enforcement bodies altogether. If such a public campaign were to occur, it might force the hand of weed control authorities to limit their discriminatory practices or face dissolution. One potential legal change would be to limit the law to enforcing only seriously invasive noxious weeds that occur in close proximity to environmentally sensitive areas. Another might be to do away with such ordinances as restrictions on completely harmless weeds like dandelions, stop enforcing greenness standards altogether, and to limit lawn height enforcement to only severe cases that pose a risk to public safety such as when tall plants block vision of railroad crossings. A final creative idea might be to redirect funds that are spent on gas and personnel from inspecting lawn heights to providing subsidized lawn-care service for poor people. If tall lawns are as big of a risk to public health as officials say they are, and our government has a duty to protect our most vulnerable neighbors, this should be in the interest of the state.

Changes to perception and valuation of the lawn would be far more difficult to achieve. If lawns are an identity symbol hypothesized, then we would expect some of the same difficulties in changing attitudes about lawns as we would the American flag. However, there is more of an argument based in

pragmatism to be made about the lawn than the Flag. For instance, in the 1970's, environmental awareness among the consumer base about harms of pesticides significantly decreased the proliferation of pro-lawn materials in periodicals and advertisements (Jenkins, 1994, insert). These periodicals were historically geared toward and read by the white suburban nuclear family. Eco-conscious efforts in the modern world have gotten companies like Scotts Miracle-Gro to at least include ecology and alternate landscapes in their marketing schemes (Knox, 2014). The lawn, while the most popular residential landscape, is not monolithic, and changing neighborhood preferences can occur slowly over time. It would hopefully follow that, as the lawn wanes in importance as a symbol of identity, so too would the hold that overbearing lawn control authorities have on our communities.

Disentangling "Property Values"

The debates around ecological, cultural, and political conflict are fascinating and important. While these discussions have dominated the sociological and psychological observations of landscape conflicts, the one factor that threatens to stunt their importance is that of "property values". No solid analysis of lawn characteristics and their effects on property value in the United States was discovered in the literature review for this work, but other factors, such as percentage tree cover for maximum home value (38%), have been studied (Siriwardena et al., 2016). One study from China found that privately supplied public greenspace in country club neighborhoods increased property values (Xiao et al., 2016). From a methodological perspective, determining which aspects of landscape affect property values in what ways is a complicated analysis including neighborhood type, social amenities, cultural values, infrastructure, and a host of other factors (Palmquist, 2005). For now, we can

simply state that property valuation is a significant and recurring topic in landscaping conflicts.

Using a CR lens, we can tackle what "property values" mean as a defense or personal grievance. They could be seen as a "position" with underlying interests. Take the example of a neighbor who is obsessive about the cultural aesthetics of landscaping, but who feels out of place maintaining a certain aesthetic. They may take the position "I cannot abide by my neighbor's landscaping because it reduces my property values," because it is more socially acceptable, even in absence of any evidence that their neighbor's landscape reduces value. On the other hand, the lowering of property values itself may indeed by the interest that the grievant ascribes to. If the grievant sees maintaining market value as important to the concept of the commons, property value may be a moral value as well.

The home is the most common investment for middle-class Americans (Carlson, 2020). For most cities "property value" is done by a tax assessor as an appraisal, though "market value" (what a reasonable buyer is willing to pay) is usually part of the equation. Undoubtedly, landscaping adds to "curb appeal", which affects market value by up to 14% (Realtor Magazine, 2020a). Following the literature, the extent to which landscaping affects this curb appeal will theoretically change based on the underlying preferences of a neighborhood (Palmquist, 2005). If cultural preferences influence aesthetic ones, then curb appeal has inherently cultural elements. As suggested by Nassauer (1995), "cues to care", signs of intentionality in a landscape, even if it is "natural", may help to find a design compromise that maintains market value. Still, the entire spectrum of interests (Table 1) and conflictual actions (Table 2) should be considered when discerning the meaning of "property values."

Table 1
Interests identified in the course of establishing the framework

Substantive	Psychological/Emotional	Procedural
Cost of maintenance/equipment	Identity: Environmentalist	Lawn Enforcement Policy
Labor Hours	Identity: Good American	Appeals processes
Usability	Identity: Good Neighbor	HOA bylaws
Fines and Fees	Identity: Contrarian	Level of Informality
Employment	Identities: Class, Race, Gender	Manner of negotiating the commons
Physical Safety from hazards	Aesthetic preferences	
Chemical Hazards	Pride in Work	
Property Value	Gender Performance	
Ecosystem Services	Privacy	
Improving Local Ecosystems	Community Cohesion	
Crime Prevention	Feeling of Safety	
Pollinators and Invertebrates	Competition	
Ethnobotanical Use	Family Tradition	
Food	Being a good family member	
Noise Pollution	Freedom from Government	
Local Air Pollution	Enjoyment of View	

Table 2

Conflict Entrances, Escalations, and Interventions in the Literature:

Entrances	Escalations	Interventions
Anonymous Complaint	Rogue Landscaping	Municipal fines/fees
Lifestyle Frictions	Miscommunication	Municipal landscaping intervention
Vacant Property	Singling-Out	HOA fines/fees
Municipal/HOA citation	Refusal to talk	HOA landscaping intervention
Plants crossing property line	Feelings of class or ethnic division	Information sharing between neighbors
Environmental Impacts	Passive Aggressive	Landlord interventions
Health Impacts		Informal resolution between parties
Drastic change in yard's landscaping		Professional Mediation
Noxious/illegal weeds		Litigation
Pesticide Drift		Design Compromises

CHAPTER VIII

CASE STUDIES

Municipal Enforcement

Kenmore, NY

The case of the Kenny couple in Kenmore, a suburb of Buffalo NY, is one of the earliest cases of a yard in opposition to the lawn making national and international headlines (Cross, 1989). Firmly established as one of the premiere conservationist groups in the US, the Audubon society was actively promoting converting yards to wildflower meadows in the 1980's (CSM, 1985; National Audobon Society, 1994). Stephen Kenney, a graduate student and self-described disciple of Thoreau, took the Audubon advice and planted a wildflower meadow in his front yard The initial reactions, according to news reports at the time, were positive from many neighbors who appreciated the colorful, free-form landscaping and thought it brightened the neighborhood, while others began to immediately see it as a "mess" and cited threats to their neighborhood (CSM, 1985). Kenney found himself and his wife Emilie subject to violent threats, attempts on his cat's life, vehicles driving through the yard, and a general public uproar (Cross, 1989).

Eventually, the complaint reached a municipal court. Because there were no lawn-specific ordinances, the village court had to rule based on public health ordinances (Associated Press, 1984). There was testimony from two competing experts, one a horticulturalist and one a biologist, each asserting an opposite view on whether the wild lawn constituted a public health threat. The judge ultimately agreed with the ornamental horticulturalist over the biologist, citing that Kenney was not at Walden Pond, that his property was a breeding ground for unwanted pests, and chastised his contempt for neighborhood aesthetic

norms. (Associated Press, 1984) . Forced out by the "pressure cooker" environment, and seeking anonymity from a news story that reached all the way to Europe, Emilie and Kenney moved to Bear Creek, PA, where they both pursued their careers in peace, growing a wildflower lawn which proved uncontroversial in rural, more natural surroundings (Cross, 1989).

Dunedin FL

In May of 2019, the City of Dunedin, Florida foreclosed on Jim Ficken's home because he owed the city $30,000, all because his property's lawn was above regulation height (Wilson, 2019a). The story quickly went viral, attracting an "investigation" by Libertarian TV pundit John Stossel (Stossel, 2019). Stossel's interviews painted the picture of an overbearing and vindictive city government, which had likewise fined others besides Ficken upwards of $30,000 for code violations. The case became a cause célèbre for those who saw municipal code enforcement as overbearing, and Ficken's case was taken up by a Libertarian law firm (K. Wilson, 2019). Jim took this dispute to the court, and, as of last year, the case was still pending after summary motions for judgement were filed on behalf of both the City and Jim (WFTS, 2020). However, in April 2021, the city ruled against Jim, stating that Dunedin could legally fine him the full amount (Fiallo, 2021).

The incident began when Ficken was out of state caring for his late mother's property (J. Wilson, 2019). As the story is told in each report, the friend he hired to mow his lawn died unexpectedly, and so the lawn went uncut. Each day brought a new $500 fine. Dunedin has gone from imposing roughly $30,000 in total annual fines in 2007 to over $700,000 in 2017 (Germond, 2018), a fact that is not lost on Ficken's law team from the Institute for Justice. Their ultimate goal for the Institute is to turn Ficken's case into a larger point of precedent regarding

excessive city fines (J. Wilson, 2019). This conflict, which started as an unfortunate mishap, quickly escalated due to seemingly draconian government interference. The Dunedin case is just the most recent instance of a long-lawn city conflict reaching a scale larger than itself.

Bloomington, IN

Alexander Gul was fighting the city of Indianapolis over his natural, long lawn for years before 2015 (Hudson, 2015). Gul's environmental leanings caused him to leave certain plants like goldenrods untouched, but also included a lawn that grew above 8 inches (Rollins, 2015). Gul eventually cut his lawn grasses less than the 8 inches, but kept the native pollinator-attracting plantings, yet the city persisted in sending a maintenance crew to cut his yard down. This led to a confrontation where Gul was captured on camera standing in the way of the lawnmower, along with his lawyer talking about why the lawn was legal (Rollins, 2015). In an attempt to challenge the ordinance, Gul invoked the Indiana constitution's guarantee of freedom of expression in matters of conscience, in addition to First Amendment rights (Hudson, 2015). The Indiana court of appeals eventually ruled that Bloomington's law did not, in fact, violate his freedom of expression.

Gul's landscaping, as opposed to Ficken's, was intentionally constructed to be tall and wild-looking. The city nonetheless fined Gul thousands of dollars (Gul vs. City of Bloomington). The court also found that his freedom of conscience was not sufficiently religious to for the Indiana constitution to apply, but their opinion on the US Constitution's First Amendment is telling. The Court of Appeals cited precedent that, for speech to be protected, it must be intended to convey a "particularized" message that is likely to be understood by the receiver of the message. The court agreed that in growing his lawn in a certain way, Alex

Gul was attempting to convey a particularized message, but that its meaning to the city required too much explanation to pass the second part of the test. Besides the ruling's implications for freedom of expression, the theme of a misunderstood message being told by the alternative landscaper is a legal codification of the theoretical discussions about performance and communication in landscapes.

Roger Welsch and the Weed Control Board

Roger Welsch is a cartoonist, author, and activist based in Nebraska. His love of using "weeds" and his advocacy for native plants not only landed him on the wrong side of the local municipal authority, it set off an entertaining saga. In his book "Weed 'Em and Reap," he recounts the story. At the time, the weed control authority was an elected position. After returning from vacation to a yellow note threatening a fine and city removal, months of battling the authorities through appeals and playing gadfly on behalf of weeds ensued. Welsch then decided to run for the position of weed control board. Eventually, he attracted the gaze of revered CBS reporter Charles Kuralt, who featured Welsch as part of his then-famous "On the Road" segment. Welsch won the election on a "pro-weed" ticket, and he speculates this may be a reason the position is no longer decided by election.

Welsch's story highlights a common theme in many of the news stories about environmentalists and rebellious landscapers grappling with a city lawn ordinance. The specifics of the law often rely on subjective terms, such as "worthless vegetation" in Welsch's case. Welsch's ideas were not rooted in property values, and not purely in environmentalist terms either. As an amateur ethnobotanist, he clearly saw that the yard, full of edible plants such as nut sedge, dandelion, and lamb's quarters was "worth" a lot from a human use

standpoint. Perhaps because banning some particular plants would be nearly impossible, cities rely on more subjective language than long lists of unacceptable plants to be kept below a certain height.

Conflicts Over Chemical Inputs and Other Environmental Concerns

Montgomery County, MD and an Attempted Chemical Ban

Carson's "Silent Spring" may have led to the banning or strict regulation of chemicals used as lawncare inputs such as DDT and chlordane, but many of the potentially dangerous chemicals we have observed in our previous discussion, such as 2,4-D and arsenical pesticides, continue their widespread use in lawncare (Jenkins, 1994, Chapters 6–7; Robbins & Sharp, 2003). Since 1990, some elected congresspeople have attempted to include lawncare applications in groundwater policy, but have met with little success (Gannet News, 1990). This has meant that regulating lawn inputs falls to state, county, or city policy makers to grapple with. One such political controversy erupted in 2015 over Montgomery County, Maryland's decision to ban harm-causing "cosmetic pesticides" in lawncare use (Turque, 2015).

As with the lawn-height controversies we observed, this proposed County ordinance began to take on political dimensions beyond a debate over the harms of chemical inputs. City councilors were compared to Bond villains, and opponents of the ordinance cited reasons like community pride, property values, and of course, the overreach of a tyrannical government. The controversy even began to take on Cold War tones, with one resident saying, "If this bill is passed as written, there is essentially no private property in Montgomery County" (Turque, 2015). The case became a flashpoint in a war that, since the reforms of the 70's, chemical makers and industrial ag lobbyists had won most of the battle

in. This coalition eventually seemed to win again in 2017, when a lawsuit filed by local companies and major chemical manufacturers won a lawsuit against Montgomery Co. in a court of special appeals (Lerner, 2018).

However, in 2019, an appeals court reversed the special court's ruling (Grimshaw, 2019). The court's decision to overturn the lower court was based on the fact that the county could, in fact, implement its own regulations that were stricter than the state's law without circumventing state authority (Fenston, 2019). This opens up a host of possibilities for other counties and small governments to be more aggressive on banning chemical inputs. This case shows that county and local level policy regarding lawn inputs is just as full of polemics and polarization as one at a national level could be. Lawn owners quoted over the case frequently invoked notions of government overreach. Notably, both pro-lawn and anti-lawn activists seem to react similarly when they feel the government is overreaching into their yards, another sign of the deeply personal nature of landscaping.

Beyond Pesticides vs. TruGreen

After its 2015 merger with Scott's LawnService, TruGreen became the largest lawn care company in the United States, with an estimated $1.3 billion in annual revenue (Palmieri, 2015). TruGreen is the epitome of industrialized lawncare, offering a streamlined system of chemical inputs that promise to create a green, lush lawn with little homeowner labor at a price most middle-class families can afford (Abraham, 2017). Beyond Pesticides is one of the heavy-hitters in the anti-pesticide activism world (Beyond Pesticides, 2020). In March 2020, it filed suit against TruGreen, alleging that it had misled customers by claiming its applications were free of carcinogens, allergens, and irritants (Beyond Pesticides, 2020). TruGreen uses glyphosate, labeled by some (but not

the EPA) as a probable carcinogen (Tarazona et al., 2017), chlorophenoxy, which causes eye damage, and trichlorfon, which is neurotoxic at certain does (Beyond Pesticides, 2020). The exact chemicals that TruGreen uses are difficult to discover as a member of the general public, but the chemicals in the Beyond Toxics suit, especially glyphosate and trichlorfon, are found in many DIY lawncare applications to kill weeds and grubs (US EPA, 2016).

Water usage: Las Vegas and the Lawn Ban

The realities of drought in the Western United States have led states like California to seriously restrict water usage for landscaping in recent years (Rodgers, 2015). However, none have seriously attempted to ban "ornamental grass." Turning the previous municipal definitions of "worthless vegetation" on its head, Las Vegas water authorities want to ban "nonfunctional ornamental turf" from medians and other public infrastructure (Associated Press, 2021). This "turf war" is not new for Las Vegas. In 2003, the city banned new developers from installing green lawns, and has long offered a rebate program for homeowners to replace turfgrass with xeriscaping (Associated Press, 2021). This was met with some concern by the city governments of Phoenix and Salt Lake City, who cite the cooling effects of their mandatory public green space as an environmental plus.

Although the authorities of the ban stress that it is not targeting a homeowner's backyard, local lawncare enthusiasts are still wary of government interference. Predictably, some feel that the banning of lawns (which has essentially been in effect for many developments and master-planned communities) is against the cultural value of freedom that is so instilled in the mythos of Las Vegas (Green, 2021).

CHAPTER IX:

SOCIAL MEDIA ARGUMENTS

Social media and message board controversies are not always conflicts between people, nor are they always meant to be conflictual. The following analyses of online conversations regarding landscaping controversies reflect a portion of the ideas and supposed motivations for those who seem highly vocal about landscaping conflicts online. Although the following pages have conversations about landscaping conflicts that generate hundreds of replies, attempts to recruit participants from them for the interviews generate little to no response. This is perhaps because these social media groups are interest-specific groups, and the anger or firestorm that occurs within, while occurring between group members to varying degrees, is usually directed toward an outside audience. This may, theoretically, give us insight into a less-guarded exploration of group norms and private interests.

Online Lawncare Forum

One lawn care forum was combed for interesting threads that related to the topic at hand (The Lawn Forum, 2017). Most of the discussions are strictly lawncare technique related, but a few, such as one on the anti-lawn movement, are illustrative for our purposes. A thread (The Lawn Forum, 2018b) in response to a NY Times Op Ed (Renkl, 2019) telling readers to "neglect their lawn" for habitat's sake, garnered 27 responses, 19 of which were identified as substantive (see Table 3). Over 40% of the respondents admitted that lawns had environmental issues, and around a third brought up a possible compromise. At least three posters seemed entirely fine with lawns heavily regulated, even if they used chemical inputs. Around 42% of replies downplayed water scarcity or

thought it was of no importance to their region, and there were at least three responses that thought that industrial lawn care was good for the environment, with some respondents writing lengthy arguments as to why. People were less likely than expected to say that property values outweigh environment, and a couple of replies alluded to Biblical sanctioning for lawn maintenance.

Table 3

Responses to a NY Times anti-lawn opinion piece on an online lawncare forum

Responses to the "anti-lawn movement"	Number of Posts	Occurrence Total (in substantive posts)
Admits environmental flaws of lawn care	8	42%
Lawn care is inherently good for environment	3	16%
Opponents are misinformed about chemicals	5	26%
Ecofriendly Compromise	6	32%
Water scarcity isn't actually an issue	8	42%
Property Values outweigh anti-lawn argument	2	11%
Aesthetic value outweighs anti-lawn argument	3	16%
Opponents are anti-American	1	5%
Religious references	2	11%

Another discussion thread replies to an article from LifeHacker called "Stop Mowing Your Lawn" where the original poster (OP) sarcastically agrees,

saying it will make Al Gore happy. One commenter stated that the article "screams liberal agenda" and brought up the commonly cited point that environmentalists who want to do away with lawncare do not understand the ecological benefits of lawns. The discussion cited carbon balance with mowing, arguing that infrequent mowing in fact reduces carbon footprint. The discussion was not positioned as anti-environment, with agreement that switching to less harmful fertilizers (Milorganite, a byproduct of Milwaukee's wastewater treatment system) has benefits, but that environmentalists are, on the whole, disconnected city dwellers who don't understand nature. Some respondents seemed to position the lawn as being way to be in tune with natural cycles.

A final illustrative forum post, though not really conflictual, was about the formative moment where someone realized they had become a true lawn person (see Table 4) (The Lawn Forum, 2018a). There were several origin stories that were repeated multiple times. The most repeated was that someone just loved lawncare as a child, especially that they enjoyed making patterns in the grass. Coming in second was a tie between pride in home ownership, often describing years of feeling inadequate during rentership for not being able to have a nice lawn. This was tied in occurrence frequency with social media "rabbit holes", where someone went to the internet for a basic lawn care answer, then got hooked. Then came the family tradition, such as where lawncare is described as, "…in my DNA." People in this category watched the pride and importance that lawncare had for their elder family members and took it to heart. One poster mentioned the opposite of family tradition, saying they wanted to have a better, weed-free lawn than what they had grown up with. Sometimes moving into a new neighborhood, and feeling competition with the nicer lawns, was the

catalyst for getting into lawncare. Golf courses were mentioned several times as formative inspiration.

Table 4
Responses to the prompt "What made you start giving a damn about your lawn?" on an online lawncare forum

"What made you start giving damn about your lawn?"	Number of posts	Occurrence total (in substantive posts)
Liked Lawns/Lawncare as a child	10	31%
Pride in Homeownership	8	25%
YouTube or Social Media "Rabbit Hole"	8	25%
Familial Importance/Pride	6	19%
Influenced by Golf Aesthetics	4	13%
Negative childhood experience, but learned lawncare skills	3	9%
Neighborhood Competition	3	9%
For the Kids	3	9%
Dislikes Weeds	2	6%

Healthy Yards Facebook Page

"Healthy Yards" is a pro-biodiversity nonprofit based in Westchester, NY (NY Secretary of State, 2019). They have a heavy focus on what they call "lawn reduction", in addition to many other steps for the practical home landscaper to take for increasing ecological health (Healthy Yards, 2021). Their Facebook page

has over 38,000 followers and frequently posts highly publicized infographics and memes (see Figures 3, 9, and 10). The over 490 similar images shared on their timeline reflect a large portion of the history and conflict over lawncare from an environmentalist perspective. In addition to arguments against conventional landscaping's ecological harms, the images highlight issues of class division and attempt to re-define masculinity and patriotism as being conducive to a biodiverse landscape. Their images also attempt to re-define being a good neighbor with ecological approaches.

Figure 9: A Healthy Yards meme linking residential landscaping to human ego

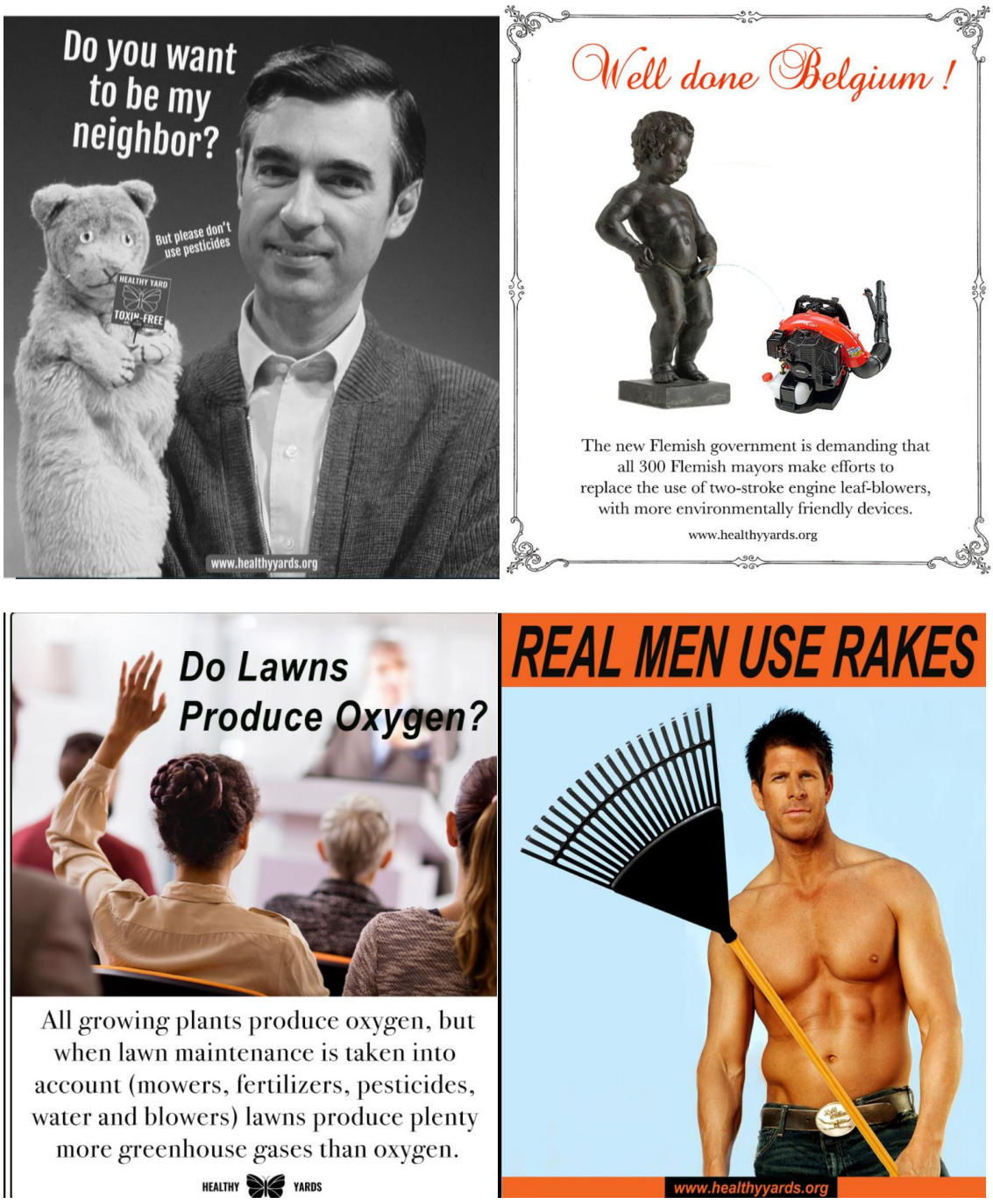


Figure 10: Healthy Yards uses meme-like infographics to challenge the ecological harms of lawns, their neighborliness, and their connection to masculinity.

CHAPTER X

INTERVIEWS AND THEMATIC ANALYSIS

This chapter was co-written by Janette Avelar. She conducted independent coding and provided a validity and trustworthiness check on the themes generated. Her contributions are further discussed below where she is referred to as "co-investigator".

Relevance to Established Framework

This study aimed to observe the recorded expressions of those involved with conflict and to see if those matched with the expectations drawn from the theoretical, historical, and academic review contained in the built framework of this paper. The questions guiding the construction of this study included the following:

1. Does the expectation that conflict regarding the American Lawn will be intertwined with historical notions of class, race, gender, and elitism hold true in real-life situations?

2. Can looking at "interests" expressed by parties to residential landscaping conflicts bring out nuances and hold space for multiple realities in a way that adds to the current academic discussions?

3. What are people processing during moments of landscaping conflict?

4. To what extent do rather mundane-seeming landscaping conflicts physically, psychologically, and spiritually affect their participants?

5. Does analyzing landscaping conflict from a CR lens contradict a common sense understanding of what is important to the conflicts analyzed?

Methodology

This study used a mix of thematic analysis and survey results to create a series of cohesive narratives informed by background, culture, and interests. Interviews were conducted and recorded over the Zoom client. Interviews had four structured questions, though clarification and occasional follow-up questions were asked. Extraneous questions were kept to a minimum to avoid priming responses. Afterward, participants were given links to a survey detailing their landscaping preferences, opinions about landscaping, political leanings, demographic markers, and the composition of their yards. A thematic analysis was conducted using the suggested methods of Braun and Clarke (2013). While there was no "code book" generated, the analysis of the principal researcher relied heavily on pre-conceived codes. Particularly, the language of the CR lens (e.g., grouping based on positions, interests, entrances, interventions, etc.) were at the forefront of the principal researcher's mind during analysis. This was balanced by the secondary researcher's position outside of the CR field in an effort to make the groupings and designations more organic.

Despite trying to draw conclusions under the CR lens, the interviews were not necessarily conducted in the manner of CR professionals. Therefore, true evaluation of the CR approach in this case must account for the fact that tools such as "active listening" were not used in favor of a more uniform approach. In addition, the "interests" of participants were not explicitly asked about. The reasoning behind the decision to forgo active listening was to reduce confirmation bias in the resulting texts. Even the minor clarification questions that the interviewer did ask most likely had a result on the themes brought out by the participants. Therefore, minimizing the extraneous questions meant that

the interviewees were arguably responding with more prescient and pressing interests and recollections.

Coding was done using a hybrid of the inductive, theoretical, and experiential Thematic Analysis (TA) methods from Braun and Clarke, (Braun & Clarke, 2013, Chapter 8). This thesis is focused in a multidisciplinary framework with a CR "skeleton". Therefore, the codes were created with a series of CR concepts in mind as primary codes or "parent codes" (see Table 5). Within these codes, subcodes were developed as they emerged within the analysis. For instance, the coding began with the parent code "Interests" with 3 child codes: "Psychological", "Substantive", and "Procedural". These child codes were filled out with instances as they arose, such placing as "Money" and "Family Security" under "Substantive" interests (see Table 6). Around these, new contextual elements of interest to the literature review were also coded for from a "ground up" approach. Finally, any other pieces of the data that seemed important to conflict but did not fit neatly into either the CR codes or the contextual codes were added, as were physical objects (such as plant types) and details of setting (such as time and type of landscaping), and explicitly stated emotions.

As opposed to finding interrater "reliability" of themes, Braun and Clarke (in addition to Nowell and company) suggest using two different coders, working independently, in order to provide "trustworthiness", as opposed to finding a "subjective" theme or code (Braun & Clarke, 2013, p. 279). This was achieved by having a co-investigator read through the anonymized transcripts with the direction to keep in mind questions three through five posed by the principal researcher. These were broad-based questions, though they did relate to the nature of conflict. The co-investigator was not a CR practitioner and was not well-versed in interest-based negotiation, nor were they ever involved with

horticulture or the landscaping industry, unlike the principal researcher. The principal investigator used a very strict semantic analysis, with far fewer instances of code applied, as opposed to the co-investigator's more contextual and more widely applied, coding. Once codes were complete for both parties, their validity was debated and run across other codes for overlap, disagreement, or nuance.

Themes were then agreed upon. The first step, after familiarization and debate over coding, was to think of the themes that had been informally conceived during the coding for each researcher. There was then a discussion as to whether those themes truly applied, and as to what the definitions of the themes truly meant. If no agreement could be reached regarding the meaning or connection of a theme to the data, it was discarded. Therefore, many of the more interesting or provocative conclusions were discarded because researchers were putting an emphasis on not "guessing" about what a participant meant by what they said. Sentences were thus allowed to be analyzed in the context of the interview, although the personal relationship the interviewer had with many of the participants surely colored interpretation the conversation. So, a sentence like "It was like the main shade tree for the deck in the morning, and when I still smoked cigarettes it was like a place for me to go," coupled with the fact that we know this participant's tree has been chopped down, meant that the participant's stake or interest in the conflict had to do with the psychological enjoyment of relaxation, and thus was coded with "Interest: Psychological: Relaxation". Emotional state, and attribution of others' emotions, was a difficult task for both researchers to agree on. The notion of how CR's mixed-methods practice complicates a thematic analysis is discussed further in the conclusion.

Table 5:
Interest Based Codes

Substantive Interest	Procedural Interests	Psychological Interests
Environmental Protection	Fairness of Process	Enjoyment of View
Extra Labor	Grievance Pathways	Feeling of Privacy
Food	Informal Agreement	Maintaining Mental Health
Money/Property Values	Radical Systemic Overhaul	Maintaining Social Life
Noise		Relaxation
Protection of Property		Manipulation
Protection of Family		Identity: Anti-Authority
Employment		Identity: Homeowner
Being Displaced		Identity: Environmentalist
		Identity: Alternative

Table 6*:*
Example of coding breakdown for two interests expressed in one quote.

Parent Code	Definition	Text Example
Interest	Interviewee describes one of the parties' underlying needs in the conflict	"You know a lot of the things that were happening at (house) um, never needed to be watered. And I mean, the amount of life that was there, and um, is still there, and um, the biodiversity is something that really drew me to there…"
Sub Code		
Substantive Interest	Interviewee describes an interest in tangible things like reason for needing money, reason for needing house, reason for needing landscape layout	
Sub-Sub Code		
Environmental Protection	Interviewee describes an interest in protecting the environment	
Sub-Sub-Sub Codes		
Biodiversity	Interviewee describes an interest in preserving biodiversity	
Irrigation	Interviewee describes an interest in saving water	

Recruitment and Participants

The majority of successfully recruited participants were collected by a convenience sampling method. All but two participants were friends, colleagues, or family of the principal researcher. The principal researcher attempted to recruit from social media pages and online forums as well, which garnered only one participant. 12 interviews were conducted with 14 qualified participants who described 17 total conflicts. Of the 14 participants, three did not complete the accompanying survey. However, household data was reported for two of those participants by their partners who were interviewed at the same time. Seven of the 13 had annual household incomes above $100,000 while 6 of the 13 had annual household incomes of below $50,000. All of the participants who responded identified as white. 5 identified as men, 6 as women, and two as gender non-binary (one of the participants who did not complete the survey identified as non-binary in the interview). The types of conflict which occurred are described in Table 7. 10 of the twelve interviews dealt with explicit interpersonal conflicts, while one dealt with a tacit conflict, and one dealt with a conflict between a man and his yard. One interviewee had described a conflict as a land use planner, which was deemed not close enough to landscaping to count for this survey, but they added a second part of the interview, a neighbor-to-neighbor conflict, which was included. Parties to the conflict included landlords, HOA's, government enforcement bodies, neighbors, family members, maintenance crews, friends, bosses, clients, employees, and, in three interviews, dogs. Interests were similar to those expressed in the literature, with some differences. Values were similar to what was expected (Table 8).

Table 7
Types of Conflicts Identified

Type of Conflict	Occurrence (# of Interviews)
Neighbor-to-Neighbor	9
Enforcement Body	7
Man vs. Nature	2
Landlord-Tenant	2
HOA	1
Conflict with Worker	4

Table 8
Values Identified in Interviews

Values
Alternative Views on Property
Fairness
Homeownership
Anti-Bureaucracy
Anti-Colonialism
Anti-Law Enforcement
Neighborliness
Environmentalism
Non-Conformism
Diversity

Results

Themes

Theme 1: Misalignment of Morals or Ideology (Ideology, Morals, and Identity). Researchers agreed that misaligned ideology, morals, and identity were a major theme that ran explicitly through all but one of the interviews. Researchers slightly disagreed on whether ideology must constitute a consciously and explicitly expressed system for the purposes of this analysis, but ultimately agreed that latent, unidentified moral systems, especially those found in the status quo (e.g. being pro-property or pro-legality) were ideological. Ideological factors were difficult to separate into their own theme because of how intertwined they were with reasons given for conflict entrance, escalation, and interests. In addition, notions of identity and ideology, especially regarding views on authority, property, queerness,

colonialism, and environmentalism were so linked as to be inextricable. Researchers agreed that, in almost all the interviewees' expression, the following ideological considerations were more important than, or underlay, the disagreement over landscaping.

Quote #1:

"Um yeah, I think it's just like…a mindset…that we've been indoctrined into. Um, I think it was the lack of maybe like respect, or communication, or um, interactions that…the native people that lived on this land had, and kind of when it was colonized we brought in those rules for how things should be. Um, so I think it has really a lot to do with, at a core, when the US was made and colonized... I think that's what like led to this point is like, it's a Western view, of like, things to be controlled, and um, how yards like originated and that sort of stuff…You can see, like, the White House; it doesn't have a giant garden. It might have, at one point I think, but it's just a big fuckin' grass lawn."

Subtheme: Neighborliness, Homeownership, and Views on Property.

Coding related to property ownership was found in all of the transcripts, and items related to being a neighbor were at play in all but one interview. The issue most often at play, property line conflict, was related to privacy violation strongly, but was also usually related to a value conflict about the nature of property and land stewardship. Similarly, differences over opinions on property seemed to signify alternative identities to "normative" American lifestyles in at least three of the interviews, while feeling singled out based on lifestyle seemed

indicated in at least four of the interviews. At least three interviewees talked about indoctrination.

Quote #2:

"I think it has to do more with like, um, a lifetime of repressed feeling and not being able to access love, and I don't know what their experiences of trauma are, but unfortunately my neighbors are some very, like, hurt people…. So, um landscaping conflict borne of property line bullshit borne of a very different relationship to land. I have a hard time wrapping my head around the idea of property ownership."

One participant, from Quote #1, linked American history to the notions of property and control involved in their conflict. For the corresponding interviewee, the transcript showed that the derivation from norms was enwrapped in their identity as queer, anti-colonial, and anti-capitalist, while the reason they were punished was not simply that their landscape was non-normative, but that it was ideologically unacceptable. Notably, this intersects with their perception of the other party as being bad or disrespectful communicators, and the intersection of ideological perception and poor communication will be further explored in the second theme. Quotes #2 and #3 reflect property value ideology conflict from other participants, and are all tied up in notions of not only the legitimacy of property lines, but the interpersonal dynamics of conflict. In participants with seemingly normative or neutral views on property there was also a serious matter of misalignment surrounding

ideology, identity, and values. Looking at Quote #4, homeownership does not explicitly stand out as a value or part of a worldview. The interview's view of being a responsible homeowner also included interests relating to property value, issues with pets, and enjoyment of life. While practical and emotional wellbeing contributed to the participants' valuation of upkeep, it was clear that "being a good homeowner" was a value judgement which constituted a part of the interviewee's ideology, however normative: owning property is a legitimate moral enterprise. Quote #5 is an illustration of one of the several interviewees who felt violated when their property line was disturbed. However, in this participant's case, the violation was from a municipal authority who had violated, by surprise, the interviewee's private property.

Quote #3:

"…it's so tied up in all these ideas of what constitutes a good neighbor, what constitutes ownership, what constitutes, you know a good relationship with the land or with the people you are in, like, immediate physical proximity to, uh...and I mean you know, drawing boundaries and where uh...I don't know, where we

Quote #4

"…my take on it is, just because someone is able to qualify for a home loan doesn't mean they're necessarily ready to be a homeowner. So I think in this case the homeowners are very young and it's their first home, and I think they just don't know much about keeping up a property or making it a priority."

The dividing point for ascribing ideology to an interviewee's expressions meant that researchers disagreed on what latent and contextual clues constituted enough evidence to ascribe an "ideology" of pro-property, but undoubtedly the notion of property lines was central to positional conflict in our interviews. Only one

interviewee overtly talked about property as a value, and they were, notably, the "…nicest house on the block…". All of the participants cared about having autonomy over the space they lived in, and even participants with anti-property views had libertarian views based on to maintain their yard in the way they preferred, although they usually framed this liberty in defense of the ecosystem. Six of the transcripts included complaints about plants crossing the property line, and seven total had issues where parties to the conflict were misaligned on what actions were justifiable based on property ownership.

Quote #5

"It felt a little bit violating I guess, like, not like 'Oh my god I can't believe they did that' but like 'Oh I guess there were people in my yard touching my things and I didn't know about it.'"

Notions of what it means to be a good neighbor were readily apparent in all but one of the transcripts. As with Quote #6, seven of the 10 participants with neighbor conflict saw a neighbor's actions (or a complainant they assumed was their neighbor) as being intentionally aggressive, manipulative, power hungry, or mean. One other saw their neighbors as slovenly, careless, and oblivious, but not antagonistic, and a ninth interview that dealt with notions of being a neighbor never directly expressed an opinion on a neighbor. An interviewee who had known their neighbor for 28 years expressed that their conflict, though it led to

Quote #6

"I guess I had just had enough, so without like skipping a beat I just said, "Wow I think it's really sad that you think that's funny." And I just walked behind her to my truck and I just...she has not spoken to me since. So that was like, almost a year ago, so I was like 'Oh, that worked.' She thinks it's funny that like, she's like, the one that's known for being a total asshole on the block."

their power being shut off and them being displaced from their home, did not lead to hard feelings. The three participants with explicitly alternative views on property seemed to link the notion of being a good neighbor with a notion of land control and ownership. Views on whether the neighbor was a sympathetic or likeable figure seemed to heavily influence the positive outcomes of negotiations and disputes.

Subtheme: Stewardship Philosophy and Environmentalism. Philosophies of stewardship and relationship to environment were closely related to notions of property and neighborliness, though they seemed to contribute to their own misalignment of ideologies. "Environmentalist" was coded as an identity if explicitly self-described or obvious implied, while "environmental protection"

Quote #7

One of the problems with the conflict with their landscaping is they own multiple dogs, and the dogs defecate everywhere, they tear their yard apart, they just tear trash apart and the trash ends up in my yard, I've had diapers in my yard (laughs), you know… I'm presently planting landscape to block him out, so, I don't think he likes that. But what I would like to do is figure out some way to confront him in a way that will not cause any, you know, any unneighborly feelings. I mean, my neighbor has never been confrontational with me so at that point, I have

Quote #8

"The conflicts that I come across are issues happening with my soil, or shade, or lack of sun, or too much sun, or too much water, or not enough water. Those are the conflicts that I run into when I'm trying to plant something in the right area… it used to be a forest, so there's weeds and other junk in there and the way my house is positioned, there's lack of sun on parts of the lawn and too much sun on other parts, and so it's really just trying to dial in the soil."

Quote #9

"I'm like against you know, non-organic…chemicals in the land. On the other hand, your landscape looks like crap if you don't use it. Are you gonna work all day weeding, you know? Uh, which I don't like, so, that's another problem... During the summer your lawn looks dry because you don't water it. That's something you have to take into account, ok? It's not very nice, but what can we do, you know?"

was described as a substantive interest, and "environmentalism" was coded as a value. The distinctions helped to disentangle the practical (e.g. interviewees who were against having their water or food poisoned) from the identity and ideology of environmentalism. Seven interviews expressed interest in environmental protection ,four transcripts contained notions of environmentalism as a value, and five interviewees tied their values of environmental protection to their larger identity. One interviewee, a lawncare enthusiast, saw their conflict as being not only with themselves, but with the previous natural environment, a forest (Quote #8). Though they expressed no disdain for the environment, their tacit acceptance of aesthetic value, property ownership, and landscaping norms as greater than the previous environment is illustrative.

For a few who mentioned environmental interests and values, there were conflictual moments where their ideals were superseded by an immediate need or preference. One participant (Quote #9) indicated that excessive labor, aesthetic preferences, and the desire to maintain household harmony (expressed in another part of the interview) were reasons to use

Quote #10

"We were notified in the yard with a sign, and um, a warning for uh being different, (laughs) or queer. You know, having a yard that wasn't um, you know, the Western yard."

inputs they were practically or philosophically against. Another participant indicated that, although they knew their leaf blower caused noise and air pollution, they used it to make their work as a landscaper more efficient, ceasing use when it became the catalyst for a nasty conflict. Three other participants ended up destroying plants they felt were beneficial to the environment because they felt like there was no other option in light of regulatory punishment, which certainly caused resentment. Two of those participants mentioned feelings of being deeply psychologically manipulated to look at certain plants negatively which they, morally, thought should be allowed to grow.

Subtheme: Other "Alternative" Identities and Ideologies. "Alternative lifestyle" self-identification happened in five of the interviews (representing six interviewees). These interviewees couched their alternative lifestyle in being anti-normative landscaping, anti-colonialist, queer, anti-law enforcement, and as mentioned, anti-property ownership. (At least one other participant expressed positive association with these ideals but did not seem to identify with them as important values.) As Quotes #1 and #10 show, the ideas of gender, colonialism, and landscaping all combined for this one participant, and anti-capitalism and landscaping were intertwined for at least three other participants. Suspicion as to who was anonymously calling in the authorities also lead another to think they were being singled out for their lifestyle. Another participant felt that they were being targeted and looked down upon because of their status as a landscaping worker, which, although not an ideology, was seemingly enough to qualify a party as a sort of "other" in at least two of the interviews. A final couple had both been yard-tenders, but were now deciding not to play the "property game" by travelling houselessly.

Even among the five alternative lifestyle interviewees, almost all appealed to norms such as right to privacy on property and freedom of individual choice. For instance, one called in a local department of agriculture to add legal legitimacy against their neighbors, who had poisoned the participant's plants, despite the participant expressing anti-authoritarian and anti-bureaucratic views. Even the most "alternative" interviewees usually chose to work within the system, although they cited their helplessness to do anything else. The other eight seemed to rely heavily on "normative" lifestyle expectations (although at least three expressed critical commentary about systems) and were sometimes disappointed that the system had no way to enforce codes related to their conflict. While minor victories against authority and those in moral or ideological conflict with the participants were discussed (education or a ceasefire for instance), almost invariably the legal power structure had the last say, if they had any say at all.

An exception to the attempt to work within the system, or at least an interview where the interviewees were doing a good deal of work to be outside of any property system, were the intentionally houseless couple. While both had described attempts to negotiate in good faith with authority, they had ultimately decided that it was better to travel and to live without renting or owning a home. One felt isolated from property owners, feeling that, though they were trying to be communal landscapers (growing fruit and providing it to their community for instance), he felt marginalized for not having a piece of land that was "theirs". Their landscaping conflicts involving places they had rented were specific and mirrored other individual-authority conflicts in the way that interactions were seen as escalatory, manipulating, and power-hungry. Even though the couple was attempting to play outside the system, they described landscaping-property

Quote #11

"So anyway, that lady called my bosses, and my bosses have to talk to me, and it's like it becomes this big thing, and it's...that story goes on…all because…we used this blower. And it's like, it doesn't actually have to do with residential landscaping it really has a lot to do with a lack of communication…"

conflict in the way of being forced to camp in a public park where a sprinkler was left on all night to discourage camping.

Theme 2: Weaponization of Authority. In every case but three, a legal enforcement body, an HOA, or a higher-up was utilized to try and gain ground in the landscaping conflict. In addition, some people's personal status of power and feeling of being in authority was weaponized. Sometimes it occurred after a breakdown in interpersonal negotiation, while other times no direct interpersonal interaction occurred at all. While enforcement bodies and authority figures were often "blunt force" conflict resolution tools, bringing a ceasefire or uneasy peace for forcing compliance, their actions were almost without exception either the entrance to the conflict or highly escalatory.

Quote #12a

"And of course the second amendment allows him to hold a gun and shoot, and (the) County doesn't enforce uh, noise nuisance, and we don't know what to do, so yeah, that's a conflict."

#12b

"So even if I cut trees that are further from my house in case they fall on my house then…I can say 'Hey this is…a safety issue' and then (the) County will say 'No it's not a safety issue', then you have to argue with them about it."

Subtheme: Code Enforcement Unfair. In most of the instances of weaponized authority, or in instances where authority's power was desired but unfulfilled, participants seemed to feel that the enforcement was arbitrary,

targeted, or generally unfairly applied. One person found their yard's violations were repeated throughout the neighborhood, including the church across the street, but they were the ones targeted. Three seemed to feel it was unfair that they can be punished for not keeping a certain aesthetic while others are left free to harm the environment or endanger their community without any legal recourse. Another (Quotes #12a and 12b) signified that authority could not be weaponized when it truly counted. Not a single instance of authority being used as a tool in the conflict was seen as positive. A few mentioned that safety standards were a reasonable motivation for authoritarian intervention, but no one seemed to think the safety standards were being applied reasonably.

Quote #13

"Of course the complaints are anonymous, so somebody made the complaint to the HOA board. And so we couldn't go talk to the individual, even though we kind of had an idea who it was, so we just cut the flowers. And it didn't make me very happy, because they… were really beautiful at that time, and we just kinda yanked them out of

Quote #14

"Well, like I said, you hear that maybe it was because a neighbor turned you in, so that makes you paranoid of who hates me or who doesn't approve of my lifestyle? So I've never, I have some suspicions of a person who might, for some reason, you know, wanna have me punished for my lifestyle? You know, I don't know."

The unfair or mysterious application of authoritarian force also caused feelings of paranoia and hypervigilance. All the interviewees who had been enforced on without knowing the origin felt a sense of confusion at why, and as with Quote #14, felt a certain sense of paranoia. The interviewee from Quote #5 felt not only violation that their plants (even ones they felt were worthless) were ripped down when someone entered their

property, but spent entire paragraphs during the interview speculating as to why. In both cases, the interviewees simply adopted a "scorched earth" policy, destroying all plants they thought might get them in trouble. The participant from Quote #13 described the unknown tipster as a vigilante type, associating the person with needing a sense of power. This came along with a suspicion and paranoia about the neighbor's supposed complaint, heightened by the fact that the suspected neighbor had been caught peering into their window.

Subtheme: Justification for "True" Motivation. When done by an adversary, the use of authority was seen as a means to get revenge on someone, make an unfair profit, harass someone for their lifestyle, or to project emotional trauma, repression, and lust for power. When done by the participant, it was seen as a means to get justice, enforce property safety, or because there was no other possible action to be taken. Going back to the property line conflicts that occurred in nearly every interview, the opposing party was framed as holding steadfastly to their rights as property owners to decide on what to do with the plants on their side of the line, sometimes appealing to the legal system by saying they "talked to the cops" or knew their rights as a homeowner. The interviewee from quote #13 linked the complaint to a lust for power, the person who said #11 mentioned that the complainant was "rich and sad", and another saw it as only a small portion of the authority involved, which extended to a larger lawsuit over other property matters.

Subtheme: Breakdown in Negotiation / Worsened Communication. Authority, as a third party, was not perceived as an effective communicator. When authority figures would cite rules (weed violations, property lines, or safety parameters), participants would often respond that these justifications were intentionally inflexible, mysterious, obfuscating, or, as mentioned,

unequally applied. This sort of communication led to several participants feeling singled out. The types of communication that authority usually used- posted signs, letters, cookie-cutter office calls, and brief visits- were seen as "threatening", shaming, or intentionally escalatory. The nature of these types of communications, which are non-personalized and vague, ironically led a few participants to feel personally attacked and picked on. The authorities were often impossible to reach, and in one instance, the interviewee identified their protocol as first sending a letter to the landlord as opposed to a renter, adding another channel for possible miscommunication. The authorities, in the description of participants, had bad people skills, poor justifications, and their physical lines of communication were inadequate to resolve the conflict without hurt feelings and ongoing psychological trauma.

Theme 3: Ineffective Communication. Flowing from the authority discussion, we consistently see that communication in these landscaping conflicts was ineffective, missing opportunities for clarification, failing to identify areas of mutual gain, and skating by with as little interpersonal contact as possible.

Subtheme: Indirect Communication. Indirect communication, either through an intermediary, impersonal notice, or using landscaping-based messaging, occurred in 8 of the 10 interviews. In addition to the indirect channel already discussed, using authority to communicate, one participant (Quote #7) was unwilling to confront the other party with a direct verbal conversation. As such, they used the landscape to communicate by planting a row of lilac bushes. Although this action was ostensibly intended as a practical barrier, the communicative action of the landscaping was not lost on the participant who feared ill-will would be garnered due to the nature of the "fence" building. One participant talked to the media, a form of communication meant to go through

an arguably non-authoritarian intermediary. In the case of the participant from Quote #8, they used indirect communication of a "golf course" lawn to signal participation in competition to their neighbors, although the conflict was considered "not serious at all".

Subtheme: Avoidance. Avoidance, or the perception thereof, was a factor in 8 of the interviews. For at least 4 participants, it seemed like authorities were intentionally avoiding direct communication, not just being bad at it. This could have been a perception of vendetta or, as with Quote #15, a suspicion that intentional avoidance is linked to getting money from an unwary public. In a more classic sense of avoidance, the participants with neighbor-to-neighbor conflict where the neighbor was highly visible all described conflict avoidance, which influenced communication, as with Quote #16, which lead to a major escalation in the conflict and feelings of being very "pissed off" from the interviewee. Avoidance was likely a root cause of indirect communication, as with the lilac wall, and the suspicion of avoidance was latently present in descriptions of anonymous tipsters who weaponized authority. Another participant who was displaced due to power outages from a tree branch claimed good neighborly relations, but also clearly had slight unspoken resentment around the situation, though they might identify as minor.

Quote #15

I'd imagine they tried contacting our landlord, but if they would have just knocked on my door and said, "Hey we gotta clear these vines out," I would have done it immediately…I feel like some direct communication could have saved, I don't know…Maybe that's how they make money is finding people like this…I would have appreciated a…knock on the door before they ripped out part of my yard without asking."

Avoidance was also coded as "loss of space" by the co-investigator. Desire to avoid on-going conflict caused a lack of comfortable use of certain areas of the yard due to "bad vibes" or the inability to landscape a yard without threat of retaliation by authority. Conflict avoidance therefore caused literal changes in the way the land would be cared for, whether it was avoiding planting certain things, dealing with a tree that needed to be cut for safety reasons, or planting intentional barriers. This feeling of inability to act due to conflict, predictably, caused a number of negative and lingering feelings of helplessness in participants' lives.

Quote #16

"Like I said our backyards are shared, so any time…I let the dogs out they were out there you know we were like seeing each other, they were like ignoring me until I was like, 'What are you gonna do about chopping this tree down?'"

Subtheme: Failure to Maintain Communication/ Partial Truths. Another common theme in bad communication was failure to maintain communication in assumption that a permanent deal had been reached through negotiation. In the case of one interviewee, their neighbor got permission to do some tree work years before they decided to completely remove a tree. This caused a more potent conflict because of feelings of some betrayal. In one telling, the weed control authority had been educated and informed of the participant's intention in maintaining a natural landscape, and though the interviewee thought they had reached agreement, they were ultimately enforced upon. In the case of the maintenance worker who had a client's neighbor complain about their leaf blower, they too thought they had come to an agreement, only to have the complainant jump from their car to hurl expletive filled insults at the worker for wearing a backpack blower. One participant was repeatedly sure they had done

the bidding of the authorities, only to find out they were wrong and needed to do more work or risk serious penalties.

Theme 4: Lessons Learned, Personal Growth, and Self Reflection. In six of the transcripts, codes of "personal growth" or "formative moments" were applied. In these reflections, the participant recalls learning something about themselves or changing their perspective on a personal philosophy, the way they see the world, and the nature of conflict itself. For these participants, the landscaping conflict was not entirely without positivity. The extent to which these moments were justifications or were their true feelings is beyond the extent of this analysis, although it was debated between researchers. Still, the fact that many participants felt their life, perspectives, or mindset was changed as a result of the conflict was solidly agreed on.

Quote #17

"This whole conflict was kind of a life turning point for me. Because I realized just how a lot of it was tied into my idea of possession and property. But I realized how much power I was giving other people over my emotions. And you know like I was just so exhausted and tired and I felt awful and I couldn't sleep and just being so angry and so like, I just gotta figure out what is going on with me that is causing this tremendous reaction. So yeah, that kind of led me down a whole different route in a way…"

Despite the fact almost all of these conflicts spawned significant negative consequences, many of the participants felt they had at least learned about how to deal with conflict better in the future as a result of

Quote #18

"The only other thing I'll say is, for me, it's been a good lesson, because, I feel like I went through a range of emotions with this thing. And again, it's just so stupid, because this person and I have no actual emotional relationship whatsoever."

their actions. Quote #17 shows how the participant recognizes that they were acting in a way that was both antithetical to their moral beliefs and also was causing highly negative, and in their mind unnecessary, negative consequences. The participant describes two conflicts, and remarks that they reacted "100 times" less emotionally than the first conflict, even though the situation, a neighbor chopping down a backyard tree, was very similar. The co-investigator pointed out that the interviewee also seemed to have sympathy with the second neighbor due to being a "single, older woman, who lives by herself…", which probably influenced the extent to which his newfound conflict skills might be applied. The participant from Quote #18 felt like they learned a lesson from allowing another person to control their emotions. The person who was constructing the plant-based barrier reflected that they no longer wanted to feel a recurring anger and was reflecting on how to negotiate without causing ill-will.

Quote #19

"I did do a little gardening yesterday so I did pull a few weeds and um, I dunno it just makes me think about my yard out front here. And there's some tall grasses, but I can see like one of those taller Pokeweeds coming out. And it's like a little taller than everything else. And I went out there today to just pull it, and it was like, so strong. And I was like "Oh my gosh, it's so strong I can't even like, pull this!" And I was like "What am I doing?" You know, like, why, what in me...So yeah I think it's like this like psychological sort of thing that I personally have been having in relationship to, um, like you know, organic life and things like that, plants."

All interviewees were sure that they were right in their overall positions, with a few exceptions of uncertainty in how they acted. While they often conceded a logical or emotional point to their adversary, there were only a

couple of times where the recollection of the interviewee cast themselves in a negative light. Long term resolution rarely occurred beyond what was called a "Ceasefire", a halting of the conflict in order to maintain an unstable peace. While participants may have gotten a positive benefit from reflecting on their emotions or how they deal with conflict, it was clear that most interpersonal, or individual to power structure conflicts, mostly were only resolved by capitulation with another side, someone moving away. Otherwise, and sometimes in the case that someone had tried their best to follow the rules, conflicts tended to hover right below the surface, never quite resolved.

Discussion

On the preliminary question of the American Lawn being linked to class, race, and other social factors, there was at least some reflection in the data of that. However, the fact that all of the interviewees but one were white Americans, and most were from middle class or higher backgrounds, represents a major failure on the part of this study to adequately address this question. The interviewee from Mexico was automatically barred from being asked demographic questions because the survey auto-skipped after selecting that they "…have not been involved with residential landscaping based conflicts." This question was meant as a credibility check but may have inadvertently prevented the survey from being answered for this interviewee. However, the participant's co-interviewee, their partner, answered the survey and provided reliable "household" income (though they were intentionally houseless). Seven interviewees did expression notions of landscaping conflict being linked to race, class, or status in society.

These interpretations mirror the rhetoric of many of the authors and sources in the first eight chapters. Though this does not necessarily indicate that the interviewees are right in their perceptions, it does indicate that the historical

framing is an important part of the conversation for at least some parties to landscaping conflict. One interviewee mentioned that a green flat lawn was also the norm against which alternative yards in his home municipality was enforced, and that the communal neighborhood they lived in On the second question of whether interests can bring out additional nuances, the answer might partially be found in the coding of environmentalism and aesthetics. By trying to honestly discern whether the environmental interests of participants were truly substantive or psychological interests by using the semantic expressions of participants, the analysis was able to piece apart the different elements, though the all existed at times within the same paragraph.

On the third point asking "what are people processing" during these landscaping conflicts, the answer turns out to be complex. Strong emotions, such as disgust, betrayal, and sorrow were often expressed, and as discussed in Theme 3, many participants wanted to change the strength of their emotional response in retrospect. Only two of the participants seemed to be processing minor conflicts. Feelings of safety, security, and faith in humanity were also at play at certain moments for interviewees. The participants also processed fault and blame, almost always justifying their own actions, but occasionally showing doubt and self-blame. Not a single interview was confined to a simplified, brainwashed lover of aesthetic design, although the psychological enjoyment of a cherished view or favorite plant was important for multiple participants.

The fourth question, concerning the extent to which the mundane landscaping conflict levels outward to larger conflict, was at least partially expressed in all of the interviews. Clearly, many participants felt that either discrimination, social posturing, ideology, neighborhood cohesion, or another larger systemic factor was at play. While none of the conflicts reached the peaks

of conflict as our more serious case studies, they all had some long-term psychic effect on the way our participants moved about their world. Whether it was changing their habits, doing unwanted labor, avoiding an area, living with unwanted emotions, or altering their style of communication, interviewees expressed that landscaping was only a small part of their conflict. The only exception was the interviewee for whom landscaping itself *is* a conflict, which, although mundane, gave insight into a private world of self-competition, neighbor competition, and a view on battling the elements.

The final question, whether a CR framing contradicts common sense, can be answered by, "usually not in these instances." Trying to fit certain elements into the conflict frame, such as an annoying dog, might have led to seemingly silly categorizations, such as "dog" as "party to conflict". In addition, the principal researcher's motivated bias toward finding conflict resolution-related elements caused disagreements with the co-investigator, mainly when looking at whether "interests" and "values" can be separated from systemic ideologies. However, notions of entrances, escalations, positions, and even almost all of the interests and values, lined up with what the co-investigator thought was happening, as well as with what the participants who were able to be reached thought was being expressed in their interviews.

Limitations

The process was constrained by a short period between IRB approval and completion. This led to most of the most important derivations from best practice ala Braun and Clarke. First, building a sound codebook from the literature review, or making an entirely ground-up inductive approach would have taken longer than the time allowed. Secondly, the snowball recruitment process used likely required longer to "get the ball rolling" when it comes to reaching a wider

audience. Coding themes became more refined and accurate the more times the interviews were analyzed, and could possibly have been improved with more time for reflection and analysis.

The CR lens, while providing many insights to the nuances of party interests, may not be entirely compatible with the way this thematic analysis was conducted. First, the interviewer might have considered including a set of pre-approved clarification questions, and criteria for when to include them. This may have permitted a compromise between teasing out more relevant information and pre-ordaining its inclusion. There might also exist a natural tension between a mediation or facilitated negotiation's goal, mutual benefit for all parties, and the academic goal of discerning the answer to a research question.

The barrier for participation was only that the participant considered their issue over residential landscaping a "conflict". The reasons for this choice were that "conflict" means many things to many people and that seemingly mundane "landscaping" conflicts might have serious implications. In hindsight, this excluded many who did not feel as though their situation rose to the level of conflict, but whose situation may have been nonetheless useful. "Tacit conflict" over residential landscaping, for instance, may exist in a much greater part of the population, although it is debatable whether tacit conflict is noteworthy for our purposes. In addition, things which might be considered a "conflict" on a non-interpersonal sense like ideological battles between alternative and normative landscapes may not have been considered a conflict that someone was "involved" with.

These contacts were skewed toward people who are in favor of alternative landscapes, though there were many interviewees who were not in any sense advocates for "alternative" landscaping. Still, the knowledge of the interviewer's

personal interest in alternative landscaping means that answers may have been positioned more in pro-alternative language than they would have to a researchers whose opinions were unknown. Very few enthusiastic pro-lawn individuals were successfully recruited. Participant conflicts were mostly based in one small Midwestern city with an active municipal weed enforcement body. The participants all identified as white, except for one whose demographic survey was unfinished. All of these factors are largely due to the fact that the participant pool was almost entirely people who the author had previously known to have had a landscaping conflict and who were close to his circle. In the full spectrum of landscaping conflicts, these represent an extremely small slice.

Suggestions for Future Research

Additional Demographics and Equity Focus

This research needs to address more seriously the implication for using enforcement bodies in a prejudicial way. While this and other studies have looked at municipal law enforcement, no systemic and widespread research exists as to the way that landscaping laws affect disenfranchised and oppressed communities. Clearly, participants felt that authority could be weaponized for prejudicial purposes, and in the experience of the PI and co-investigator, this is undoubtedly an occurrence that takes place. In addition, getting the perspectives of Native people and non-white people with connections to landscaping could help add nuanced perspective to the framing of colonialism and discrimination. In order to fully weigh the value of enforcement bodies, the true effects on equity on inclusion need to be explored and weighed.

Focus on Government Enforcement Conflicts

For lack of time and resources, this study abandoned an early intention by the principal researcher to interview county and city governments involved with landscaping, which has been done in other studies (Mustafa et al., 2010; Sisser et al., 2016). Attempting to discern the policy implementation goals outside of the legal justification might help to find shared solution space. Looking at different enforcement procedures across different climactic regions may provide insight to interests in landscaping code enforcement.

Social Media

Discussions concerning lawns and how to landscape the front yard are prolific on social media. Niche arguments about landscaping, such as minute differences between different kinds of lawn people or native landscape people, might be more highly visible on the internet. Whether these discussion map onto real life versions of the conflict might provide a further avenue for study.

Further Environmental Conflicts

Graywater Disposal and Compost. Graywater disposal and permitting has a long history of conflict in Oregon. Professor Todd Jarvis has suggested this as a possible dissertation topic. Reusing residential refuse water in the home landscape has been the subject of lengthy legal and neighborly battles ("Decriminalizing Graywater," 2011). Backyard composting is also a contentious issue in the experience of the primary author, and has numerous dimensions of enforcement-based nuance.

Fire Fuels Reduction. Cities across the west have cleanup programs for overgrown yards, and some places legally require this cleanup for purposes of fuel reduction. However, mowing sparks many fires every year in dried grass

(Firewise, 2015). In the urban-wildland interface, fire mitigation and landscaping have a very tangible connection.

Leaf Matter Disposal and Nutrient Runoff. A hot topic this year on social media, including in the Healthy Yards page. Removing leaves may have a negative impact on the life cycles of beneficial insects , as well as taking organic matter away from a landscape (Xerces Society, 2017). However, city governments see leaf matter as a serious threat to wastewater systems, both in sedimentary deposits and in nutrient overload (USGS, 2016). This presents a potentially wicked problem.

Urban Agriculture. Utilitarian gardens do not always follow the normative landscaping aesthetic of a neighborhood yet provide an essential service for their owners. While this topic has been researched and commented on (Schindler, 2012), further qualitative analysis with a CR lens would add nuance to an important piece of the discourse concerning urban food systems.

Nativars vs Native Ecotypes. There may be trouble in paradise among eco-yard advocates. Nativars, a shortened term for native species which have been selectively bred for more classical landscaping traits, are under scrutiny. Their status on online forums and message board is as both a "gateway" to native planting as well as being less ecologically important in addition to causing genetic degradation of native plants.

APPENDIX A
INTERVIEW QUESTIONS

Interview Questions

1. Describe in detail any conflict or conflicts you have been involved with regarding residential landscaping. Who was involved, where did it happen, and what happened?

2. What were reasons you believe the conflict occurred?

3. How, if at all, has the conflict (or conflicts) over landscaping affected your life, or how does it still affect your life?

4. Is there anything else you would like to add?

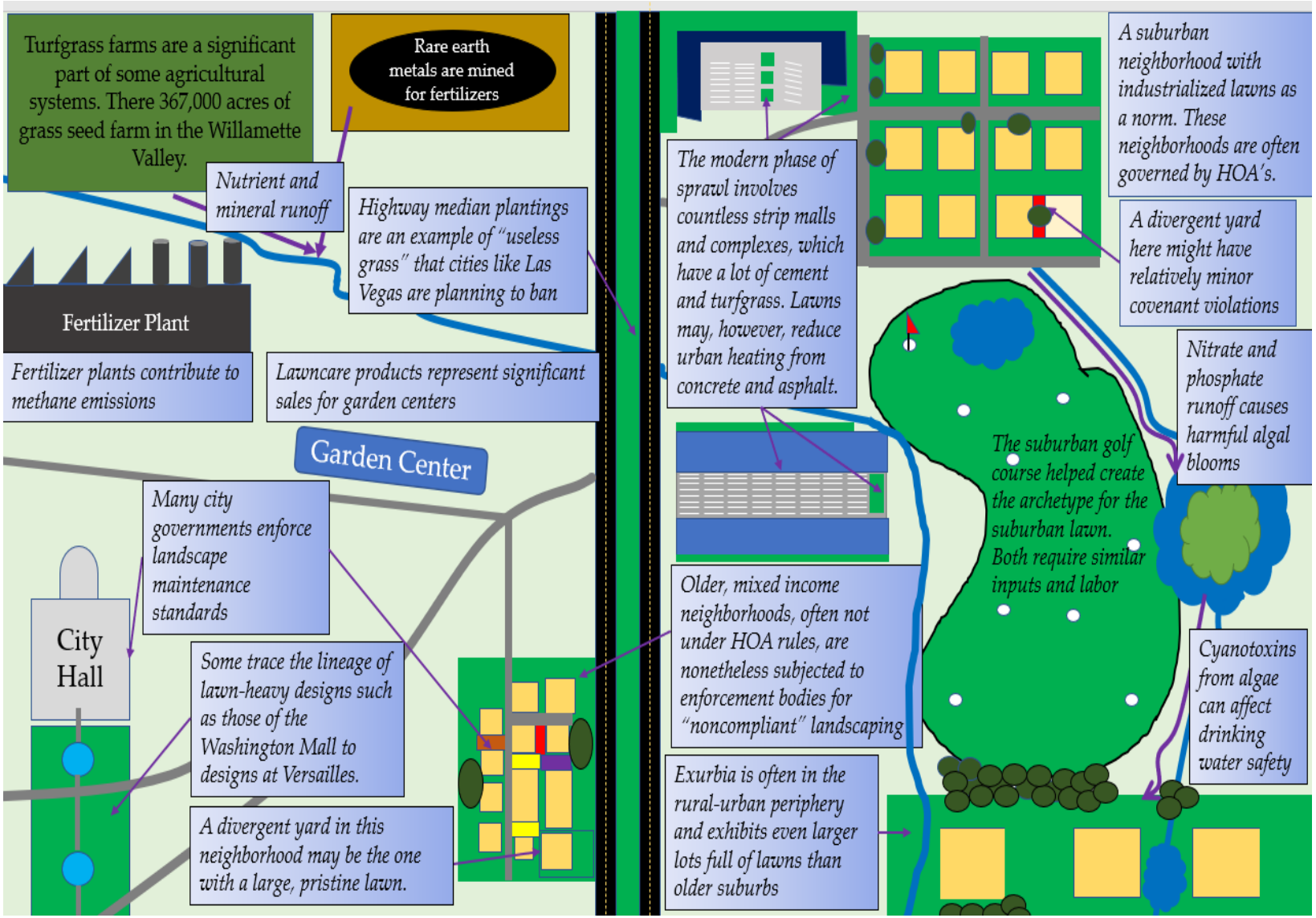
APPENDIX B
SAMPLE LIST OF MUNICIPAL LAWN HEIGHT RESTRICTIONS

City/County	State	Max Lawn Height	Penalty	Residential Exceptions	Code Link
Edwardsville	IL	6 in.	Lien, Cost of Removal		https://tinyurl.com/ncymasw4
Bridgman	MI	6 in.	Up to $400 per repeat offense		https://tinyurl.com/re4h4thx
Warren	MI	6 in.	$50 fine, 25% of cost of removal, Lien		https://tinyurl.com/ddvsfcus
Lincoln	NE	6 in.	Cost of Removal	Natural Yards (with inspection)	https://tinyurl.com/536x8eat
Auburn	WA	6 in.	Cost of Removal, Lien		https://tinyurl.com/2d3amuek
Elory	WI	6 in.	Cost of Removal		https://tinyurl.com/y3446p48
Washington	DC	8 in.	Cost of Removal	"Maintained" Areas	https://tinyurl.com/k97n3wjk
Aurora	IL	8 in.	Up to $1000 per growing season		https://tinyurl.com/2vkb2mnh
Bloomington	IN	8 in.	$50/day fine, Cost of Removal, Lien		https://tinyurl.com/y8zw4dhx
Fishers	IN	8 in.	Up to $750 fine, Cost of Removal		https://tinyurl.com/y8npj8xn
Markey Township	MI	8 in.	Lien, Cost of Removal (plus markup)	Vegetable/Flower gardens	https://tinyurl.com/em47cftx
Birmingham	MI	8 in.	Cost of Removal, Lien		https://tinyurl.com/3jzte53n
Lansing	MI	8 in.	Cost of Removal		https://tinyurl.com/4t8kmer6
Rochester	MN	8 in.	Cost of Removal	Natural Yards (with Permit)	https://tinyurl.com/4h3n2tk8
Faribault	MN	8 in.	Cost of Removal	Natural Yards (with Permit)	https://tinyurl.com/5v7aupjv
Fargo	ND	8 in.	$150 fine, Cost of Removal		https://tinyurl.com/7t9zpbrw
Cleveland Heights	OH	8 in.	Cost of Removal ($200/hr)		https://tinyurl.com/94x4ut7z
Avon Lake	OH	8 in.	Cost of Removal, Lien		https://tinyurl.com/y42cph56
Sioux Falls	SD	8 in.	Cost of Removal		https://tinyurl.com/5hfar7nt
Madison	WI	8 in.	$187- $313 fine per ticket		https://tinyurl.com/2ryupbum
Colorado Springs	CO	9 in.	Cost of Removal, Lien	Virgin Native Landscape	https://tinyurl.com/75vp6ujf

APPENDIX B CONTINUED
SAMPLE LIST OF MUNICIPAL LAWN HEIGHT RESTRICTIONS

Dunedin	FL	10 in.	$500/day, Cost of Removal, Lien		https://tinyurl.com/3j5a4kwf
Lexington	KY	10 in.	Cost of Removal, Lien		https://tinyurl.com/487fw56m
Rochester	NY	10 in.	Cost of Removal, $125 fine		https://tinyurl.com/xypj669z
Cincinnati	OH	10 in.	Cost or Removal, Lien	Managed Natural Yard	https://tinyurl.com/94d43bne
Eugene	OR	10 in.	Cost of Removal		https://tinyurl.com/w4n66ak
Portland	OR	10 in.	Cost of Removal		https://tinyurl.com/rs4wpk8y
Portsmouth	VA	10 in.	Cost of Removal, Lien		https://tinyurl.com/e6pmbyns
Tempe	AZ	12 in.	Misdemeanor, Cost of Removal, Lien		https://tinyurl.com/tbxywau3
DeKalb Co.	GA	12 in.	Cost of Removal, Lien		https://tinyurl.com/w4n66ak
Boise	ID	12 in.	Cost of Removal, Lien	If weeds are not a fire hazard	https://tinyurl.com/33k5um9n
Indianapolis	IN	12 in.	Fixed Removal Cost		https://tinyurl.com/3f223956
Wichita	KS	12 in.	Cost of Removal, Lien		https://tinyurl.com/v3mr5rwk
Billings	MT	12 in.	Cost of Removal, Lien		https://tinyurl.com/3rtubn9h
Sidney	OH	12 in.	Cost of Removal, Lien		https://tinyurl.com/4mdvrdy9
Tulsa	OK	12 in.	$1200 fine, Cost of Removal, Lien		https://tinyurl.com/2wf4ddu3
Hanahan	SC	12 in.	Cost of Removal, Lien		https://tinyurl.com/yrzyk4pu
Nashville	TN	12 in.	Cost of Removal, Lien	Maintained Natural Yards	https://tinyurl.com/24yuwezm
Memphis	TN	12 in.	Cost of Removal, Lien	Maintained Natural Yards	https://tinyurl.com/jxx6h5cc
Allen	TX	12 in.	Cost of Removal, $150 fine		https://tinyurl.com/56z853sm
Austin	TX	12 in.	Fine up to $2000	Maintained Natural Yards	https://tinyurl.com/27b6zd9f
Longview	WA	12 in.	Cost of Removal		https://tinyurl.com/a287z24v
Pasco	WA	12 in.	$500/day violation		https://tinyurl.com/45dvdj6m
Council Bluffs	IA	18 in.	Criminal Penalty	Vegetable/Flower Gardens	https://tinyurl.com/4vwukwxr

APPENDIX C
SITUATION VISUALIZATION

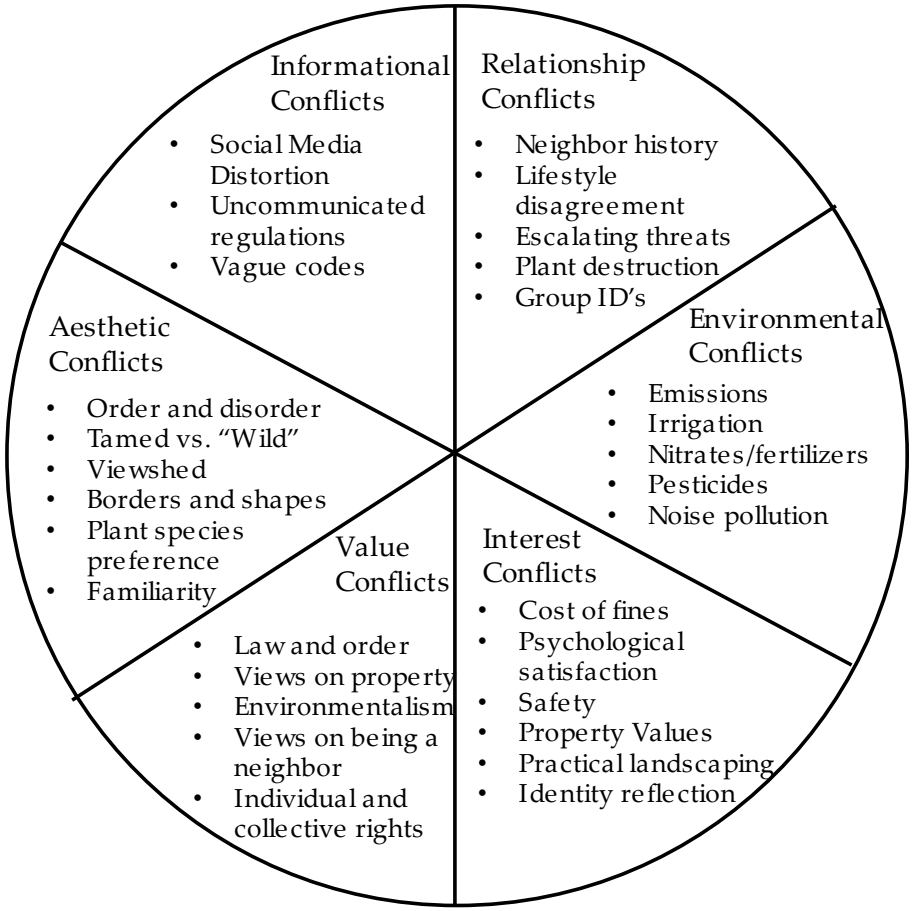


APPENDIX D

CONFLICT WHEEL

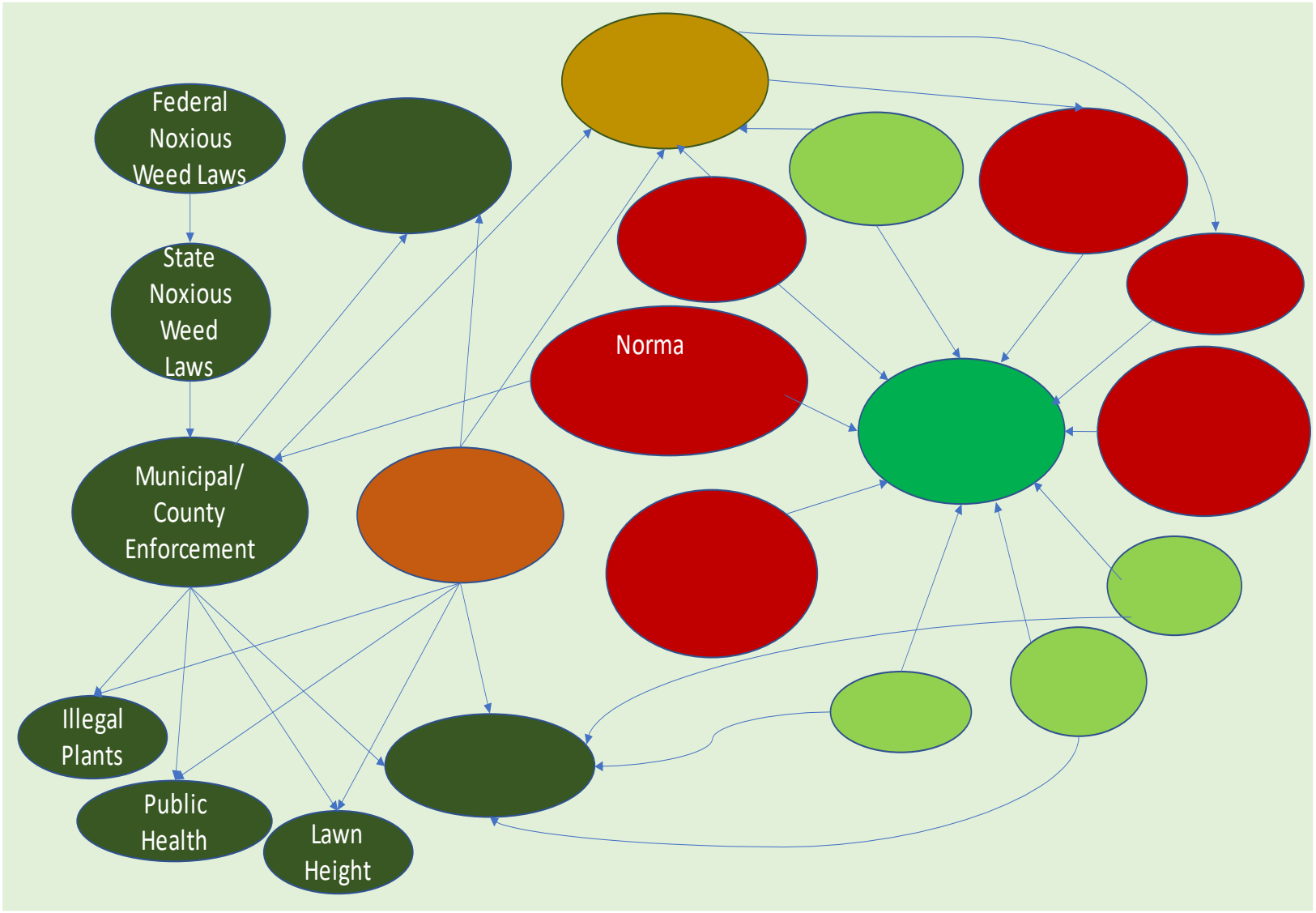
Conflict Wheel

Parsing different conflictual elements into clear categories was particularly difficult in the case of landscaping conflicts. For instance, "aesthetics" were a value for people who cared a lot about landscaping, while for others, they may be a substantive interest (property values) or a psychological interest (enjoyment or relaxation).



APPENDIX E

SIMPLIFIED GOVERNMENTAL-ENVIRONMENTAL-INDIVIDUAL LANDSCAPING NEXUS



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