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Hybridizers and the Hybridized: Orchid Growing as Hybrid "Nature?"

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Hybridizers and the Hybridized: Orchid Growing as Hybrid “Nature?”

by

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A thesis submitted in partial fulfillment
of the requirements for the degree
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ABSTRACT

Orchid growing is a hobby that includes not only acquiring and caring for orchids, but also learning about the diverse care requirements of various orchids, attending meetings of orchid groups, having one's orchids evaluated by American Orchid Society judges or being a judge, or even creating hybrids. In this way, orchid hobbyists compose a distinctive subculture (Hansen 2000). Yet the activity of orchid growing also forms a nexus between the non-human and the human, two categories that are often constructed as an opposing binary. This thesis focuses on how orchid growing represents both the embedded, institutionalized characteristic of the binary between the non-human and the human and how this binary is actively deconstructed; that is, orchid growers often reinforce this binary through positioning their orchids as a part of "nature" and also blur it by participating in the activity of orchid growing. Through observations of monthly meetings of two local orchid groups and affiliated events and walking tours of individual participants' orchid growing spaces and semi-structured interviews with them, I show how orchid growing represents such a "hybrid" form of nature (Whatmore 2002). Specifically, the ways in which orchid growers appreciate the novelty of their orchids, care for them, and establish authenticity in orchid growing demonstrates the nuanced ways orchid growing forms a relationship with "nature."

INTRODUCTION

Orchid growing has a devoted following of enthusiastic hobbyists, whose knowledge of orchids, including their various genealogies, traits, and growing habits, is deep, and who constitute a distinctive subculture (Hansen 2000). The hobby includes the activities of not only acquiring and caring for orchids, but also gaining and dispensing the necessary knowledge, attending meetings of orchid societies or clubs and orchid shows, having their orchids judged or judging orchids, and creating hybrids (Hansen 2000). Thus, an activity that at first may seem simple is rather complex, demonstrating nuanced ways about how humans envision and relate to what we so often deem “nature.” In this sense, nature is anything living that is distinctly separate from humans, reflecting the variously described binaries nature and society, nature and culture, or the natural and the social, but always referring to a separation of the non-human and the human. Orchid growing is therefore an activity in which people interact with “nature,” as it is commonly perceived, by caring for, learning about, and otherwise enjoying their orchids. Yet it is also an activity in which the distinction between non-human and human becomes blurred, as orchids and orchid growers are both actors in the process, interacting with each other and thereby unmaking and remaking “nature.”

As orchid growing necessarily involves a relationship with plants, it shares many similarities with gardens and gardening in this respect. The ways in which gardens as sites and gardening as an activity represent the paradoxes of how the non-human and the human come together is a topic that is being increasingly examined (Bhatti and Church 2001, 2004; Ginn 2014; Head and Muir 2006; Hitchings 2003, 2007; Longhurst 2006; Power 2005). These studies

include the ways in which gardens and gardening simultaneously reinforce the binary between the non-human and human. Furthermore, gardens are often spaces in which people experience what is often termed to be nature, that is plants and various animals, through encounters that represent enchantment, peace, and relaxation (Bhatti, et al. 2009). Yet they are also spaces that require complicated relationships with non-human actors that contradict such positive feelings (Ginn 2014). This study draws on the literature pertaining to gardens and gardening to demonstrate how orchid growers ascribe meaning to their orchids in ways that perpetuate the binary between the human and the non-human, but also how orchid growing is an example of the combining of these categories.

This thesis is an exploration of how orchid growing simultaneously reinforces dichotomies of the non-human and human and provides a representation of how these dichotomies are obscured. It seeks to answer the question of how orchid growers negotiate a relationship with their orchids that both reaffirms and destabilizes such boundaries. Orchid growers primarily position their orchids as living beings that are part of “nature.” They relish when their orchids bloom and take a variety of measures to ensure this result and the general health of their plants. They maintain knowledge of the diverse care requirements of different orchid varieties, assure that the specific care requirements are adequately carried out, and monitor their orchids consistently for outbreaks of pests and disease. They are critical of the ever-increasing commercialization and commodification of orchids and plants in general. Yet they are not explicitly conscious of how orchid growing represents a way in which both orchids and humans come together during this process, representing a hybrid conceptualization of nature (Whatmore 2002). This concept describes the concealed ways in which the binary between non-human and human is broken down, and how nature is therefore a fluid concept that is open to

change and reinterpretation. The unawareness of hybridity is indicative of the embedded, institutionalized characteristic of the binary between the non-human and human, resulting in that it is almost universally held and taken for granted, a characteristic of general perceptions of what is taken to be reality (Berger and Luckmann 1966). Indeed, my original approach to this project was to better understand how orchid growing represents both an appreciation for “nature,” without the quotes, and control of it. Yet I found that the data reveal such a dualistic analysis was over-simplified, and one that acknowledges the hybrid quality of this activity is more accurate. Through observations of the monthly meetings of two local orchid groups and affiliated events such as orchid shows and American Orchid Society judging, “walking tours” of orchid growing spaces, and semi-structured interviews with participants recruited through the orchid groups, I examine the complex ways the activity of orchid growing demonstrates how people think of and relate to “nature,” including how the separation of the non-human from the human continues to persist in spite of the actual blending of these categories.

The Hobby of Orchid Growing

Growing orchids, or more specifically acquiring and caring for them, is an activity with a rich cultural history (Endersby 2016b). This complex history may come as a surprise, as Endersby (2016b:239) demonstrates in reflecting on writing a book on the subject:

I had no idea that there was a genre of “killer orchid” stories, much less that it would shed light on European attitudes to the places and people they were subjugating in the nineteenth century, or to the changing role of women in Victorian society. It never crossed my mind that Darwin’s orchid research would leave me pondering the theological problem of evil. Some of my coincidences have cohered into patterns, revealing strange but (I hope) illuminating connections between apparently unrelated histories – of literature and science, empire and sexuality, cinema and horticulture, and many others.

Endersby (2016b) indicates that orchid growing, and the larger fascination with orchids in the public imagination, is indicative of seemingly unrelated social and cultural forces. The

particular histories he describes intersect during the nineteenth and early twentieth century, in which orchids symbolized not only colonialism and the anxiety over the changing status of women, but also discoveries about coevolutionary relationships with pollinators. Orchids are therefore a potent cultural symbol, whether it be of colonialism, sexuality, or science. As plants they also symbolize much more literally how people interact with what is commonly considered nature.

Growing orchids as presently enacted became popular among wealthy people in Victorian-era England, who could afford not only the plants but the elaborate greenhouses required to care for them (Endersby 2016b; Valen 2016). The ability to own the plants themselves and build the necessary greenhouses was a symbol of wealth and social status, but it was also a symbol of the colonialist expansion of the British Empire, with tropical plants growing in engineered, temperature-controlled environments, protected by glass from the temperate weather of the British Isle (Endersby 2016b; Valen 2016). The tropics, whether it be through the plants, animals, or the people, was often presented as a foil to that existing in more temperate climates (Driver and Martins 2005). It is important to recognize the influence of colonization on Europe itself, which Driver and Martins (2005) emphasize is necessary to avoid historical analyses that describe the process as one of unbalanced projection and expansion. This does not mean that power imbalances were not present, rather it emphasizes the necessity of colonization to colonial powers, even if it was one of exploitation, as Driver and Martins (2005:5) state: “Culturally as well as economically speaking, this European self has never been self-sufficient: it has always learned, borrowed, or stolen from elsewhere.” The acquisition that was inherent to the colonial process was clearly evident in the thriving trade in orchids, collected often mercilessly from their native environments, the excitement over purchasing them furthered

with masculine stories of orchid hunters finding and accumulating them for transport back to the United Kingdom and elsewhere in Europe (Endersby 2016b). Indeed, tropical varieties of orchids are still emphasized in orchid growing, a vestige of its colonial heritage.

Advancements in technology made orchid growing increasingly affordable during the beginnings of its popularity, and therefore increasingly accessible (Endersby 2016b). These advancements have only continued, now drastically reducing the cost of many orchids and making them widely available commercially, which contributes to their commodification and even creates a distinction between the orchids preferred by hobbyists and those preferred by the less-discerning consumer (Hinsley, Verissimo, and Roberts 2015). Therefore, they have come to represent both the mass-produced, homogenous cultural artifacts viewed with disdain by people who prefer individual craftsmanship and who may also possess high levels of cultural capital (McFarren 2015; Holt 1997), as well as rare living organisms that are cultivated and cared for as a hobby that has traditionally connoted an elite status. Hinsley, Verissimo, and Roberts (2015) apply this contrast to orchids specifically, finding that a majority of buyers prefer white, multi-flowered orchids indicative of mass production while a smaller number of hobbyists prefer less well-known and rare varieties acquired online. Indeed, one of the signifiers of an elite hobby is that it requires expert knowledge and necessitates access to scarce objects (Holt 1997). Therefore, this concept is especially applicable to dedicated orchid hobbyists who likely have advanced collections of less widely-available orchids, whose upkeep requires vast knowledge and lots of care.

LITERATURE REVIEW

Nature, though seemingly a tangible, physical concept, is nevertheless one that is dependent upon the meanings humans bestow upon it. Considering nature to be socially created, and therefore mediated, is becoming increasingly recognized (Angelo and Jerolmack 2012; Angelo 2013a, 2013b; Cronon 1995; Freudenberg, Frickel, and Gramling 1995; Whatmore 2002). Works such as these emphasize “nature” as a social construct, dependent upon the agreed-upon view as to what it constitutes, yet demonstrate that is view is neither stable nor an actual reality. A constructionist paradigm is therefore one useful perspective to describe the hobby of orchid growing, especially as it pertains to a relationship with “nature.” This perspective is further extended by the concept of hybridity (Whatmore 2002), which demonstrates the socially-constructed characteristic of nature as it describes how the non-human and human are intertwined, rather than occupying neatly separated categories as is commonly believed. Gardening as an activity and gardens and yards as sites are prevalent examples of how humans negotiate the boundary between the non-human and human, including ways in which this boundary is muddled (Bhatti, et al. 2009; Bhatti and Church 2001, 2004; Gillon 2014; Ginn 2014; Head and Muir 2006; Hitchings 2003, 2007; Longhurst 2006; Power 2005). In order to situate orchid growing as an activity that intersects the non-human and human, I will draw upon social constructionist literature, including hybridity and gardening and gardens and yards as activities and spaces in which this hybridity is enacted.

Individuals within a certain social group are able to draw on commonly held ways of thinking and knowing that are so pervasively available that they no longer question them (Berger

and Luckmann 1966). This describes the way in which individuals become part of larger forces of which they are unaware in the process of subscribing to what is “common knowledge.” Yet this common knowledge can change over time, further demonstrating the socially constructed characteristic of reality. Angelo (2017:160) acknowledges the temporal aspect of “lenses” that not only “become generalised epistemological frameworks through which we view and interpret the world” but that are subject to change over time. When the particular lens for how we view the world changes, then it follows that our perception of it would as well. Freudenberg, Frickel, and Gramling (1995) provide a clear description of the temporality of how a seemingly static object, a mountain, is viewed, as it was first a living space and hunting grounds for the indigenous Menominee people, an otherwise ambivalent physical feature that yielded mainly timber, a potential source of iron ore and then a decreasingly profitable one, and finally a tourist attraction. Furthermore, Cronon (1995) describes how prior to the beginnings of the environmental movement, the “wilderness” areas so many people consider to be divine today still had a religious connotation, yet one associated with the devil himself and were therefore areas to be avoided, juxtaposed against the pleasant surroundings of a securely human – in the white, settler sense – society.

The changing ways in which people view representations of “nature” further demonstrates the socially constructed characteristic of nature itself. Angelo and Jerolmack (2012) acknowledge that humans’ relationships with the environment are always socially mediated, and that as such “nature” is often referred to in quotes. These relationships extend to what is considered nature, in that a true nature is viewed as separate from humans and the province of pristine “wilderness” spaces (Angelo and Jerolmack 2012; Cronon 1995). This view of nature is so established that people may fail to recognize aspects of it within decidedly human

spaces. For example, followers of the hawks nesting on the NYU Bobst Library readily displayed that they considered them a part of this natural world, discussing whether to remove one of the hawk's bands placed by conservation officials or disapproving of their choice of inorganic nesting materials (Angelo and Jerolmack 2012). Furthermore, in all of this discussion of the hawks' lives, people "remain unmoved by the pigeons picking at the remains of a bagel below the hawks' nest" (Angelo and Jerolmack 2012:28). Thus, the separation between the "natural" world of non-humans and the social one of humans is embedded to such a degree in the perceptions of people that they feel it necessary to maintain. Yet this separation, itself a social creation, becomes destabilized upon further examination.

Hybrid Concepts of "Nature"

Among the ways in which nature is being conceptualized differently is recognition of the interconnectivity between the non-human and the human. This includes acknowledging that nature does not exist only in pristine "wilderness" spaces (Angelo and Jerolmack 2012; Cronon 1995). Rather, it exists alongside humans, including in such human-designated spaces as the city (Angelo and Jerolmack 2012). Even more so, it exists in such daily, routinized spaces as the backyard or garden, often viewed as an extension of the home (Bhatti and Church 2001, 2004; Bhatti, et al. 2009; Gillon 2014). Therefore, humans do not have to travel to wilderness areas in order to encounter "nature," as it literally exists within their daily surroundings, whether these be a city street or backyard garden. These everyday spaces represent sites of connectivity between the non-human and human, or humans and "nature" (Angelo and Jerolmack 2012; Bhatti, et. al. 2009; Gillon 2014, Ginn 2014; Head and Muir 2006; Power 2005). As such, they often also represent socially-designated categories of separation beyond that of the non-human/human divide. These include that between the rural and suburban (Gillon 2014), native and non-native

species (Head and Muir 2006), and acceptable and unacceptable non-humans (Ginn 2014). These sites of connectivity thus also demonstrate the various socially-created categories of separation.

The concept of hybridity offers a pertinent and useful alternative to describing “nature” in bifurcated ways that most often depend on the separation of non-human from human. Whatmore (2002) describes hybridity as a concept that allows for a greater appreciation for the ways in which dichotomous categories are often intertwined. Principal among these is the division between non-human and human. Whatmore (2002) shows that human intervention into aspects of the physical world that are so often deemed to be nature creates hybrids. These may be literal hybrids such as those genetically-modified agricultural products that have been the target of consumer backlash in the United Kingdom or how plant genetic materials are defined and therefore regulated, or even how animals are moved about by humans for distinctly human purposes. Whatmore (2002:31) further describes the concept of hybridity: “My argument is that these geographies are not the province of some distant discourse or elevated judgement but the collective habitation of all those party, in many different guises, to *leopardus* or *Caiman latirostris* coming into being.” In this way, hybridity represents the coming together of both the non-human and human, albeit often in ways that reinforce human control of the non-human. It is the process of how certain features of the “natural” world, whether the various species of leopards favored in Roman gladiator matches or the common caiman, are defined and described, or “come into being,” and thus in a way are made by humans.

The creation of these hybrids is therefore indicative of the social influence on what humans have termed to be “nature,” as well as to the ways in which they represent continual processes of invention and reinvention. Head and Muir (2006:511) describe the socially constructed characteristic of “nature” and the processes that make it possible:

According to how we have conceptualized something called nature, we might want to put a fence around it, create a bureaucracy to look after it, kill it, eat it, plant it, or remove it. The dividing line is drawn in many different places under a variety of influences: between inside and outside spaces, between domesticated environments and restored bushland ones, between trees and suburbs, between native and non-native species, between exotics that sit quietly and ones that behave badly, between neighbours who kill good trees and neighbours who kill bad trees. The question of belonging is thus highly contingent; trees, cats, native plants, dogs, birds, weeds are situated in various ways, and in relation to each other.

These definitions are therefore often reliant upon bifurcations that seek to separate not only the “natural” from the “unnatural” but the various ways in which “nature” can be separated, often in ways that are connected to morality. Yet as Head and Muir (2006) state, these categories are defined by and therefore depend on their supposedly opposing relationships and are ever-changing. It is this aspect that allows for the concept of hybridity, as conceptualization between the non-human and the human are not only subject to change, but the questioning of such dichotomies is as well.

Gardens and Gardening as Hybridity

Gardens and the activity of gardening are beginning to be recognized and examined as sites where socially constructed binaries between the non-human and human are exposed (Bhatti and Church 2001, 2004; Ginn 2014; Head and Muir 2006; Hitchings 2003, 2007; Longhurst 2006; Power 2005). Gardens perpetuate dichotomies, yet they are also spaces that provide opportunities to understand how these dichotomies are not wholly accurate. Longhurst (2006) describes gardens as paradoxical spaces that simultaneously reaffirm and destabilize not only the binary between non-human and human that is popularly conceptualized as that between nature and culture, but also those between the private and public, individual and collective, work and leisure, and colonial and post-colonial. Gardens are therefore sites where dichotomous categories come together. Longhurst (2006:581) describes them as “paradoxical spaces that trouble binary

thinking.” As such spaces, gardens therefore provide no precise or clear definition, as Longhurst (2006:581) continues: “They are ‘betwixt and between.’ There is no immanent meaning that lies buried in gardens waiting to be unearthed, rather they are spaces that are imbued with multiple, ambiguous and paradoxical meanings.” In this way, gardens are hybrid spaces between juxtaposed categories of the non-human and the human. Given that gardens are everyday spaces in which people can experience what is commonly considered nature (Bhatti, et al. 2009), it follows that they are places in which the dichotomy between “nature” and human culture would be evident, and where the hybrid quality of these categories becomes clear.

This study continues the exploration of the interactions between plants and people as an example of hybridity. It draws on how gardens and the activity of gardening explicate the combining of the traditionally opposed categories of the non-human and the human. Orchid growing allows for people to simultaneously enjoy what is commonly perceived to be “nature” as orchids are living, non-human organisms and in this way are not entirely predictable in their actions and responses. Yet these plants are also dependent upon the care of the orchid growers, who engage in a variety of practices to ensure that their orchids remain healthy and bloom. Furthermore, orchid growing, especially as enabled by involvement in orchid societies and clubs, depends upon determinations of how it is to be authentically enacted. Therefore, I will utilize the three themes of novelty, care, and authenticity to demonstrate how orchid growing is situated within a larger framework of hybridity between the non-human and the human.

METHODS

I had the inspiration for this study, and this particular approach to it, while working at a floral shop. I liked the orchids that were sold as popular gifts, the *Phalaenopsis* that have become almost ubiquitous, because they seemed so obviously adapted to their natural environments. I imagined them growing on a tree surrounded by other plants and animals, and marveled at how the leaves were shaped in a way that appeared to allow the frequent rain to wash over them without pooling and growing fungus in the humid environment. While watering them one day I realized that this plant, grown commercially, shipped to Iowa, and staked to grow upright in a pot may be an apt representation of how humans in general treat nature. I also realize now that I was drawn to working in the floral shop and to appreciate the adaptive qualities of orchids because my mother has always gardened extensively as a hobby and I spent a lot of time outdoors in her gardens as a child. Therefore, my research question was formed by my particular background and personal circumstances, or “accidents of remote biography and personal history” (Lofland and Lofland 2005:13). I remembered this thought when deciding on thesis topics and thought that interviewing hobbyist orchid growers could potentially provide some insight into it.

Methods Utilized

My approach to this project was to incorporate multiple methods that could be utilized in conjunction with each other and that would ideally reinforce and contribute to one another. These methods included observations of the monthly meetings of the Tampa Bay Orchid Society and the Tampa Orchid Club and any associated events, walking tours of participants’ orchid growing spaces, and semi-structured interviews. I also took photographs of participants’ orchid

growing spaces and any affiliated gardens during the tours. Although each of these methods is important, I found that I tended to rely most on the walking tours and semi-structured interviews, and therefore will reserve discussion of these for last.

As I was recruiting study participants through the two local orchid groups, I thought that observation of their monthly meetings as an additional data collection method would be helpful. My increasing involvement in the study and the contacts I made through it also made me aware of orchid shows and American Orchid Society judging sessions as additional opportunities for observation. These observations, detailed in my fieldnotes, allows for a better, richer understanding of the hobby of orchid growing, as well as how it is expressed socially. Emerson, Fretz, and Shaw (2011) emphasize that what is eventually considered a finding of observations cannot be separated from the interview process and that utilizing observations as a method and writing fieldnotes to record the findings that result from them allow for better expression of the meanings participants ascribe to the phenomenon of interest, and also allow the researcher to center these meanings within the study itself. Observing the meetings and the shows and American Orchid Society judging events did indeed provide me with a greater understanding of orchid growing. Without this background knowledge I may not have been able to contextualize the walking tours and interviews, and to notice how individual enactments of this hobby are indicative of it as a whole.

I may not have originally planned on utilizing observations as a method, but I had always intended to incorporate walking tours of participants' orchid spaces into my project. As my project centers on participants' relationships to their orchids, other plants and gardens, and to what is commonly considered nature itself, attention to the spaces in which these relationships are expressed is necessary. Space has been conceptualized as a vital part of the research process

in that it effects the ways in which participants live their lives (Hall 2009). More traditional approaches to interviewing also remove participants from the naturally occurring environments and therefore aspects of them that may be applicable to the research question and of interest to the researcher (Kusenbach 2003). The connection of participants to the everyday spaces in which they inhabit is realized in the “go-along” method, in which researchers accompany participants as they carry out routines and move about their daily lives (Kusenbach 2003). Utilizing this method allows for the emphasis to be on how participants move about and experience various qualities of their physical and social environments (Kusenbach 2003). Incorporating this method therefore allows me to understand the ways in which participants enact their orchid growing by providing me with experience not only of the orchids themselves and how they are arranged, but also how these spaces facilitate other aspects of the hobby such as showcasing orchids and caring for them.

As my study is not concerned explicitly with these everyday physical and social environments, but rather how these environments impact and facilitate the hobby of orchid growing, I considered my approach to be adopting a condensed and abbreviated form of the go-along that I have been referring to as walking tours of participants’ orchids and orchid spaces as well as gardens and yards generally. Other researchers have utilized this method, particularly when exploring how gardens and gardening and yards represent such paradoxical relationships to “nature” (Gillon 2014; Ginn 2014; Head and Muir 2006; Hitchings 2003; Longhurst 2006; Power 2005). Through these studies as well as my own, significance of the space to the relationship under study necessitates incorporating such walking tours of orchid growing spaces. These are participant-guided, as they choose what characteristics of their orchids and their orchid spaces, and which orchids and plants, to emphasize and what information to provide about these

spaces. This process provides participants with the opportunity to actively construct the tour, as even though qualitative interviews are always a co-construction of the researcher and participant (Charmaz 2006; Warren 2011), more traditional sit-down interviews may feel to participants as they are more controlled by the researcher. I often included a sit-down interview after the walking tour to ask any follow-up questions or remaining questions from my protocol, but found that the information provided by participants and my follow-up questions asked during the tour often yielded much of the requested information.

Site Selection and Participant Recruitment

The research sites for this project were largely determined by the topic and methods utilized, and therefore left little choice for me as the researcher. The sites were simply the meeting spaces for the orchid groups, the orchid shows, or American Orchid Society judging, as well as participants' homes which provided access to their orchids and a place to conduct the walking tour. Mostly, I determined the physical sites as they were the spaces that would allow me to investigate this project more fully. Yet I found that they had all of the necessary components of a research site, as Lofland and Lofland (2005) emphasize a research site should be appropriate to the topic of study, accessible to the researcher, allow for research to be gathered ethically, and not pose an immediate risk to the researcher or participants. These sites obviously were appropriate to the topic of study, being that they were the locations in which the activity of orchid growing, however expressed, was taking place. They were also accessible to me being technically open to the public or places in which hobbyists were gathered to share information about their hobby, or spaces in which I was invited in the case of participants' homes. They also allowed for the ethical gathering of data posing no immediate risk to

participants as these were public spaces in which people had willingly gathered to participate in a shared hobby or were their own homes.

Not only did I feel that this project could potentially provide more of an understanding about a topic of interest, but I also considered it to be pragmatic. To be honest, I do not remember how I came to realize that orchid groups exist widely throughout the United States and are registered and therefore searchable through the American Orchid Society website. It may have been some previous knowledge I had about social clubs focusing on specific plants, or it may have been from looking at the American Orchid Society website itself. Either way, I realized I could make a short presentation to an already assembled group of potential participants about my project, better ensuring that I would find participants who wished to participate in my study. The fact that I was interested in talking with hobbyists about their hobby, many of whom had plenty of availability, also aided in recruitment.

I had originally planned to include all of the orchid groups in the Tampa Bay area for recruitment purposes, therefore not only the two in Tampa itself but also those in the Bradenton, Largo, Lakeland, Spring Hill, and Sarasota areas. I visited meetings of all of these groups once or twice during the summer of 2017, sometimes to introduce myself and explain my project to the leadership and sometimes to recruit formally after having received an approval letter for the Institutional Review Board. However, I soon found that I had plenty of interested potential participants, indeed an unmanageable number of potential interviewees for a thesis-level project, so I limited recruiting participants to the Tampa Bay Orchid Society and the Tampa Orchid Club. Indeed, I found that after a visit to the Tampa Bay Orchid Society I had almost a manageable number of participants, so only needed a few more and therefore asked some contacts in the Tampa Orchid Club if they would like to participate.

FINDINGS

The meetings of the orchid groups in this study represent less sites of communion with “nature” than participants’ orchid spaces and gardens do, yet they serve the important functions of places in which people can enact their hobby of orchid growing and providing the structure for the ongoing maintenance of orchid growing at the individual level. The meetings serve as gatherings for hobbyist orchid growers, and although these gatherings are in many respects social, that is, they consist of friends and acquaintances seeing each other and therefore likely discussing non-orchid related aspects of their lives, many of these conversations are understandably about orchids and orchid growing practices. Several characteristics of the meetings themselves focus the discussion on orchids, whether it is the vendor table where people can peruse potential additions to their collections, the informational lecture that provides the central meeting structure, the bloom table where members’ plants are officially presented to the group, or the raffle tickets people purchase for a chance to win plants and other orchid items at the conclusion of the meeting. People may inquire about the growing conditions of a particular orchid compared to ones they already grow before making a purchase, openly ask questions or provide comments on orchid species and hybrids, remark about the particular beauty of an orchid in bloom, or bemoan that none of their tickets have been drawn.

Both the Tampa Bay Orchid Society and the Tampa Orchid Club, as well as the numerous other societies I visited prior to beginning formal data collection, include these features as a part of their meetings. Even more so, they all follow relatively the same structure, with meetings beginning with a presentation of new and old business that includes upcoming

events and announcements, a brief educational presentation by a member about some aspect of orchid care, the main lecture or demonstration, a break, the presentation of the bloom table, and then the raffle. Yet there are also subtle differences between the two groups, primarily revolving around the timing of the meetings and how these may affect the membership.

The Tampa Bay Orchid Society meets the third Thursday of every month. The typical meeting location is fairly large room with high-ceilings and an attached kitchen on the campus of the Christ the King Catholic Church in south Tampa. The meetings begin at 6:30 p.m. according to the website, although it is common for people to still be arriving and setting up at this time. Each meeting includes a potluck-style dinner, so people are usually still bringing their dishes to the kitchen and fixing their plates, as well as talking causally with each other at this time. The meetings usually begin about 7:00 p.m. and go until 9:00 p.m. or 10:00 p.m. depending on the length of the presentation. The membership is generally composed of people who appear to be in their forties to sixties, although there are a few younger attendants who may be in their thirties. The time of day of the meetings likely influences the age of the members, as it is conducive to people who still work, and indeed may be one of the reasons for the delayed starts as people are unable to arrive before 6:30 p.m. after ending work and then probably stopping at home to get ready for the meeting. Members appear to be cisgendered men and women and the group is evenly proportioned among this gender identity and these sexes. Members also appear to be predominantly white, although some members appear to be Latinx. It can also be inferred that most members are middle-class or upper-middle class, as this is a meeting of hobbyists centering on a hobby that requires the financial and cultural capital to actively participate in.

The meetings clearly serve a social function as people greet each other and have friendly conversations, and indeed the group as a whole is collegial. Meetings are usually called to order

by the president with some difficulty, often struggling to be heard at first by the now crowded tables where people are talking with each other and finishing their meals. Parliamentary procedure is followed with a casual, almost joking manner in the approval of minutes. Then various members speak, sometimes at length, about upcoming initiatives and events for which they are responsible, such as an announcement about the upcoming bus ride to Tamiami International Orchid Festival, with details about the schedule and an emphasis on the continued difficulty of finding transportation for day-long trips. On another occasion, the focus is on a proposed description of the booth at the Florida State Fair that includes urgent requests for volunteers to help set up and staff it. There is then usually a presentation of the finances from the society treasurer, who often encourages membership and raffle ticket sales. The education portion is not present at every meeting, as it seems to be the portion of the meeting that is eliminated for the sake of time. Indeed, my field notes describe only two times out of four meetings in which it was included, once at the August meeting in which two highly involved members of the group, both American Orchid Society judges, gave what was likely at least a twenty-minute description on how to enter plants into the “schedule” or registry of the American Orchid Society prior to judging, and another in which a member discussed a solution that she makes and sells to fertilize orchids that occurred directly before the featured presentation for the meeting.

In general, lectures for these meetings were by local professional growers, although one was by an advanced hobbyist belonging to the group. Members of the group appear to listen well, making the occasional comment to people sitting at their table. Yet there are also side conversations and, likely given the timing of the meeting, occasional yawns and sleepiness.

These lectures are also fairly interactive, with members interrupting with questions or comments

about particular plants. After the lecture concludes there is usually another brief break, and especially if there has been a long talk, an indication by the leadership that the rest of the meeting should proceed quickly given the time of night. This includes the presentation of the bloom table. This is a table in which members bring orchids in that are in bloom to be presented formally to the group, and perhaps also awarded with a less-formal, agreed upon vote by their peers for the “best” plant and one also designated as such by the person doing the presenting. A highly-involved member, who is also an American Orchid Society judge, is assisted by another member who hands her the plant, and she holds it and reads off of a card that includes the registered name as well as that of both parents. She comments on the health of the plant or its bloom, sometimes holding it up to a vertical light to amplify its appearance, but overall this process is mostly hurried, as there are usually at least between five to ten plants to present. Although members can vote on which plant they believe should win the Member’s Choice ribbon, I do not recall this award nor the Judges’ Choice ribbon being consistently awarded. After this aspect of the meeting concludes the raffle is done in an even more rushed fashion. Indeed, for the last few meetings I attended members did not get to choose their plant when their ticket was drawn, but rather were given the corresponding plant or item that was the subject of their ticket, and I wondered if this was a choice that was made to further expedite the process.

The meeting is officially called to end shortly after the raffle concludes, but often seems to fall apart prior to and during the raffle, as some people are seated at the tables to hear if their ticket will be called but others are in kitchen preparing their dishes to take home, collecting their plants from the bloom table, and making last-minute purchases from the vendor. Overall, the Tampa Bay Orchid Society is to be a group of dedicated, enthusiastic, and knowledgeable hobbyist orchid growers. However, it could be that many of them still work or are raising

families, have numerous other life responsibilities, or may simply be getting tired and thinking about their commute home, which may contribute to the delayed, relaxed start of this meetings, as this is an enjoyable hobby and not a required obligation after all, as well as to the somewhat rushed endings to them.

The Tampa Orchid Club meets the fourth Tuesday of every month in a moderately-sized, rectangular room with a kitchen attached at the Northdale Community Center in the Northdale area of Tampa. The meetings usually begin between 10:00 a.m. and 10:30 a.m. and usually end between 1:00 p.m. and 2:00 p.m. including the potluck lunch that occurs after the featured lecture. The membership skews older than the Tampa Bay Orchid Society, with more participants appearing to be in their sixties, seventies, or eighties, although there are also members who appear to be in their thirties, forties, or fifties. Again, the time of day of the meetings likely influences the membership, restricting it mainly to retirees or people who do not work or have a flexible work schedule. Prior to beginning research, I had been advised by the president of a society in a town in the Tampa Bay area to focus my research on the Tampa Bay Orchid Society, as he said the Tampa Orchid Club was composed mainly of older women whose main purpose for the meetings was to eat lunch. I tried not to let this statement interfere with my observations, but I must admit that it was slightly difficult for it not to do so given the general age of the members. However, upon further observation I did not find this statement to be accurate, and although some members may be older they were still active in their hobby and knowledgeable about it.

Aside from age, the membership shares demographic characteristics with the Tampa Bay Orchid Society. Members appear to be primarily cisgendered men and women and are relatively evenly proportioned among this gender identity and these sexes, although there are slightly more

women than men. Members are also predominantly white, although some members also appear to be Latinx. It can similarly be inferred that members are middle-class or upper middle-class, but age potentially could affect this as more members may be on fixed incomes due to retirement.

The meetings follow the typical structure, announcements concerning old and new business being made by the president to begin the meeting. In contrast to the Tampa Bay Orchid Society, the Tampa Orchid Club appears to have a more complex organizational structure, which includes committees. For example, it is common for each respective leader to be called upon during this time to give a brief presentation about current matters regarding their committee. These include volunteer outreach, membership, and communications, among others, and may include a lengthy discussion of the upcoming expo at the USF Botanical Gardens where the club maintains an orchid display, a brief announcement of how many guests or members are in attendance, or a presentation about using Facebook and improving the club website to publicize activities and encourage membership. Indeed, at the most recent meeting I attended, there was an announcement that the president and the rest of the executive board's two-year terms would be expiring in May, and the president immediately designated a member from volunteers who were raising their hands to chair a committee that would solicit fellow members to potentially fill these leadership positions and coordinate the election, as well as an alternate for the chair of this committee. The education portion is almost always present and occurs after the conclusion of the announcements. Typically, it seems offered by the same member who serves as the chair of the education committee. During this portion, there is almost always at least a few questions from people who have raised their hands or simply called out their question. Indeed, it seems that in general there are consistent questions about orchid growing habits, as members seem keen to

learn more about how to grow and care for orchids. There is then a break, announced as ten to fifteen minutes but typically seems to be more like twenty to twenty-five, in which members talk with each other and move about the room perusing the vendor table, purchasing raffle tickets or adding their names to the silent auction, or voting on which plant they believe should win Members' Choice at the bloom table. The room being alive with talk and activity, the president often has some difficulty calling the group to attention and resuming the meeting, however, most members have usually made their way back to their seats.

There has been a featured lecture by local professional growers at most of the meetings that I observed, however in lieu of a speaker at two meetings the group screened an installment of a documentary series created by a local orchid enthusiast affiliated with Marie Selby Gardens, Stig Dahlstrom, that features him looking for various orchids in their native habitats. After this portion ends, there is a brief break and volunteers begin setting up the lunch. During this time, the bloom table is presented by the same person who does so at Tampa Bay Orchid Society. This process occurs with most members seated and listening, although a significant number are either walking about the room talking with other members, looking at various tables, or are busy setting up lunch. It does seem that the Members' Choice and Judges Choice awards are presented fairly regularly. Lunch is then officially called to begin by the president, with a member providing a blessing that at times includes the names of members, and everyone gets in line to prepare their plates. After lunch, the raffle and silent auction, which usually seems to be composed of orchid-related items such as books that members have donated, occur before the meeting concludes. Overall, these meetings, although following a rather routine organizational structure, appear to proceed in a relaxed fashion. It does seem that a significant number of the members are retired or have at least deescalated their work responsibilities, perhaps lending to this more leisurely pace.

Nevertheless, overall members of Tampa Orchid Club are committed and enthusiastic hobbyist orchid growers.

The meetings of the orchid groups in this study are therefore spaces in which hobbyist orchid growers make the social connections and gain the necessary knowledge to carry out their hobby at the individual level. They are also the spaces in which I recruited individual participants for walking tours of their orchid spaces and semi-structured interviews about their hobby of orchid growing. Participants demographic characteristics therefore reflect those of the orchid groups, with all ten participants being in their late thirties to early eighties. Five participants identified as male and five identified as female, and all except for one identified as white or some similar descriptor. All participants who provided the information indicated that their household is in one of the three highest income quintiles.

Table 1. Demographic Characteristics of Participants

Pseudonym	Age	Sex	Race/Ethnicity	Income
James	39	Male	White	\$43,512 - \$72,0001
Catherine	66	Female	Anglo	\$72,002-\$112,262
Marian	67	Female	West Indian	---
Frank	80	Male	White	\$72,002-\$112,262
Michael	66	Male	Non-Hispanic Caucasian	Above \$112,263
Margaret	55	Female	White	Above \$112,263
Jacqueline	70	Female	White	\$43,512 - \$72,001
Donald	72	Male	White	Above \$112,263
Erin	55	Female	White	Above \$112,263
George	62	Male	White	\$43,512-\$72,001

Novelty in Orchid Growing

From the very beginning of data collection, it was clear that one does not collect orchids, but grows them. While participants may refer to their orchids as a collection when describing them as a collective mass, the ways in which they relate to them indicate that they are far more often treated and valued more for the “natural,” living beings that they are, often in ways that necessitate recognition of this quality. In this respect, their orchids are a collection, but they are not a collection of static objects. While some participants discussed certain orchids they wished to obtain, and none disputed the impulse to acquire more, participants position their orchids differently than collections of objects. Michael illustrates this when answering a question about whether he considers his orchids as a collection, comparing them to a few Roseville pottery vases he got from his mother:

But when I say, those don't change. They sit there. That vase has looked the same from my mother's since she got it in 1943 or whenever she got it.

Yeah.

It hasn't changed.

Yeah.

Orchids are always growing, changing, blooming.

Okay.

So it's different than like a coin collection or a stamp collection that's just sitting there. You can add to it but the stamps you have don't change, whereas the plants are growing, living things.

Michael expresses an appreciation for the changing quality of orchids that is a necessary component of them being alive. This appreciation is common among participants, who often commented on the anticipation and delight of an orchid in bloom. More specifically, the satisfaction derives from getting an orchid to bloom, rather than just seeing one in bloom. Marian describes this feeling as she compares growing orchids to other activities she has done during her retirement, such as crochet:

I did that, I did sewing, I used to sew my own clothes but I needed something living, something that has life, something that will bloom and I look forward to seeing it bloom. I will talk to my orchids, *laughs*, I will say ‘come on’ my son he will tell me you are mad and I said no, they are living, you know, so I would bring an orchid from a grower and I would say ‘why are you not flowering for me?’ you know, just I go to the garden and I just say for myself, you know, I say ‘but when are you going to give me a bloom?’ You know they are alive, they have life, and would you believe when an orchid blooms the joy you get from that. It is amazing, especially if it is one that you don’t know what the flower is going to be, it is so amazing.

Marian demonstrates that it is the aspect of cultivating, or actively taking the care to get an orchid to grow and bloom, that is such a rewarding aspect of the hobby, and one that differentiates it from other potential hobbies. Even more so, Marian clearly relates to her orchids as living beings, speaking to them and encouraging them to grow. She knows that they cannot hear her, which is why her son thinks the behavior is odd, but she indicates that she speaks to her orchids because they are alive. Marian speaks to them in a way that implores them to bloom, and while they may be to a degree dependent upon her care, whether they bloom is not guaranteed. Furthermore, Marian really enjoys when an unidentified orchid, or an orchid that she does not know the exact species or hybrid of blooms, something that other participants also describe. Margaret relates anxiously checking on an unidentified orchid in bud, anticipating what it may be so that she can research it. The thrill of an unidentified orchid blooming shows how participants really do value the living qualities of orchids, as even though an orchid blooming is pleasing, when growers do not know what to expect it is even more so. Furthermore, it demonstrates how novelty is an aspect of orchid growing, in that participants anxiously wait for their orchids to bloom but are never completely sure if this will be the result.

Participants position orchids as “natural” beings that are alive and value this quality. This is evident in how participants discuss the natural diversity of orchids. Several participants

indicated that this is an aspect of orchids, and thereby orchid growing, that they find interesting.

Catherine describes why the natural diversity of orchids appeals to her:

I'm sorry if I asked you this already, but like what exactly was it about orchids that made you want to grow them, when you first started and why you still like them so much?

Well, you know I saw one of them and it was a love/hate kind of thing because my husband being a grower would --- You know, my kitchen would always be filled with flasks of orchids and stuff like that, and we had a huge mess, so it was kind of inconvenient, but, you know, they started to grow on you.

Oh.

No literally, but the more I saw them, the more interesting they were, you know, when I saw them in a store and they were just flowers they were nice but then I started to see the variety and how, you know, how interesting they were, they would do odd things, so I became interested in more the science behind it than just the plants.

Okay, so, can you describe more what you mean by science behind it?

If you look at orchids and if you look at the way that they grow and the way that they flower, especially the way that they flower, you wonder 'why would a plant do that?' and you have to dig around a lot to find out, so they're always having little surprises for you. The more you learn about them the more interesting they are because they have a lot of really unique --- You know, if you took something like daffodils, this one may have some red in it, this one may have some orange in it, but they all pretty much grow the same way, they're bulbs you plant them in the ground and they come up and in the spring. They produce a flower but orchids don't do that.

Okay.

Some orchids do that, you can plant them in the ground and then in the spring they'll produce a flower, some of them produce a flower, you know, every so many years, some of them will bloom all the time, some of them will bloom for a couple of hours, so they have a lot of variety and it's interesting to find out why they do that.

Catherine illustrates several interesting points. Firstly, she describes her fondness for orchids as being based less on the bloom than the plant itself. While she may discuss the flower specifically, it is less for aesthetic qualities than how the flower serves a function for the orchid. Her ascription that the orchids "do odd things" and "always have little surprises for you" indicates that she appreciates the novelty inherent to orchids. It also shows that she appreciates the diversity of orchids, and that this diversity is partly what makes them more unexpected and



Figure 1. An orchid in bloom in Catherine’s greenhouse.

and themselves. Learning about the specific needs of certain orchids is perhaps one of the main requirements of orchid growing. Participants readily provided information about what a particular orchid needed to thrive, such as the *Dendrobium* varieties that require a strict rest period without any water during the winter months. Furthermore, they described arranging their greenhouses and other growing spaces in ways that catered to the orchids’ various care requirements. Catherine was not uncommon in having a greenhouse that was arranged by types

interesting. Overall, Catherine recognizes that orchids are living beings that have evolved in a variety of ways for a variety of purposes, something that makes them more appealing than other plants such as daffodils. In this way orchids are more interesting than more seemingly predictable plants.

Care in Orchid Growing

Catherine and other orchid growers must find out why certain orchids behave the way they do, necessitating a partnership between their orchids

of orchids and what each specified for care, whether more or less water, light, or humidity. For example, the orchids that required high humidity were placed near a black cloth meant to trap heat. At times, meeting these diverse care requirements may seem tedious, as Donald admits that it would be nice to “go out there with the hose and water them all the same” rather than having to remember which ones need more or less, if any, water. Yet in the same exchange he acknowledges that these different requirements are part of what makes orchid growing enjoyable, specifically in that it presents a challenge. Other participants, as evidenced by the example provided by Catherine above, described the necessity of acquiring knowledge about the different needs of orchids to be an engaging feature of the hobby. Frank describes this aspect, as well as the diversity of orchids in general:

Well, there’s so many different species that many of them are a challenge to grow. You know we have species that grow on the tops of mountains and in cloud forests, not rainforest, the cloud forest. You understand the difference?

A little bit, yeah.

Okay, cloud forest is up on top of mountains.

Okay.

It’s very cold. Doesn’t freeze, but it gets very cold up there and they can’t stand heat. So, if you take a plant from the top of that mountain and take it down in the valley it’s going to die. So, you have to understand that growing and learning about them is just fascinating to me and so that’s what I’ve done.

Frank later agrees that learning about the orchids and what care they require is as much a part of the hobby for him as actually growing them. It is therefore necessary for participants to learn about what their orchids need to thrive in order to successfully grow and bloom them, but this is viewed as enjoyable rather than a necessary chore that must be undertaken. Participants, and likely any successful orchid grower, must take on measures to meet the needs of their orchids, including acquiring knowledge about their specific care requirements and taking measures to follow these care requirements, such as by how their orchids are arranged in their growing spaces.



Figure 2. Part of Frank’s extensive orchid library.

The diversity of orchids, and thereby the diversity of the type of care they require, is not simply a one-sided responsibility of orchid growers. Although they must be knowledgeable about and execute their specific care requirements, the diversity of orchid species has an effect on orchid growers as well. They must modify their behaviors in order for their orchids to thrive. They cannot, as Donald mused, treat their orchids homogenously. In this way, the orchids are part of this partnership and affect the

actions of orchid growers. Jacqueline, who also relates how she must move her orchids around her pool depending on the time of year so that they can get the most sun, describes the specific care requirements of her *Vandas*:

Oh, those are very pretty.

Yeah. Now, you know, I work on them outside all summer long and then when I lock them in here is when they come to bloom and I can’t enjoy them. So, it’s —

Yeah.

It doesn’t work sometimes with *Vandas*.

So, you have these outside in the summer, you said?

Yeah, they are very high light.

Yes.

Voracious, fertile eaters. They like a lot of food and a lot of water.

Okay.

And they just grow you know hanging.

Yes.

So, it's imperative that they keep wet.

So why --- So, again, why do you have them in here in the winter and then outside during the summer?

They only like it like 60 degrees.

This exchange not only demonstrates the specified care Jacqueline must provide for her *Vanda* orchids, making sure that they have high light and warmth and are watered frequently, but that sometimes these requirements are in conflict with the wishes of the orchid growers themselves.



Figure 3. Some of Jacqueline's *Vandas* in bloom.

Jacqueline demonstrates this aspect by describing how she works all summer to get her *Vandas* to bloom, providing them with all the care the perhaps needier-than-average orchids require, only to have them bloom in the winter when they must be moved to a semi-enclosed orchid room where they are protected from the cooler winter weather, making them less available for her to enjoy their blooms as they are no longer surrounding the pool.

There is a similar effect in that the demands of certain orchid varieties dictate what types of orchids people can grow depending on the space they have available. Margaret describes how she used to grow primarily *Phalaenopsis*, but that because their new house has higher light in her orchid growing space she has had to transition primarily to growing *Cattleyas*. Michael demonstrates this effect further when discussing how he has had to change the orchids he grows depending on the locations in which he has lived:

Well, there were a couple of periods we didn't have any, but at home we had a greenhouse that was like 10' X 15' and in a greenhouse they're outside --- In California you can grow *Cymbidiums*, I don't know if you're familiar with those?
Not really. But —

You don't really see them here because they don't --- They like a cool fall, so they grow beautifully in California and so we had a big collection of those outside in a screen house and then we had a greenhouse for the *Cattleyas* and *Phalaenopsis* and everything else.

Oh, alright.

Then after a couple years of leaving home I moved to Italy.

Oh.

Where I was for seven years and did not have orchids there.

I see. Wow!

Then back to Washington D.C. Didn't have orchids there for --- Because it's --- You know, I didn't really consider it possible because the winters and stuff although it could've been, but then we moved to Key West where it's just a matter of, you know, you could throw anything in the backyard and it's going to grow.

Oh, really? That's what I've heard about the Keys.

And then we moved to --- From there to Seattle and in Seattle had a big greenhouse.

This exchange makes it clear that Michael's involvement with orchid growing depended upon whether his lifestyle at the time gave him the ability to do so, but it also indicates how when he

had the time and space to grow orchids his surrounding environment influenced the types of orchids he grew and how he grew them. Later during the exchange, he reiterates this point when saying that even with a greenhouse a person would have a very difficult time growing *Vandas* in Seattle because while they require a lot of rain, which Seattle would be able to provide, they also require a lot of sun, heat, and humidity, which it would be much more difficult to obtain in the area. Therefore, the ways in which participants arrange and care for their orchids in their greenhouses and other orchid spaces, and indeed the very orchids that they choose to grow, are influenced by the needs of the orchid. In this situation, orchid growers are acknowledging, even if implicitly, that they do not fully control the orchids in their care. Rather, the orchids themselves, through their diversity and therefore diversity of their needs, exert some influence on their human caretakers. An orchid grower in Seattle may wish to grow *Vandas*, but even if they use sodium vapor lights like Michael acknowledged could be used, they would most likely not be nearly as successful as the grower in south Florida who merely hangs them from a fence or a tree and attends that they are watered more often during the drier winter months. Overall, orchid growers cannot care for their orchids in ways that only they see fit, and indeed would not wish to do so because it would be counterproductive to their goal of growing healthy plants with beautiful blooms.

Another way in which orchid growers' actions are dictated by their orchids is the necessity of almost constant vigilance in care. While orchid growers must also be vigilant in meeting the proper water, light, and heat requirements, these are more stable and predictable, and therefore require less monitoring. The main reason participants must monitor their orchids extensively is to prevent the spread of pests and disease. It is a continual process of inspection, treatment, and quarantine of suspicious plants, as James describes:

Typically, I probably spend an hour or two in the yard a day.

A day, every day, wow.

Yeah, because I've got to enjoy it but also if there's any kind of mites or infestation, any kind of bugs I want to take, you know, take care of it right away. A lot of times I'll walk out here and there's this black fungus that if it attaches to your orchid within three days your orchid's dead.

Okay.

And in the summertime when we're getting so much rain it's very common to come out and see four of your plants dead, so it's something that you need to do.

This inspection and quick attention to any presenting problems is one of the aspects of orchid growing that forms a daily routine for orchid growers. Even watering may not need to be done every day for certain orchids, but participants must monitor their orchids daily ideally. George, who once came back from a trip to a very severe infestation of spider mites that required him to adapt a Cutter mosquito fogger to get rid of them, lists checking for pests and disease as one of his daily tasks.



Figure 4. Two orchids in one of Margaret's quarantine areas.

George even owns a microscope so that he can examine any questionable samples to determine with certainty if there is an infestation or outbreak. Yet the time spent looking for any signs of pests or disease is not necessarily a chore, as it allows orchid growers time with their orchids. In this way, this necessary part of the activity is one that perhaps occurs logically, as orchid growers are apt to spend time in their growing spaces viewing and enjoying their plants, of which inspecting them is also a part.

The monitoring for pests and disease is one way in which orchid growing necessitates that people encounter and engage with non-human actors beyond the orchids themselves. Though participants do rely on insecticides and other forms of chemical pest control, especially for particularly serious infestations, most commonly these are utilized as a last resort, participants generally preferring to utilize the aforementioned monitoring and treatment with more benign substances such as soap or rubbing alcohol. Even more drastic, some participants describe allowing one plant to be overtaken by pests so that others may be spared, as Erin describes:

And then it kind of spread from that as I started being observant about what was happening and allowing things --- I used to do this thing where I would have like the sacrificial lamb. So, if something got scale like terribly I would notice like, oh my gosh, this has terrible scale, let me move you. So, I would move this plant and I would take it away somewhere and then things around it then would get the scale. It would just be like, you know what, you are the scale magnet so I'll just leave you alone right there. I would treat everything around it, and so I'm pretty much going to lose that plant anyway because the scale has really gotten to it, so I can either remove it completely but then the scale will just feast on something else. It's really happy here so lets you be happy here.

Erin and other participants who utilize this method of pest control do so with an understanding of how the relationships between non-humans deemed as pests and orchids function and are especially cognizant of their influence on this relationship in that they choose to allow the “natural” course of action to take place, that being for the pests to feed off a particular plant. Yet

in this process participants are using this course of action to their advantage, as Erin explains that the scale will devastate one plant but because of this the others will be spared, thus ensuring that less of her collection will be destroyed. This pest management strategy demonstrates a way in which the non-human and human are coexisting together, and even more so in a way in which actors with different goals can attain a certain harmony, even if this harmony necessitates the death of a few orchids. It is a recognition that the “natural,” the behavior of scale and other pests, coexists alongside the “social” of a collection of numerous orchids in a greenhouse, tended to carefully by a human curator.

Authenticity in Orchid Growing

It is clear that orchid growers consider their orchids to be part of the “natural” world, and that this natural quality effects the authenticity with which orchids and orchid growing are viewed. This quality is made even more significant by viewing orchids in their native spaces. At a meeting of the Tampa Bay Orchid Society, Catherine tells me that she and her husband often visit the Fakahatchee Strand State Preserve in part because there are orchids everywhere there, and because it represents what Florida looked like before it was developed. The enjoyment of seeing orchids in their “natural” spaces is what provided George with his attachment to the local orchid *Encyrcia tampensis*, which he first encountered during times he spent near swamps during his youth. Participants such as Catherine and Frank have also travelled internationally to see orchids in their native spaces, a practice that is perhaps not uncommon among more committed hobbyists who are financially able to do so.

How participants position orchids as “natural” and value them as such is also evident in how James describes seeing an orchid for the first time:

I looked up into a big mahogany tree and there was a huge *Epidendrum tampensis*, in bloom. It’s native to the Keys, and it’s just beautiful, in May it’s just

a shower of yellow, and I saw all the birds and there's, uh, this humming, was the reason I looked up and it was all these bees in the tree, and I said 'oh my gosh, what is it?' and my mom said 'oh, that's an orchid, that's native to the Keys'.

James' recollection of seeing an orchid blooming in its native environment illustrates awe, appreciation, and a sense of enchantment. His description of the mahogany tree, the beautiful shower of yellow, and sound of the bees also make apparent that he not only values the orchid itself, but also the larger ecosystem of which it is a part. Indeed, James often expresses concerns about conservation and climate change, and while he may be different from most participants in being so explicit about these concerns, such concerns nevertheless indicate that participants respect what is so often defined as the natural world.

This designation of authenticity in orchids often coalesces with an overall appreciation for what is often termed "nature." One of the ways in which this is evident is how some participants explicitly articulated a dislike for commercialization and commodification of plants, such as in the lack of diversity in plant species inherent to much of modern landscaping. James, who grew up on Big Pine Key and connects the biodiversity and wildlife he encountered during his childhood to how he grows his orchids, demonstrates this concern:

So, I think, you know, that's one thing we miss in today's landscaping, is there's no genetic diversity, everything's a monoculture, everything not really planted, based on sustainability or usefulness and I think there's a lot of different types of trees and plants and stuff that we could use to not only attract the wildlife --- As you can see there's a lot of butterflies and birds will come through my yard, and it's kind of like a little oasis right here near the interstate, you would never imagine this to exist.

James describes his yard as an "oasis," and indeed it could certainly be considered one, with almost all usable space dedicated to trees, plants, and water features, among which various orchids are naturalistically arranged. James approaches landscaping in this way, if one can call it that, as a reaction to the lack of diversity of plants he often sees utilized, which he associates

with a lack of concern for biodiversity or sustainability and an emphasis on aesthetics and ease of care. He wishes to create a space in which an ecosystem may be fostered, as indicated by his pride in his garden spaces attracting butterflies and birds.

Donald shares a similar dislike for the lack of diversity available in landscaping and joined a local Palm and Cycad Society partially so that he could become aware of more options. He was surprised to learn from the group that there are close to one hundred different types of palms that can be grown in the Tampa area, as he was seeing the same four or five in garden centers and around his neighborhood. Donald describes his frustration with this lack of diversity:

I don't care too much about the Queen that everybody has, and besides, what happens when a disease comes through that kills all the Queens and the Robellini? You know? What happens then? It'd wipe out 90% of the trees in Tampa, and why do I want one of those? I want a big wide variety that nobody hardly grows so that --- There's a difference between a guy that's in it for the money and a guy that's in it for the love of plants, and so I'm in it for the love of plants.

Okay.

And the people that are in the business are in it for the money and then a big majority of people don't really care, you know? That pretty bulb looks good to me. Put one in there.

Okay, okay.

You know? And I want to say, hey, you know, why don't we get something different?

Donald is annoyed by the lack of options for his yard and expresses concern over the susceptibility to disease such a lack of diversity creates, but even more he is vexed by the connection that this lack of diversity has to a commercialized apathy toward plants in general. He is clear that his motivation for a connection to plants is not one of profit but rather appreciation, and is frustrated by the response of many consumers to the lack of options which is to value the few available to them for aesthetics or ease of care. In this way, he is separating and signifying not only is orchid growing but his approach to plants in general as more authentic, not least because of its closer connection to "nature."



Figure 5. A variety of plants and a water feature with fish in James' garden.

This recognition of the commercialization and commodification of plants is not isolated to the general landscaping participants choose for their yards, but extends to their orchids as well. Participants are certainly aware of how orchids have become increasingly available and thereby commercialized and recognize that this commercial nature is sometimes at odds with proper orchid growing. George describes this trend and its implications:

Wow, so, um, do you have any particular like potting media that you use or just kind of anything?

Yeah, I'm very specific about my potting media and I'm very different from everyone else in that way because we've learned how to pot orchids the improper way.

Really?

We've learned to repot orchids the way commercial people have done it. Their goal is to grow those orchids as fast as they can, get them to bloom in as small a

pot as they can and get them out the door. They won't last very long in that mix that they have, that mix that they use is a very fast decomposing mix, which does aid to promoting growth in the plants but they also have to control it very strictly with bactericides and biocides and fungicides because as it breaks down the pH drops and it tends to --- Any bacteria, fungus in the air tends to grow, feed on that, and, so, in their very controlled environment yes it works, but that's why you'll hear so many people say 'well, I bought an orchid at Home Depot or wherever and I just can't grow them.' Well, nobody can grow them in that mix, *laughs*.

George describes how the wide availability of these more commercialized orchids has led some growers to repot their orchids in an "improper" way, as they are accustomed to the potting mixes that are commercially available, yet as George indicates these emphasize fast growth rather than the health of individual plants. He is recognizing that orchid growers must again be cognizant of the influence of non-human actors beyond the orchids such as pests and disease, and that such a sanitized landscape produced by the widely available, commercialized orchids shields consumers and would-be orchid growers to this. Even more so, his description of how a profit motive negatively effects the growing conditions of the orchids and thereby the experiences of orchid growers indicates that he is determining these to be a less authentic enactment of orchid growing when compared to that of hobbyist orchid growers.

Participants are not fond of what they perceive to be commercialized intrusions into their hobby, whether this is because of the risks of a lack of diversity in landscaping or the homogenization of orchids. Michael first recognizes that advancements in orchid breeding have made them much more widely available, but that this availability is often relegated to the *Phalaenopsis* varieties that are easiest to grow on a large commercial scale:

Well, it makes certain things to me less desirable.

Oh, okay.

I mean like everybody's got *Phalaenopsis*, you know.

Yeah.

Well, everybody has these today at the grocery store. Why do we care?

I see.

So, I'd be more interested in things that are more unusual.

Okay, okay. Is that what, partly why you started liking orchids because they were unusual?

Yeah. That's probably why I started in the very beginning because they were unusual and different.

Okay, yeah, I'm just beginning to learn more about that process and it's interesting.

I mean you would have never seen in the '60s you know, fifty *Phalaenopsis* in the grocery store.

Wow! Yeah, they're everywhere now, okay.

Or they're dyed blue.

Yes, I've seen those.

That's horrible, *laughs*, that's horrible.

I was wondering how you felt about dyed ones.

That's horrible.

Okay.

Somebody sent me a picture on Facebook, "Look, look what I saw. Wouldn't you like this?" I was like, "Oh, my God no. Don't."

So why is it you don't like the dyed ones?

They're not real. I mean, basically they might as well be silk flowers. They're fake.

Michael makes several interesting points, first by recognizing that the standard *Phalaenopsis* have become almost ubiquitous. He admits the increasing popularity of orchids, or at least one variety of them, makes them less attractive to him as a more involved hobbyist orchid grower.

Rather, he seeks orchids that are harder to find, a sentiment echoed by other participants.

Michael also describes orchids as unusual and indicates this is one of their qualities that made them attractive to him. Other participants also mention the "unusual" or "unique" qualities of orchids as a motivation to grow them. Of course, whether a plant is unusual or not is relative to what is common to an individual, and it is telling that the orchids that are primarily collected are tropical varieties that are positioned as "unusual" or even "exotic" by some participants. Yet this exchange ultimately reveals that Michael considers orchids to be "natural" and values them for this quality, evidenced by his revulsion to the artificially-dyed *Phalaenopsis*. He considers these to be fake and likens them to actual artificial flowers. In this way, these mass-produced, commonly available, artificially dyed *Phalaenopsis* are not deemed as authentic, and while

hobbyist orchid growers would likely not refuse if presented with one, as it is an orchid after all, they are clearly not preferred.

DISCUSSION

Michael's views of the artificially dyed *Phalaenopsis* represent how orchid growing reinforces the separation of the non-human from the human, at least in how it is primarily viewed by the orchid growers themselves. Orchid growers position their orchids as living beings and appreciate them as such, as demonstrated by their enjoyment of caring for and cultivating these plants so that they are healthy and will eventually bloom. They respect, if not value, that this aspect of the hobby is dictated to a degree by their orchids, who must not only often be cared for to produce this outcome but in very specific ways that require specialized knowledge of the diversity of orchids and their care requirements. They recognize that orchids exist in native habitats in the "wild" and treasure experiences they have had with orchids in these spaces, likewise lamenting the intrusion of commercialization into their hobby. Yet it is through the novelty expressed in the inherent unpredictability of orchids as living beings, the care required of the orchid growers for their orchids to thrive and bloom, and a positioning of certain orchids and orchid growing practices as authentic that orchid growing represents how the binary between non-human and human is in reality obscured.

The ways in which humans are intertwined with a variety of forces that also occupy the world in which they inhabit, and that such a multitude of occupants necessitates thinking beyond dichotomous categories, is now widely acknowledged (Angelo 2017; Angelo and Jerolmack 2012; Davison 2015; Gillon 2014; Ginn 2014; Head and Muir 2006; Longhurst 2006; Pickering 2005; Power 2005; Whatmore 2002). These interactions often take place among and with features that are often deemed a part of the "natural" world, or that is plants and animals. While

they may be outside of the pristine spaces designated as “wilderness” (Cronon 1995), spaces such as the city or yard and garden are sites that demonstrate how the non-human and human are combined (Angelo and Jerolmack 2012; Gillon 2014; Ginn 2014; Head and Muir 2006; Hitchings 2003, 2007; Longhurst 2006; Power 2005). This study provides an additional example of how the binary between non-human and human may be transcended that includes not only the sites of participants’ orchid growing spaces, but the activity of orchid growing itself that is enacted at both the individual and group levels. It is an examination of an instance in which the non-human and the human come together, described through the concept of hybridity (Whatmore 2002). The three themes of novelty, care, and authenticity are ways through which this hybridity becomes clear.

Novelty is perhaps the most obvious example of how orchid growers value and respect orchids as living beings. While they may refer to their orchids as a collection as a convenient way to describe them as a collective mass, they are not viewed as a collection of static objects. Indeed, they are considered to be the opposite of static objects in that they are valued for their ability to grow and change. It is this ability of orchids that makes the hobby of orchid growing desirable for orchid growers and is one of the reasons they choose to engage in it in spite of alternative hobbies. Orchid growing shares this quality with keeping and caring for other plants and gardening in general, and participants often had interests in other plants and gardened as well. Marian and Donald both grew roses at one time, but found the required upkeep too difficult, especially in such a hot and humid environment. Plants are therefore unpredictable in this way, as their continued growth and eventual bloom is not always guaranteed. This way in which orchids demonstrate novelty is particularly evident in the delight orchid growers have

when an unidentified orchid they have acquired finally blooms, revealing its particular species or hybrid.

In order for such an unidentified orchid to bloom, orchid growers must care for it, as they must for all of their orchids. Care is therefore another aspect of orchid growing that participants enjoy. It is connected to novelty through how orchid growers nurture their orchids, and although this nurturing better ensures that their orchids will be healthy and eventually bloom, these outcomes are not always guaranteed. How orchid growers care for their orchids is not only evident through such basic activities as watering and fertilizing, but through how orchid growers must be knowledgeable about the specific care requirements of orchid varieties. Accumulating and utilizing this knowledge is indeed a major aspect of orchid growing, and likely is part of the hobby that orchid growers find engaging independent of how it allows them to better care for their plants. Furthermore, how care is evident in orchid growing demonstrates how this is an activity that blurs the boundaries between non-human and human. Orchid growers actively care for their orchids through a variety of activities and in a variety of ways, which are dictated by the orchids themselves, and as such they are interacting with their orchids, and in the process obscuring the neatly defined categories of non-human and human.

Authenticity is also a way in which hybridity is evident in orchid growing. This study shows that there are clearly ways in which relatively advanced orchid growers construct authenticity around their hobby. Yet this authenticity most often emphasizes a separation of the non-human from the human and recalls typical representations of “nature” as life that is separate from humans. Participants such as Donald and James who seek to incorporate a diversity of plants in their yards do so out of an attempt to maintain a more “natural” environment.

Participants also often deride the intrusion of commercialization into their hobby, which is

perhaps one of the most profound ways in which such a separation between the non-human and human is disturbed. In this way, authentic orchid growing consists of attention to orchids in their native and natural forms. Hobbyist orchid growers often seek to acquire orchids that are not as widely available (Hinsley, Verissimo, and Roberts 2015). Participants in this study appear to be similar, indicated by Michael's lack of appreciation for the commonly available *Phalaenopsis*. Less commercialized orchids are positioned as more "natural" and therefore more authentic, as habits of orchid growing that are considered to be more natural are equally considered more authentic.

How orchid growers discuss and relate to their orchids makes it evident that the hybrid characteristic of their hobby remains unacknowledged. That it does so is indicative of the way binaries such as that between the non-human and human become embedded and institutionalized within society and therefore for members of the society (Berger and Luckmann 1966). In this way the separation between the non-human and the human form what is considered "common knowledge" (Berger and Luckmann 1966), and it is therefore understandable that participants would consider their orchids to be part of "nature." Indeed, as I previously mentioned, my original approach to this project was to explore the paradoxes inherent to orchid growing, but paradoxes that focused on how it simultaneously fostered an appreciation for nature and a control of it. This approach itself reinforces the binary between the non-human and the human, as it places orchids centrally within the natural world separate from their human caretakers. The data revealed, however, that while orchid growers may consider their orchids a part of this unquestioned nature, the activity itself is actually a hybrid one that blurs the boundaries between the non-human and the human.

Obviously, orchids are central to orchid growing, but this extends beyond the orchid as a static actor within the process. As evidenced by the way in which participants discuss their orchids, whether it be the delight of seeing them grow and bloom or the individualized efforts they must make to bring about this outcome, orchid growers and their orchids come together during the activity, each an actor in the process. The activity of orchid growing necessitates that the orchid is made into something beyond its native form, whether an actual hybrid or a species grown carefully in a greenhouse, if not at least placed in a garden. In this way, the artificially-dyed *Phalaenopsis* festooned in bright hues of blue, indigo, hot pink, or lime green are representative of this hybrid quality, even if they are generally not favored by participants and other hobbyist orchid growers. Indeed, as I relate having to tell customers that these orchids were artificially-dyed, Michael says: “Right, yeah. On the other hand, one could say what’s natural? Because any hybrid isn’t really natural.” He therefore recognizes, even if implicitly, the role humans have in changing orchids from their “natural” forms, creating new hybrids in the process.

CONCLUSION

This study is an investigation into the rich and interesting world of orchid growers. While orchid growing definitely constitutes a subculture (Hansen 2000), it focuses on how orchid growing mediates a relationship between orchid growers and their orchids. Furthermore, it explores how this relationship simultaneously upholds and deconstructs the boundary between the non-human and human. It reinforces this boundary through how orchid growers position their orchids as living beings that are part of a “nature” distinctly separate from humans and deconstructs it through how orchid growing necessarily requires interactions between the non-human and the human. Orchid growers think of their orchids as a part of nature as they themselves are a part of a society wherein “nature” is commonly defined by the absence of the human. Such a concept of nature is only one of the numerous ways in which the socially-constructed quality of reality becomes institutionalized and therefore unquestioned (Berger and Luckmann 1966). Yet a view of nature that separates it from humans has been and is becoming increasingly challenged (Angelo 2017; Angelo and Jerolmack 2012; Cronon 1995; Gillon 2014; Ginn 2014; Head and Muir 2006; Longhurst 2006; Pickering 2005; Power 2005; Whatmore 2002). In order to demonstrate how orchid growing blurs the boundaries between the non-human and the human, I rely on the concept of hybridity (Whatmore 2002). This describes how “nature” is the product of interactions between the non-human and human and is therefore continually being made and remade.

The relatively homogenous demographic characteristics of both the orchid groups observed and the participants for the walking tours and interviews, recruited through the orchid

groups, is one limitation of this study. It is also limited by the small number of observations and small sample size for the walking tours and interviews. Yet it still yields valuable information about how people think of and interact with “nature,” and how these understandings and interactions may be reflected at both the individual and group levels. The three themes of novelty, care, and authenticity demonstrate how orchid growing represents a hybrid between the non-human and human, whether participants are challenging or reinforcing this binary through their behaviors. Given that much of the hybrid quality of orchid growing consists of how the plants are viewed and appreciated as living beings, future studies within this frame could incorporate actor-network theory to better explain the agency that orchids have and how orchid growers value this agency. Attention to the agency that non-human actors inherently possess and are able to exert further demonstrates the socially-constructed aspect of the binary between the non-human and human and shows how this binary may be deconstructed. Furthermore, it counters anthropocentrism, as does posthuman work generally.

Recognizing the value that other-than-human life possesses is of ethical importance, and only becomes increasingly so given climate change and the fragile state of many ecosystems and species of plants and animals, including many varieties of orchids. Indeed, orchids are among the most diverse families of plants, and many contain specialized, co-evolutionary relationships with pollinators (Cozzolino and Widmer 2005; Endersby 2016b; Schaefer and Ruxton 2009; Swarts and Dixon 2009). This means that many orchids are threatened or endangered, and all orchids are protected by the Convention on International Trade in Endangered Species of Flora and Fauna (CITES) of the United Nations, with rarer species relegated to Index I prohibiting any international trade and all other species occupying Index II requiring export and import permits (Hinsley, Verissimo, and Roberts 2015; Phelps and Webb 2015; Thomas 2006). Yet orchid

growing represents ways in which humans and orchids are intertwined, and depicts one of the numerous ways in which humans interact with “nature” throughout their daily lives. This study could therefore provide insight into such examples, including hobbies that share similarities to orchid growing such as collecting fish and keeping aquariums or showing pure-bred dogs, as well as petkeeping generally or even enjoying a socially-designated nature space such as a park. Furthermore, it is an example of how our modernly post-modern world is not one wherein boundaries are neat and clean, as much as this may be a vestige of a perhaps distinctly Western impulse to order and separate, but rather one where all boundaries and binaries are fluid, amorphous hybrids.

REFERENCES

- Amos, Robert. 2017. "Reassessing the Role of Plants in Society." *International Journal of Law in Context*, 13(3): 295-315.
- Angelo, Hillary and Colin Jerolmack. 2012. "Nature's Looking-Glass." *Contexts*, 11(1): 24-29.
- Angelo, Hillary 2013a. "Bird in Hand: How Experience Makes Nature." *Theory and Society*, 42(4): 351-368.
- Angelo, Hillary. 2013b. "More than Exception: Categories and the Problem of 'Nature' in the Ruhr." *Moving the Social*, 50: 7-24.
- Angelo, Hillary. 2017. "From a City Lens Toward Urbanisation as a Way of Seeing: Country/City Binaries on an Urbanising Planet." *Urban Studies*, 54(1): 158-178.
- Berger, Peter L. and Thomas Luckmann. 1966. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Doubleday.
- Bhatti, Mark and Andrew Church. 2001. "Cultivating Natures: Homes and Gardens in Late Modernity." *Sociology*, 35(2): 365-383.
- Bhatti, Mark and Andrew Church. 2004. "Home, the Culture of Nature and Meanings of Gardens in Late Modernity." *Housing Studies*, 19(1): 37-51.
- Bhatti, Mark, Andrew Church, Amanda Claremont, and Paul Stenner. 2009. "'I Love Being in the Garden': Enchanting Encounters in Everyday Life." *Social & Cultural Geography*, 10(1): 61-76.
- Broszmitter, Franz. 1991. "Botanical Imperialism: The Stewardship of Plant Genetic Resources in the Third World." *Critical Sociology*, 18(1): 3-17.
- Clifford, Robert. 2005. "Grassroots Orchid Conservation in Florida." *Selbyana*, 26(1/2): 326-327.
- Cozzolino, Salvatore and Alex Widmer. 2005. "Orchid Diversity: An Evolutionary Consequence of Deception?" *TRENDS in Ecology and Evolution*, 20(9): 487-494.
- Cronon, William. 1996. "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature." *Environmental History*, 1(1): 7-28.

- Charmaz, Kathy. 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Thousand Oaks, CA: SAGE.
- Davison, Aidan. 2010a. "Beyond the Mirrored Horizon: Modern Ontology and Amodern Possibilities in the Anthropocene." *Geographical Research*, 53(3): 298-305.
- Deibel, Eric. 2013. "Open Variety Rights: Rethinking the Commodification of Plants." *Journal of Agrarian Change*, 13(2): 282-309.
- Deleuze, Gilles and Felix Guattari. 1988. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. Minneapolis: University of Minnesota Press.
- Driver, Felix and Luciana Martins. 2005. "Views and Visions of the Tropical World." Pp. 3-20 in *Tropical Visions in an Age of Empire*, edited by Felix Driver and Luciana Martins. Chicago: University of Chicago Press.
- Emerson, Robert M., Rachel I. Fretz, and Linda L. Shaw. 2011. *Writing Ethnographic Fieldnotes*. 2nd ed. Chicago: University of Chicago Press.
- Endersby, Jim. 2016a. "Deceived by Orchids: Sex, Science, Fiction and Darwin." *British Journal for the History of Science*, 49(2): 205-229.
- Endersby, Jim. 2016b. *Orchid: A Cultural History*. Chicago: University of Chicago Press.
- Freudenberg, William R., Scott Frickel, and Robert Gramling. 1995. "Beyond the Nature/Society Divide: Learning to Think About a Mountain." *Sociological Forum*, 10(3): 361-392.
- Glesne, Corrine. 2016. *Becoming Qualitative Researchers: An Introduction*. 5th ed. London: Pearson.
- Gillon, Charles. 2014. "Amenity Migrants, Animals and Ambivalent Natures: More-than-human Encounters at Home in the Rural Residential Estate." *Journal of Rural Studies*, 36: 262-272.
- Ginn, Franklin. 2014. "Sticky Lives: Slugs, Detachment and More-than-human Ethics in the Garden." *Transactions of the Institute of British Geographers*, 39(4): 532-544.
- Grossberg, Lawrence. 2014. "Cultural Studies and Deleuze-Guattari, Part 1: A Polemic on Projects and Possibilities." *Cultural Studies*, 28(1): 1-28.
- Hall, Tom. 2009. "Footwork: Moving and Knowing in Local Space(s)." *Qualitative Research*, 9(5): 571-585.
- Hansen, Eric. 2000. *Orchid Fever: A Horticultural Tale of Love, Lust, and Lunacy*. New York: Pantheon Books.

- Head, Lesley and Pat Muir. 2006. "Suburban Life and the Boundaries of Nature: Resilience and Rupture in Australian Backyard Gardens." *Transactions of the Institute of British Geographers*, 31(4): 505-524.
- Holt, Douglas B. 1997. "Distinction in America? Recovering Bourdieu's Theory of Tastes from Its Critics." *Poetics*, 25: 93-120.
- Hondagneu-Sotelo, Pierrette. 2010. "Cultivating Questions for a Sociology of Gardens." *Journal of Contemporary Ethnography*, 39(5): 498-516.
- Hinsley, Amy, Diogo Verissimo, and David L. Roberts. 2015. "Heterogeneity in Consumer Preferences for Orchids in International Trade and the Potential for the Use of Market Research Methods to Study Demand for Wildlife." *Biological Conservation*, 190:80-86.
- Hitchings, Russell. 2003. "People, Plants, and Performance: On Actor Network Theory and the Material Pleasure of the Private Garden." *Social & Cultural Geography*, 4(1): 99-113.
- Hitchings, Russell. 2007. "Approaching Life in the London Garden Centre: Acquiring Entities and Providing Products." *Environment and Planning*, 39: 242-259.
- Kusenbach, Margarethe. 2003. "Street Phenomenology: The go-along as ethnographic research tool." *Ethnography*, 4(3): 455-485.
- Lofland, John, David A. Snow, Leon Anderson, and Lyn H. Lofland. 2005. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*. 4th ed. Boston: Cengage Learning.
- Longhurst, Robyn. 2006. "Plots, Plants and Paradoxes: Contemporary Domestic Gardens in Aotearoa/New Zealand." *Social & Cultural Geography*, 7(4): 581-593.
- Luke, Timothy. 2000. "The Missouri Botanical Garden: Reworking Biopower as Florapower." *Organization & Environment*, 13(3): 305-321.
- McFarren, Jeromy. 2015. "Craft Revisited: Moving Toward a Consumer Revolution." *VOICES: The Journal of New York Folklore*, 41(1/2): 28-37.
- Saldana, Joey. 2009. *The Coding Manual for Qualitative Researchers*. 2nd edition. Thousand Oaks, CA: SAGE.
- Schaefer, H. Martin and Graeme D. Ruxton. 2009. "Deception in Plants: Mimicry or Perceptual Exploitation?" *Trends in Ecology and Evolution*, 24(12): 676-685.
- Swarts, Nigel D. and Kingsley W. Dixon. 2009. "Perspectives on Orchid Conservation in Botanic Gardens." *Trends in Plant Science*, 14(11): 590-598.

- Pickering, Andrew. 2005. "Asian Eels and Global Warming: A Posthumanist Perspective on Science and the Environment." *Ethics and the Environment*, 10(2): 29-43.
- Phelps, J. and Edward L. Webb. 2015. "Invisible Wildlife Trade: Southeast Asia's Undocumented Illegal Trade in Wild Ornamental Plants." *Biological Conservation*, 186:296-305.
- Power, Emma R. 2005. "Human-Nature Relations in Suburban Gardens." *Australian Geographer*, 36(1): 39-53.
- Regan, Kevin E. 2004. "The Need for a Comprehensive Approach to Protecting Rare Plants: Florida as a Case Study." *Natural Resources Journal*, 44: 125-162.
- Richardson, Laurel and Elizabeth Adams St. Pierre. 2005. "Writing as a Method of Inquiry." Pp. 959-978 in *The Sage Handbook of Qualitative Research*, edited by Norman K. Denzin and Yvonna S. Lincoln. Thousand Oaks, CA: SAGE.
- Thomas, Barry. 2006. "Slippers, Thieves and Smugglers — Dealing with the Illegal International Trade in Orchids." *Environmental Law Review*, 8: 85-92.
- Valen, Dustin. 2016. "On the Horticultural Origins of Victorian Glasshouse Culture." *Journal of the Society of Architectural Historians*. 75(4): 403-423.
- Warren, Carol A.B. 2011. "Qualitative Interviewing." Pp. 83-102 in *Handbook of Interview Research*, edited by Jaber F. Gubrium and James A. Holstein. Thousand Oaks, CA: SAGE.
- Whatmore, Sarah. 2002. *Hybrid Geographies: Natures Cultures Spaces*. London: SAGE.

APPENDIX A: INTERVIEW QUESTIONS

1. Please start by showing me your orchid collection.
2. How many orchids do you have in your collection?
3. Which orchid is the newest? Which one is the oldest?
4. Do you have a favorite orchid? If so, which one and why?
5. How long have you collected orchids?
6. What got you interested in collecting orchids?
7. Could you describe how you relate to your orchids on a typical day?
8. How do you care for your orchids?
9. Does your orchid collecting involve any other activities other than directly caring for your orchids?
10. How involved are you in the orchid society or club?
11. How did you get involved in the orchid society or club?
12. What were some of your first experiences with and impressions of the orchid society or club?
13. Are you involved in the AOS shows and/or judging? How did you get involved in this?
What do you enjoy about it?
14. Would you describe orchid collecting as an individual or social activity?
15. What is your favorite aspect of orchid collecting?
16. Do you have any other plants? Do you garden?
17. Do you think orchids are becoming more popular? If so, why?

18. Do you think of your orchid collection as a collection?

19. Are you involved in any orchid conservation efforts? What is your opinion about orchid conservation and conservation in general?

APPENDIX B: DEMOGRAPHIC SHEET QUESTIONS

1. What is your age?
2. What is your occupation and the occupation of your partner if applicable?
3. What were your parents' occupations?
4. What is the highest level of education you have completed?
5. How would you describe your race and/or your ethnicity?
6. How would you describe your gender?
7. Into which income bracket would you place your household?
 - a) Below or up to \$22,800
 - b) \$22,801 - \$43,511
 - c) \$43,512 - \$72,001
 - d) \$72,002 - \$112,262
 - e) Above \$112,263¹

¹ Income quintiles acquired from: <http://www.taxpolicycenter.org/statistics/household-income-quintiles>.

APPENDIX C: CONSENT FORM



Informed Consent to Participate in Research Involving Minimal Risk

Pro # 00031247

You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask her to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

We are asking you to take part in a research study called:

Orchid Collecting as a Cultural Practice

The person who is in charge of this research study is Kellie Petersen. This person is called the Principal Investigator. She is being guided in this research by Dr. Laurel Graham of the sociology department at the University of South Florida.

The research will be conducted at locations of participants' choosing. This will likely be participants' homes but may also be a public location such as a park or botanical garden, coffee shop, or library.

Purpose of the study

The purpose of this study is to better understand the practice of orchid collecting, specifically as it may reflect a subculture and the larger culture of which it is a part.

Why are you being asked to take part?

We are asking you to take part in this research study because your involvement in an orchid society or club or the reference provided to the researcher indicates that you collect orchids as a hobby.

Study Procedures:

If you take part in this study, you will be asked to:

- Participate in a semi-structured interview about your hobby of collecting orchids and any other activities associated with this hobby, such as the care and cultivation of orchids and involvement in any orchid societies or clubs. If you would like, you will also be asked to showcase your orchid collection and provide an informal tour of any affiliated spaces such as a greenhouse or garden as well as provide photographs of your collection and these spaces, take photographs during the interview, or allow the researcher to take photographs.
- You will be asked questions about your orchid collection, your interest in orchids and how you recall it beginning, the routines associated with your hobby of orchid collecting, and your involvement in any social groups related to orchid collecting such as orchid clubs or societies. You will also be asked some demographic questions. If you would like to see a complete list of questions prior to beginning the interview please ask the researcher.
- It is anticipated that only one interview will be necessary for this study. However, if it would better accommodate your schedule or if you would prefer a follow-up interview can be arranged. Interview length is up to you, but interviews are expected to take a minimum of a half an hour to a maximum of two hours to complete.
- The location of the research is up to you, but it is anticipated to take place in your home. However, if you would prefer a public location such as a park or botanical garden, coffee shop, or library may also be used.
- If you agree, the interview will be audio recorded and later transcribed by the researcher. There will be no identifying information in the recordings unless provided by you. Only the researcher will hear the recordings, but transcripts will be shared with faculty advisors and excerpts with the general academic community. The recordings will be maintained for the duration of the study, which may be up to five years.

Total Number of Participants

About fifteen to twenty-five individuals will take part in this study.

Alternatives / Voluntary Participation / Withdrawal

You do not have to participate in this research study.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time.

You will receive no benefit by participating in this research study.

Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Compensation

You will receive no payment or other compensation for taking part in this study.

Costs

There are not anticipated costs associated with participation in this study.

Privacy and Confidentiality

The researcher will keep your study records private and confidential. Certain people may need to see your study records. Anyone who looks at your records must keep them confidential. These individuals include:

- The research team, including the Principal Investigator and faculty advisor.
- Certain government and university people who need to know more about the study, and individuals who provide oversight to ensure that we are doing the study in the right way.
- Any agency of the federal, state, or local government that regulates this research, especially the Office of Human Research Protections (OHRP).
- The USF Institutional Review Board (IRB) and related staff who have oversight responsibilities for this study, including staff in USF Research Integrity and Compliance.

The researcher may present these research findings at academic conferences and publish them in academic journals. If this occurs, your name and any identifying information will not be included.

You can get the answers to your questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, or experience an unanticipated problem, call Kellie Petersen at 319-415-6985.

If you have questions about your rights as a participant in this study, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

Consent to Take Part in this Research Study

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

Signature of Person Taking Part in Study

Date

Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in their primary language. This research subject has provided legally effective informed consent.

Signature of Person obtaining Informed Consent

Date

Printed Name of Person Obtaining Informed Consent

APPENDIX D: LETTER OF CONSENT FROM TAMPA BAY ORCHID SOCIETY



30 June 2017

University of South Florida

Re: “Orchid Collecting as a Cultural Practice” by Kellie Petersen

As leadership of Tampa Bay Orchid Society Inc., We grant permission to Kellie Petersen to visit any meetings and affiliated events for the purpose of explaining her project entitled “Orchid Collecting as a Cultural Practice,” to seek participants for said project, and to observe the typical activities for the project itself. This permission will begin in July of 2017 and will continue tentatively through November 2017.

We have been informed of the project by Ms. Petersen and understand the anticipated subject of the research and its directions as well as her motivations for pursuing it. There has been ample time and opportunity to ask any questions about the project. We understand that if, for any reason, we elect to discontinue the participation of Tampa Bay Orchid Society Inc. we are free to do so without providing advanced notice.

For this project, we agree to allow Ms. Petersen some time either prior to or during regularly scheduled meetings and potentially affiliated events to explain her project and request participants. We agree to allow her time after the meeting to speak with potential participants to explain the project in more detail and coordinate potential interviews. We also allow her access to the meetings and any affiliated events in order to make relatively unobtrusive observations of the typical activities that take place at them.

We understand that any interviews and observations that result from Ms. Petersen's attendance at meetings or any affiliated events will compose material for her Master's thesis in sociology at the University of South Florida. This material may also appear in part or in full as conference presentations and potentially as papers to be published.

Please feel free to contact us at tampabayorchidsociety@verizon.net or 813-368-7353 to confirm our participation in this research project.

Sincerely,
on behalf of the Tampa Bay Orchid Society Board of Directors

Eileen M. Hector

Eileen M. Hector
Communications Director
Newsletter Editor
WebSitekeeper

APPENDIX E: LETTER OF CONSENT FROM TAMPA ORCHID CLUB



7/12/17

University of South Florida

Re: "Orchid Collecting as a Cultural Practice" by Kellie Petersen

As leadership of the Tampa Orchid Club, we grant permission to Kellie Petersen to visit any meetings and affiliated events for the purpose of explaining her project entitled "Orchid Collecting as a Cultural Practice," to seek participants for said project, and to observe the typical activities for the project itself. This permission will begin in July of 2017 and will continue tentatively through November 2017.

We have been informed of the project by Ms. Petersen and understand the anticipated subject of the research and its directions as well as her motivations for pursuing it. There has been ample time and opportunity to ask any questions about the project. We understand that if, for any reason, we elect to discontinue the participation of Tampa Orchid Club we are free to do so without providing advanced notice.

For this project, we agree to allow Ms. Petersen some time either prior to or during regularly scheduled meetings and potentially affiliated events to explain her project and request participants. We agree to allow her time after the meeting to speak with potential participants to explain the project in more detail and coordinate potential interviews. We also allow her access to the meetings and any affiliated events in order to make relatively unobtrusive observations of the typical activities that take place at them.

We understand that any interviews and observations that result from Ms. Petersen's attendance at meetings or any affiliated events will compose material for her Master's thesis in sociology at the University of South Florida. This material may also appear in part or in full as conference presentations and potentially as papers to be published.

Please feel free to contact us at Tampa Orchid Club, Laura Newton 352.799.7604; 23003 White Rock Rd. Brooksville, FL 34602.

Sincerely,

Laura Newton

American Orchid Society Representative for the Tampa Orchid Club

APPENDIX F: IRB APPROVAL LETTER



RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

August 18, 2017

Kellie Petersen
Sociology
Department of Sociology, CPR 107
University of South Florida, 4202 E. Fowler Avenue Tampa, FL 33620

RE: **Expedited Approval for Initial Review** IRB#: Pro00031247
Title: Orchid Collecting as a Cultural Practice

Study Approval Period: 8/17/2017 to 8/17/2018

Dear Ms. Petersen:

On 8/17/2017, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents contained within, including those outlined below.

Approved Item(s): Protocol Document(s): [IRB study protocol.docx](#)

Consent/Assent Document(s)*: [Informed Consent.docx.pdf](#)

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent documents are valid until the consent document is amended and approved.

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110. The research proposed in this study is categorized under the following expedited review category:

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval via an amendment. Additionally, all unanticipated problems must be reported to the USF IRB within five (5) calendar days.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

Kristen Salomon, Ph.D., Vice Chairperson USF Institutional Review Board

