BOTANICAL PAINTINGS AS REFLECTIONS OF CULTURE: HOW BELIEFS AND MOTIVATIONS INFORM DEPICTIONS OF THE NATURAL WORLD.

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BY

Charlotte Pecot

Charlotte Pecot

APPROVED:

Anne Nelson, MFA
Director of Thesis

Anthony Baab, MFA
Second Reader

Donata Henry, PhD
Third Reader
The relationship between humans and nature has always been complicated. The availability of objective threads of knowledge, and influential cultural values have evolved throughout varied times and places. This thesis will analyze how interwoven values and complex bodies of knowledge affect the subject matter and stylistic choices within naturalistic depictions of the natural world, and how artists respond to and create meaning through the natural subjects around them. Through selection of a number of artists and pieces, an exploration into the cultural frameworks surrounding the works’ production will illuminate the ways in which cultural influences affect artistic output. The lenses of spirituality, imperial expansion, economic exploitation, and scientific conventions reveal aesthetic choices that conform to or juxtapose certain cultural motivations. As an artist interested in representing the natural world in my paintings, this exploration aids in my own understanding of how my depictions of plants are, and will be, shaped by how I think about the environment around me. Composition, perspective, form, and subject matter are some elements of my artistic practice informed by this research. My goal is to produce informed pieces of art that fully reflect my own artistic desires and personal aspirations. I hope to gain an improved pictorial means of communicating particular interests through analysis of botanical paintings and the contexts, cultures, and values surrounding their production. This leads me in attempting to produce a better informed, purposeful depiction of the Louisiana environment.
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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF IMAGES</td>
<td>v</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>2</td>
</tr>
<tr>
<td>Religion</td>
<td>4</td>
</tr>
<tr>
<td>Botanical Painting in China</td>
<td>5</td>
</tr>
<tr>
<td>Botanical Painting in Japan</td>
<td>9</td>
</tr>
<tr>
<td>Medieval Christianity</td>
<td>11</td>
</tr>
<tr>
<td>Renaissance Return to Naturalism</td>
<td>12</td>
</tr>
<tr>
<td>Imperial Expansion</td>
<td>15</td>
</tr>
<tr>
<td>Fruits of the New World</td>
<td>16</td>
</tr>
<tr>
<td>European Exoticism</td>
<td>17</td>
</tr>
<tr>
<td>Linnaean Conventions</td>
<td>22</td>
</tr>
<tr>
<td>Dutch Still Life Tradition</td>
<td>26</td>
</tr>
<tr>
<td>Darwinian Conventions</td>
<td>28</td>
</tr>
<tr>
<td>German Romantic Movement</td>
<td>32</td>
</tr>
<tr>
<td>Environmental Conservation</td>
<td>35</td>
</tr>
<tr>
<td>Contemporary Artists</td>
<td>38</td>
</tr>
<tr>
<td>Local Flora of Louisiana</td>
<td>40</td>
</tr>
<tr>
<td>Conclusion</td>
<td>52</td>
</tr>
<tr>
<td>WORKS CITED</td>
<td></td>
</tr>
</tbody>
</table>
List of Images

Figure 1.1: Cui Bai. *Double Happiness*. 1061, National Palace Museum, Taipei. Wikimedia Commons, Wikimedia Foundation, https://commons.wikimedia.org/wiki/File:Cui_Bai_Magpies_and_Hare.jpg
Figure 1.2: Ma Lin. *Secluded Fragrance*. 1127-1279, Metropolitan Museum of Art, New York City. *Metropolitan Museum of Art*,
https://www.metmuseum.org/art/collection/search/40133
Figure 1.4: Hasegawa Tōhaku. *Pine Forrest*. 16th century, Tokyo National Museum, Tokyo.

*Tokyo National Museum*,

Figure 2.1: Eckhout, Albert. *Fruits, Pineapple, and Melon, etc.* 1640-50, Nationalmuseet, Copenhagen. *Wikimedia Commons,* Wikimedia Foundation, https://commons.wikimedia.org/wiki/File:Albert_Eckhout_1610-1666_Brazilian_fruits.jpg
Figure 2.2: Eckhout, Albert. *Palm Inflorescence and Basket of Spices*, 1640-1650, Nationalmuseet, Copenhagen. *National Museum Denmark*,
https://samlinger.natmus.dk/ES/asset/25501
Figure 2.3: Sibylla Merian, Maria. *Pineapple with Cockroaches* (Plate I To *Metamorphosis Insectorum Surnamensium*). 1702-1703, Royal Collection Trust, London. [Royal Collection Trust](https://www.rct.uk/collection/921156/pineapple-with-cockroaches)
Figure 2.5: Sibylla Merian, Maria. *Metamorphosis of a Butterfly* (from *Metamorphosis Insectorum Surnamensium*, Plate XX). 1705, Amsterdam. Wikimedia Commons, Wikimedia Foundation. [https://commons.wikimedia.org/wiki/File:Metamorphosis_of_a_Butterfly_Merrian_1705.jpg](https://commons.wikimedia.org/wiki/File:Metamorphosis_of_a_Butterfly_Merrian_1705.jpg)
Figure 2.8: Parkinson, Sydney. *Banksia intergrifolia* from *Bank’s Florgelium*. 1770-1780, Natural History Museum, London. *Wikimedia Commons*, Wikimedia Foundation, [https://commons.wikimedia.org/wiki/File:Banksia_integrifolia_watercolour_from_Bank%27s_Florigelium.jpg](https://commons.wikimedia.org/wiki/File:Banksia_integrifolia_watercolour_from_Bank%27s_Florigelium.jpg)
Figure 3.2: North, Marianne. *Poison Tree Strangled by a Fig, Queensland* (Painting 781). 1881, Marianne North Online Gallery, Kew: Marianne North Gallery, https://www.kew.org/mng/gallery/781.html
Figure 3.4: North, Marianne. *Chilean Cactus in flower and its leafless Parasite in fruit.* 1880s, Marianne North Online Gallery, *Kew: Marianne North Gallery,* [https://www.kew.org/mng/gallery/023.html](https://www.kew.org/mng/gallery/023.html)
Figure 3.5: Haeckel, Ernst. *Orchidaea* (Plate 74). 1899, in *Kunstformen der Natur* (Art Forms in Nature), Wikimedia Commons, Wikimedia Foundation, [https://commons.wikimedia.org/wiki/File:Haeckel_Orchidae.jpg](https://commons.wikimedia.org/wiki/File:Haeckel_Orchidae.jpg)
Figure 4.1: Mee, Margaret. *Cattleya violacea*. 1981, Royal Botanic Gardens, Kew, Financial Times, *Financial Times*, [https://www.ft.com/content/96592878-1d4a-11e8-a748-5da7d696ccab](https://www.ft.com/content/96592878-1d4a-11e8-a748-5da7d696ccab)
Figure 4.2: Mee, Margaret. *Gustavia pulchra flowering in the Rio Negro forest in Amazonas*. 1979, Royal Botanic Gardens, Kew, Financial Times, Financial Times, https://www.ft.com/content/96592878-1d4a-11e8-a748-5da7d696ccab
Figure 5.2: Rockman, Alexis. *Cascade*. 2015, Grand Rapids Art Museum, Commissioned by Grand Rapids Art Museum with funds provided by Peter Wege, Jim and Mary Nelson, John and Muriel Halick, Mary B. Loupee, Karl and Patricia Betz, and general accessions funds, *Grand Rapids Art Museum*, https://www.artmuseumgr.org/2017/04/03/alexisrockman-the-great-lakes-cycle/
Figure 5.3: Rockman, Alexis. *Spheres of Influence*. 2016, Jonathan O’Hara Gallery, [http://alexisrockman.net/great-lakes/](http://alexisrockman.net/great-lakes/)
Figure 6.1: Pecot, Charlotte. *Hardwoods in a Longleaf Pine Stand*, 2019-2020. Acrylic on canvas, 18” by 24”
Figure 6.2: Pecot, Charlotte. *Fallen Log, Lake Ramsey*. 2019-2020. Acrylic on canvas, 24” by 24”
Figure 6.3: Pecot, Charlotte. *Piece of Wetlands*. 2020. Acrylic on canvas, 18’’ by 24’’
Figure 6.4: Pecot, Charlotte. *Portraits of Louisiana*. 2020. Acrylic on canvas, 9” by 12” each
Figure 6.5: Pecot, Charlotte. *Floating Log, Jean Lafitte*. 2020. Acrylic on canvas, 18” by 18”
**Introduction**

The ways in which humans consider and value their environment and are influenced by the various sources of information and desires which permeate their culture, have a profound effect on artistic representation of the natural world. Philosopher Michel Foucault posited the inextricability of the goals of knowledge and power, namely that in knowing we control and in controlling we know (Aloi 2019). Similarly, in her analysis on the roles of science and art in portrayal of ‘discovered’ lands by European artists, contemporary scholar Victoria Dickenson concludes that the history of thought cannot be separated from the history of making (Dickenson 1998). When artistic representations of the natural world are rendered by a human hand, what do they communicate about the culture that an artist is embedded in?

Sources of information and values inform naturalistic depictions of botanical subjects. These representations present a view of plants through the lens of an artist’s personal knowledge and cultural thought processes. Plant identification as a practice has historically depended on cultural negotiations between botanists, patrons, and consumers. Not all pieces within the scope of this research were made with the sole intention of botanical identification; artists depicting the environment for any purpose are involved in political, social, economic, and scientific negotiations and processes. The documentation of plants relies on the thoughts and knowledge of an artist as well as their resources and capabilities. Botanical depictions not only have ideological power, the representations themselves relate to various systems of ideas.

This project came to be through a personal curiosity in botanical depictions as visual means of scientific communication. These art pieces are epistemological as they
are objects which inform knowledge, but I took an interest in what informants affected the artists themselves in terms of their aesthetic output. As a painter interested in representing the natural world, I hope to use the analysis of historical pieces and the ways in which they reflect external sources of knowledge and meaning-making to inform my own observation-based depictions of the environment. Through exploration into the implications of certain frameworks on artistic production, this project attempts to unearth the influences of cultural particularities on the work of botanical artists, whether the artists themselves were actively aware of these influences or not, as a means of producing naturalistic depictions in an informed and purposeful manner.

While this thesis is an effort to explore a useful array of cultural influences as far as how they relate to aesthetic output, it in no way addresses every convention of botanical depiction that has existed over time or catalogues all of the subjectivities which affect human artistic production. The scope of this research is limited to depictions of the natural world which are able to be botanically identified. That said, the following is not meant to stand as a comprehensive history of all botanical depictions of the environment. Rather, specific artists and the cultural circumstances in which they produced their work will be analyzed in terms of aesthetic choices.

**Early History**

Botany as we know it today is considered to have developed due to curiosity regarding the medicinal properties of plants (Blunt 1951). Classical manuscripts remain some of the oldest known descriptions and classifications of plants, such as *Historia Plantarum*, written by Aristotle’s pupil Theophrastus in the 3rd century BCE (Meier
Reeds 1976). While plants and plant lore were always an integral part of Greek culture and life, Theophrastus’ manuscripts were some of the first organized attempts to classify the natural world. This manuscript was produced when Alexander the Great, another pupil of Aristotle, undertook his expedition through Persia to India from 336 to 332 BCE, calling to mind the Aristotelian ideal of military conquests with a spirit of inquiry (Aitken 2008). In the 1st century CE, Dioscorides compiled *De Materia Medica*, what was considered the earliest comprehensive medical treatise and Pliny the Elder produced *Historia Naturalis*, which provided information on the botany and horticulture of the Roman Empire (Aitken 2008). Greek kingdoms had been established in Persia after the death of Alexander the Great, spreading Hellenistic thought throughout the Arabian Peninsula as well as through the regions traversed during conquests (Ofek 2001).

After the dissolution of the Roman Empire at the end of the 5th century, botanical knowledge and depiction flourished outside of Europe. Scholars throughout Persia and the Arabian Peninsula translated classical manuscripts to Latin and created their own botanical treatises. The influence of Islam began with the teachings of the Prophet Muhammed, born in 571 with the Qu’ran being revealed to him by God over 23 years (Deen 2010). Scientific inquiry was an essential part of fulfilling Qu’ranic recommendations, encouraging Muslims to seek knowledge and ponder the mystery of God’s creation (Deen 2010). This religious importance placed on scientific inquiry may be a part of the reason why in a time when European scientific advancement was relatively stagnant, Islamic scholars had translated nearly the entire Greek corpus of medicinal and botanical knowledge into Arabic by 1000 C.E. These Arabic texts were studied and translated by European scholars beginning in the 12th century. By 1390,
Islamic influence reached Italy with the Italian translation of an Arabic treatise on medical botany by physician Serapion the Younger, a document written at the beginning of the 9th century (Maziak 2005).

While this discussion of classical knowledge of botany and its movement and influence in other regions is one snapshot of a particular discourse, it exemplifies the ways in which knowledge of and curiosity toward the natural world are influenced by external factors. Though this philosophical background is not a discussion of particular pieces and their influences, it depicts the effect of spiritual frameworks, colonial expansion and economic opportunities, and cultural scientific conventions in terms of how humans think about the natural world. It also lays a foundation for the start of cultural interest in plant life, through the plants’ uses to humans.

Religion

The values of various philosophical and theological mindsets are important aspects of human experience, and as such have historically informed attitudes towards the natural world and depictions of it. The qualities assigned to the natural world, whether through fear or reverence, have ideological dimensions and artistic implications. Donald Worster (1996) perfectly captures the concept of how perceptions of the natural world are shaped by factors such as religion when discussing the work of scholars pertaining to the environment, stating that ideas of nature are products of the culture in which one lives (Worster 1996). The ways in which the natural world is depicted is in turn informed by an artist’s ideas regarding nature. The following analysis of various spiritual frameworks
and religions provides insight into one part of human culture which has a substantial effect on the depiction of botanical subjects.

In general, Eastern traditions of depicting the natural world preceded the botanical tradition in Western civilizations with bird-and-flower painting in China and Japan, attributed by scholars to the Taoist and Buddhist ideals of harmony with nature. In comparison, medieval Christianity was more anthropocentric. The goal of the medieval European mind was generally spiritual salvation from life on earth, with nature given by God to man to keep dominion over. These Christian attitudes towards nature evolved over time with the return to naturalism during the Enlightenment as well as with the Scientific Revolution. While certain aspects of spiritual frameworks will be investigated as working to inform botanical depictions, the reality of how human beings value and interact with the natural world is continuously complicated by existing attitudes that can work to promote or negate religious leanings.

**Botanical Painting in China**

Flower painting emerged as early as the 7th or 8th centuries in Eastern countries (Blunt 1951). This tradition of the naturalistic delineation of the environment functioned independent of identification or economic considerations, preceding and perhaps informing the botanical tradition that later developed in the West (Blunt 1951). According to Laurence Binyon, this Eastern tradition bears witness to an “exquisite courtesy to Nature,” fostered by Daoism (Saunders 1995). Flowers held many appeals, specifically to those imbued with these conceptions. These included their delicacy and vigor, their beauty, and their purposeful expansion to light. Through analysis of the
influence of Confucianism and Daoism in China and the effect of the spread of Buddhism through Japan, naturalistic painting traditions within specific Eastern cultures serve to reflect how philosophical and theological values affect depictions of the natural world. Confucianism stresses ideals of moderation and contentment and a central tenet of Daoism is the union of man’s spirit with nature, facilitating the contemplation and study of nature as a way of Daoist life (Luo 2015). In his analysis of the effect of Chinese culture on Chinese painting, Jianxin Luo speaks to the core principle of Chinese tradition that is harmony between humans and nature, attributing it to ideals reflected in the three previously mentioned belief systems (Luo 2015).

Daoism is the philosophy of an all-pervasive order of nature, the harmony and precision of the heavenly bodies. (Bao 2004). The rise in importance of this traditional philosophy in the Song Dynasty as well as its deep roots in ancient Chinese culture had many effects on the way in which the natural world was depicted. One of the most visible influences from Daoism is the awareness of the harmony of “void and solid,” and “existence and non-existence” (Law 2016). While from some perspectives existence and non-existence stand as opposites, according to Daoist values they are in fact complimentary and each fills the other to achieve harmony. In the context of bird-and-flower painting, the importance placed on harmony and balance can be seen in the Chinese tradition of ‘liubai,’ translating to English as ‘leave whiteness behind’ (Chen 2016). In the tradition of liubai, the background behind a subject is intentionally left blank. Due to the influence of Daoist values, the space is to be read not as blank but as a depiction of the non-existence that is necessary to achieve harmony (Law 2016). The effect of the Daoist concepts of yin and yang, the use of existence and non-existence, can
be seen in Northern Song Painting Dynasty (960-1127) Academy painter, Cui Bai’s *Double Happiness* from 1061 (Figure 1.1). In this depiction of a hare and two magpies, the absence of indicators of space or perspective creates an ethereal sense of forest and mountains in the background. This painting is representative of the way in which traditional Song Dynasty artists provided space for the viewer’s imagination to aid in the expression of the ‘ethereal’ spirit of nature. The use of *liubai* gives *Double Happiness* Daoist harmony, and it also lends itself to another aspect of depicting nature that was important in Chinese painting tradition at this time, the increased emphasis on capturing the essence of the subject. This was a reflection of the values of Neo-Confucianism, a combination of both Confucian and Daoist values with the influence of Buddhist asceticism, that were developed during the Song Dynasty (Brook 1993).

Ma Lin was also a Southern Song Dynasty painter who exemplified the tradition of capturing the character of the plant. In *Secluded Fragrance*, produced between the 12th and 13th centuries, Ma not only attempted to capture the form of the orchid, but also its essence in an abstract expression of seclusion and fragrance (Figure 1.2). In this context, *liubai* is employed to create an atmosphere of serenity and isolation, characteristic of the orchid according to Confucius thought. Cemented in the Song Dynasty due to the revival of Confucianism, the orchid became saturated with associations of elegance and integrity (Sui 2018). The title of the painting refers to the scent of the orchid, and the expansive space surrounding the orchid’s petals aids in the expression of its fragrance filling the space. Capturing the essence of the character of the flower rather than its purely material form is reflective of the syncretism of Buddhist, Daoist, Confucian ideals at this period. In her article on Buddhist and Daoist influences on Chinese depictions of the natural
world, Miranda Shaw speaks to the ideal of contemplating nature in order to achieve spiritual elevation, therefore giving the natural world a spiritual force (Shaw 1988). In the Buddhist context, Ma Lin’s depiction of the orchid not only portrays the esteemed flower, the image itself transmits the spiritual force and essence of the flower. The recognition of spirit in nature from Daoism and specific qualities about the flower expressed in Confucianism work together to inform the depiction of this plant. Were the background of this piece congested in detail, neither the character of the orchid in Neo-Confucian perspective nor the evocation of its fragrance would be expressed.

Ch’an Buddhism, Ch’an meaning meditation, developed as a distinctive Buddhist school in China during the Tang Dynasty (Bao 2004), Buddhism, originating in India, transferred to China and picked up elements of Chinese culture. (Herschock 2004). Ch’an Buddhism combined traditional Buddhist thought with subtle aspects of Daoism, emphasizing self-cultivation, quietism, and the freeing of the mind from all intellectual and material distractions. This school of Buddhism, based on the physical practice of meditation as a means of spiritual elevation, eventually spread to Japan and took root as the most prominent form of Buddhism in Japanese culture during the 14th century, Zen Buddhism (Zen is the Japanese translation of Ch’an) (Bao 2004).

**Botanical Painting in Japan**

Various aspects and values of Zen Buddhism work to inform the depiction of nature in some Japanese art. According to Zen, Buddhists can transcend their egos and be released from the shackles of the mundane world through cultivation of discipline and intense concentration. In reaction to the Chinese scholastic literary tradition of other
Buddhist schools, Ch’an, later Zen, dictated that worldly knowledge and mindless thought patterns were barriers to achieving enlightenment. The Buddhist concept of *maya* describes how the material world is merely an illusion, whereas *brahman* is the universal and eternal spiritual reality to which Buddhists strive to ascend (O’Reilly 2007). Without a permanent substance in things, preoccupation with an individual existence gives place to the realization of a supreme reality behind all phenomena. In Japanese art, the *maya* can be expressed in the acceptance of transience and imperfection. The Daoist influence on Zen Buddhism is also reflected in this painting tradition, as ideas of simplicity and acceptance that permeated artistic practice, finding beauty in the imperfect. This aesthetic of imperfection can be thought of as the material representation of Zen Buddhism and its emphasis on simplicity and the importance of nature (Juniper 2011).

One of the earliest Japanese depictions of the natural world reflecting the ideals of Zen Buddhism is *Plum Blossoms* (Figure 1.3), by an unknown artist, produced around 1350 during the Nambokucho period (Lee 1972). Aspects of this depiction reflect the movement of Buddhism from China to Japan and the influence of Chinese philosophy on Zen Buddhism. *Plum Blossoms* falls in line with the Neo-Confucian tradition of representing morally infused plants (Lee 1972). The depiction of these blossoms expresses the qualities of lonely nobility and purity through the minimal background. This is also a depiction of a fragment of nature, an expression of the fragility and impermanence of the subject matter. The branches supporting the blossoms are not explicitly depicted, and instead the trunk of the tree is to be imagined by the viewer. These traces of ink stand for material representation of the branches and represent the Zen Buddhist attitude towards the nature of reality. Here more interest is given to
expressing the spiritual reality, *brahman*, of the botanical subject over its physical presence.

Hasegawa Tohaku’s *Pine Forest* from the Momoyama period in the late 16th century is an example of the Zen Buddhist inclination to express the spiritual reality of a subject over the physical one (Figure 1.4). The name of this piece and the skeletal structures recessing into the background suggest a forest of trees, but the artist only fully represents a few pines. This act of not representing the entire forest works to suggest that the pines are shrouded in mist, not that they are not present. Inclusion of how the mist is concealing the pine forest captures an ephemeral moment in time during which Tohaku meditated on the reality of nature. An expression on the transient quality of life, beauty is found in moments of the subtle and ethereal, a dynamic event between the artist and the subject where anything can take on beauty due to the artist’s meditation. This decision to represent how the mist is concealing the pine forest also keys into a characteristic of Zen painting that can be compared to choices made in Western depictions of the natural world. In her book *Japanese Buddhist Art*, Felice Fischer discusses how in Zen Buddhism, nature and man are defined by the same reality, and this results in a sense of equality in all forms, leading to a distinct sense of naturalism in Japanese art (Fischer 1991). Whereas Western painting came to regularly depict the ideal, informed by the classical handling of beauty rationalized in terms of proportions and an organized hierarchy, Zen dictates that only by losing oneself in the vastness of nature can an enlightened state be achieved. This intense concentration on the realities of the physical world discourages the idealization of forms, as the reality of existence is a basic value in Zen Buddhism. (Juniper 2011)
Medieval Christianity

While in Eastern tradition illusionistic representations of the natural world had already been a long-standing custom, Western botanical tradition rose to popularity at the end of the Middle Ages. In his book, *The Idea of Wilderness: From Prehistory to the Age of Ecology*, Max Oelschlanger analyzes how the natural world has historically been framed in the human mind. In the Paleolithic era of plentiful food and resources, the conception of nature was generally that humans were a part of the cyclical natural world, with their role in the system intuited to be that of living in harmony with nature (Oelschlaeger 1991). With the start of agriculture in the Neolithic era, farmers attempted to dominate the wilderness and boundaries between the natural and the cultural were drawn for the first time (Oelschlaeger 1991). Late antiquity and the middle ages in the West were saturated with a sense anthropocentrism, that the natural world had been created by God for the sole purpose of the spiritual edification of man (White 1967).

Generally, though of course subject to exception, salvation of the soul was the ultimate goal of the medieval mind, with life on earth being transitory. According to Clarence Glacken, the dominant form of medieval Christianity was that man benefitted both himself and God in the improvement of an earthly home. As such, this understanding of the natural world served as an instrument of human dominion over nature, with the environment being designed and created for the benefit and cultivation of humans (Oosthoek 2016). While revelations of God’s presence were also thought by the medieval mind to be found in the natural world, a constant theme in medieval theology was the insistence that nature is not divine (Oelschlaeger 2016). At this time, paganism
stood as the enemy to medieval Christianity as “to revere wild nature was to the medieval mind a blatant heresy.” (Oelschlaeger 2016) The views of German philosopher and theologian Albert the Great (1193-1280) capture the dominant attitude towards nature at a time when human settlement was rapidly encroaching on the environment, that “God created nature to serve human needs,” and humans were performing God’s bidding by bending nature to cultivation.

In 1336, Francesco Petrarch climbed Mount Ventoux. Petrarch is considered by scholars to be the first proof of the proto-Romantic sense of awe with nature that came after the medieval era (Coates 2016). Petrarch spoke to admiring the view from Mount Ventoux, but parts of his written reflections reflect that renaissance conceptions of nature’s sublime dignity were still in the process of permeating Western thought in Petrarch’s time. Of his experience on Mount Ventoux, Petrarch spoke to St. Augustine’s Confessions, which constantly warned against confusing the “created” with the “creator” (Coates 2009). After reading a section of Confessions warning men from being seduced by scenery to detract from their focus on salvation, Petrarch wrote, “I closed the book, angry with myself that I should still be admiring earthly things who might long ago have learned… that nothing is wonderful but the soul. I gazed back, and the lofty summit of the mountain seemed to me scarcely a cubit high, compared with the sublime dignity of man.” (Coates 2009) While Petrarch still held the platonic view that the spiritual world was the object of a philosopher’s interest with the material world being inferior, his interest in classical texts display the shift in sensibilities towards nature at the end of the medieval times.
Renaissance Return to Naturalism

After the reintroduction of classical thinking into European conventions, artists in Italy started to make use of realistically rendered flowers and fruit to fill formal spaces. Examples of this push towards naturalism include lilies and irises along the meadows of the Ghent Altarpiece (1430) and thirty species of plants being depicted in Botticelli’s *Primavera* (Blunt 1951) Illuminating this shift towards naturalistic depictions of the environment with the end of the medieval times is German artist Albrecht Dürer. Born in 1471 in Nürnberg, Germany, Dürer was a deeply religious northern European artist, one of the first to immerse himself in the art of the Italian Renaissance. While Dürer may be best known for his striking and Christ-like self-portrait or his depictions of biblical scenes, he held a belief that the key to artistic success lay in the diligent and focused study of nature. This humanist desire to understand the workings of nature is evidenced by in his theoretical treatises, such as in *Four Books On Human Proportions*, where he repeatedly refers to the importance of such studies (Eichberger 2005). One example of the importance Dürer placed on the study of nature is his watercolor painting, *Das grosse Rasenstück*, or *Great Piece of Turf*, executed in 1503 (Figure 1.5).

This illusionistic portrayal of everyday plants and common weeds illuminates the shift in sensibilities that accompanied the Renaissance. Dürer held the belief that as an artist, he had been endowed with creative powers by God and as such it was his duty as an artist not to deviate far from God’s masterpiece of creation, nature (Eichberger 2005). His studies of nature stand as both attempts to understand the order of the natural world and to reflect the earth’s “God-given order.” This order in nature that Dürer was attempting to depict is reflected in the symphonic disorder of the roots emanating from
the weeds into the soil, organic life emerging from chaos. This piece’s perspective is also reflective of Dürer’s attempt to depict nature’s relationship and unity with God. The surreal downward reach of the roots into the soil portray the piece of turf as if it is positioned above the viewer’s eyes, ascending towards heaven. This piece is also of interest due to the plants that Dürer chose to depict. This is a humble piece of turf, overgrown with weeds, wildflowers, feathery fibers of cock’s foot, smooth meadow-grass in flower, grasses at various stages of ripening, and weightlessly swaying creeping bents (Blunt 1951). These were commonplace, unspectacular plants that had not previously been subjects of naturalistic depiction, and any symbolism within this depiction of nature is a highly personal reflection of the artist’s relationship with nature. While Dürer was a Catholic, he was also a humanist and very sympathetic towards the Reformation (Taiz 2017). The Reformation called for a personal relationship with God and this diligent study of everyday plants can be seen as an identification of God within the humblest patch of earth, the secular equivalent of a personal relationship with God being a personal relationship with nature (Taiz 2017). Not only is this a representation of nature that may have previously been considered unimportant in its cultural contexts, but this is also a highly individualized depiction of these certain plants. Instead of representing an ideal portrayal of a species of plants, Dürer focuses on minute detail and the individualization of each blade of grass. This focus gives his patch of meadow an individual character, perhaps another reflection of the belief of God’s order in every part of nature.

This exploration of how religious ideologies can work to shape attitudes towards the natural world is complicated, as human culture and perceptions towards nature are constantly shifting and changing, affected by every other aspect of culture. Even
conversely, the environment in which people live can work to shape their religious ideas. While this discourse highlights certain interpretations of aspects of various religious frameworks as expressed in depictions of nature, it is not meant to stand as a statement on those ideologies’ valuation or treatment of nature. Just as Genesis can and has been taken as a proclamation of man’s dominion over nature, the importance placed on all species of animals in the story of Noah’s ark could serve as a valuation of biodiversity and has been used as a charge to preserve it. While Daoist and Buddhist ideals dictate the valuation of nature, it doesn’t mean that all of those in cultures infused with these values have a greater respect towards the environment than those not. Agrarian and urban societies are bound to have the imperative to domesticate the environment and while spirituality affects thought, so do economics, politics, and other parts of human culture.

Just as spirituality can be analyzed as a framework through which depictions of nature are informed, religious values have vast and wide-reaching implications in all aspects of human society. When discussing the link between botany and empire, Patricia Fara (2003) states that the colonial mind frame around botanical studies stemmed from two sources: The Bible and Aristotle (Fara 2003) In the book of Genesis, Christians learned that God created human beings separately from plants and animals, giving humans the privilege and responsibility of looking after and using the earth. According to Aristotle’s Scala Naturae, the universe was arranged in a hierarchal chain of order with the European man at the top of the ladder. The combination of these two influences is why Fara says European explorers held a belief of superiority over foreign people and cultures they encountered.
Imperial Expansion

In manuscript tradition, where the primary function was to communicate the utility of certain plants, particular plants were represented through reproduced schematic icons which were recognizable to botanists and physicians (Farber 2000). In map-making tradition, plants were seen as signs to assist navigators in identifying their surroundings, with abstracted qualities exemplifying the exotic. By the end of the 1500s, European explorers of foreign lands needed ways to communicate their findings to a larger audience, whether it be patrons supporting the voyage or wealthy Europeans eager to visually and physically consume the discoveries of the voyages. Along with the rise in antiquity from the readings of classical manuscripts, scholars such as Paul Farber point to this as the period when naturalistic images became the medium for botanical communication (Farber 2000).

The boom of European expansion created conditions for artists in which they produced depictions of plants within a specifically colonial framework. Artists usually worked in tandem with botanists and other professionals to document and organize in European conventions the plants which they encountered in colonies throughout Asia, Australia, the Americas, and Africa. The dominant impulse in this time was to gain political, economic, and social power through these voyages, with the pictorial depictions produced during the voyages communicating the power of an empire and the economic prosperity of its new exploits. Supported by wealthy patrons, botanical artists worked to exemplify an imperial power while appealing to and satiating the everyday European’s desires to experience these places they had never seen before. While these artists were working under imperial motives and their work often represented a taste for the exotic
and a desire to colonize foreign lands, artists were also informed by personal sources without a necessarily imperial motive. Regional artistic conventions, religious frameworks, and botanical organization and identification traditions are examples of some of the influences on artists. As such, depictions of flora differ in convention and inclusion of certain elements, even when the artists were working within similar imperial frameworks.

**Fruits of the New World**

In 1621, the Dutch West India Company established Dutch Brazil with Count Johan Mauritz as the governor (Bleichmar 2017). Naturalists and artists were hired to catalogue the region, with the images produced constituting the first European image to be produced *in situ* in the region. The two leading artists were Frans Post and Albert Eckhout. While Post’s expansive landscapes of Dutch territories do not fit within the scope of this discourse, his representations of nature are derived from the roots of the project itself, appropriation and control of both land for economic resources and flora for scientific advancement. Albert Eckhout, the other leading artist at the time, produced ethnographic portraits of Brazilian inhabitants and 12 still lives showcasing South American flora. While the portraits are not of botanical subjects, the figures are embedded within the Brazilian landscape and surrounded with the plants of the region. His set of botanical still-life representations are dynamic and highly life-like, reminiscent of 17th century Dutch still-life painting. They are set in simple arrangements resting on dull slabs, “effectively putting nature on a pedestal,” according to scholar Daniela Bleichmar (Bleichmar 2017). The groupings are pushed to the foreground with scale and
vantage point being used to communicate the object’s importance. They are set outside, as if perched on a windowsill looking over a Brazilian landscape, appealing to the intended European audience’s appetite for the exotic. In *Fruits, Pineapple, and Melon, etc.* (1640-1650) a variety of ‘New World’ fruits are spilling over the ledge, piled on top of one another (Figure 2.1). Passion fruit and passionflower are depicted on the vine, with pineapple, peppers, guava, and watermelon sliced open, revealed to the audience. In *Palm Inflorescence and Basket of Spices* (1640-1650), the basket is tilted forward to show a bounty of nuts, peppers, and spices (Figure 2.2). These compositions communicate exotic rarity and abundance and are composed in order to appeal to Northern European audiences (Bleichmar 2017).

**European Exoticism**

After the beginnings of European expansion in the 16th century onward, a culture of curiosity collections exploded back in Europe as visual manifestations of imperial exploits. These collections featured European items juxtaposed with specimens from other parts of the world. The wealth generated to procure the collection was for the most part generated through colonial trade, and the cabinets served to display a patron’s power to assemble rare elements from across the world. These collections of specimens, objects, and natural history studies of regions inaccessible to everyday Europeans were prized for their rarity and suggestion of a faraway place. They also worked to affirm the power and ability of those who could produce the collections. Representation of plants within this framework then can be analyzed as expressing views and desires about the exotic at the time. One artist working who notably spent part of her artistic career working abroad was
Maria Sibylla Merian. The European taste for exotica, perpetrated by global expansion and appropriation of places, people, and things, created an environment in which Merian depicted the natural world in ways which reflected European desires. Merian was the first naturalist to document the processes of metamorphosis during a time when it was relatively unknown. Some scholars attribute this to her religious background, an interesting thread to be followed in relation to the previous discussions. Whether stemming from religious motivations or solely from her childhood interests, Merian’s insistence on the cyclic representation points to personal sources of information which set her apart from other botanical artists working in colonizing contexts.

In 1699, the Dutch West India Company shipped nearly four thousand tons of raw sugar from Suriname to Holland, the same year that Merian and her daughter Dorothea boarded the Peace in Amsterdam to sail to Suriname. While the cultivation of sugarcane provided the means for Merian to travel, her writings and depictions of the region appear to be devoid of concern for Dutch interests in the territory, as can usually be seen in artists working within imperial frameworks. The cultivation of sugarcane, its economic and cultural impact, on 17th century Europe played a critical role in the production and reception of Merian’s work, yet there is not a single depiction of sugarcane in her work in Suriname, the colony’s most important and prevalent commodity at the time. That said, the circumstances and reception of her work speak to larger imperial forces and their effect on the depiction of plants. As Hannah Blumenthal puts it in her work on Merian, her “creations are worlds unto themselves, with fruits to be consumed, plants to be grown, insects to be observed, and customs to be observed.” (Blumenthal 2006)
European audience, enticed by the exotica and wealth promised by sugar cane, wanted to claim these foreign regions in both a figurative and literal sense.

Merian called the pineapple, “the noblest of all the edible fruits.” This is one of the few instances in *Metamorphosis insectorum Surinamensium*, 1705, in which the same plant species is shown more than once, and the pineapple is the only plant shown twice in succession. The first page to be opened in the book, the “noble” pineapple sets a tone of foreign luxury and exotic rarity for its European consumers. In England the pineapple had already been prized as a rarity, with the first of its kind being grown as a gift for King Charles II in 1642 (Blumenthal 2006). With the rest of the book undeniably about insects, the text accompanying the pineapples is chiefly concerned with the fruit, not the insects (Merian 1705). The first depiction of a pineapple is spiky and provocative (Figure 2.3). Each leaf of the plant reaches out past the border, suggesting a plant that struggles against containment. It is surrounded by cockroaches, four of various sizes along the leaves and one dashing dynamically through the air down toward the fruit. The spiky fruit emerges with red leaves at its base, contrasting the green of the stalk and fruit to give the piece optical energy. In the second depiction of pineapple, the fruit is placed on a central axis, being flocked by various insects, and only the base of the stalk reaches past the border of the page (Figure 2.4). Instead of being surrounded by cockroaches, this presentation of the pineapple features caterpillars and butterflies. The fruit is symmetrical and luscious, with the rich yellow of the skin reflected in the wings of the butterflies. The leaves are contained within the framework of the plant, and while the fruit is textured it does not appear unpleasant to the touch as the previous depiction. The movement of the insects
gives the pieces dynamism along with the use of color theory in having red insects on contrasting green leaves, giving a sense of movement for even the static insects.

Placing the depictions immediately after one another, it is apparent that the metamorphosis of the fruit is an important choice for Merian. The first unripe pineapple, dangerous in its physicality and enticing in its rarity, transforms into an equally beautiful but attractive pineapple that is ready for consumption. The sense of smell of the ripened fruit can even be analyzed in their comparison, as the riper fruit has much more dynamism surrounding it, as if displaying the waft of its scent. The depictions of pineapples communicate sense experience to the consumer audience on the European home front, and yet these prints also transcended the visual sense as they themselves stood for artefacts for consumption (Baumhammer and Kennedy 2017). The luxurious pineapple, relatively new to Merian’s European audience at the time, represented the seductions and riches of the regions being exploited by the empire. While both the colonies across the Atlantic and this fruit were largely inaccessible to Europe, Merian’s presentation of the pineapple provided a means of overcoming that distance.

While Merian’s works represent a European taste for consuming foreign entities, they also stand apart from conventional imperial botanical art. Her inclusion of related species and their lifecycles can be attributed to a number of influences in the painter’s life, whether it be a lifelong interest in insects or being raised by her stepfather, a renowned Dutch flower painter, Jacob Marell. Merian’s religious interests and ties were well documented throughout her life. Merian exhibited a creationist approach to natural history, which lay in the assumption that evidence of the existence of God is found in the natural order and beauty of the world. In the preface to her caterpillar book, Merian
charges her readers with the following: “Do not seek herein my glory / but that of God / to praise / Him / as Creator of even these small and most humble worms; / for they spring not from themselves / but from God.”(Merian 1677) With this statement, Merian rejects the artist’s ability to imitate the perfect beauty of nature and alludes to her paintings as a medium for reflection of God’s creations, and to present nature’s splendor to her readers. This appreciation for all aspects of nature as evidence of God’s workings can be seen in her depiction of the Metamorphosis of a Butterfly, from *Metamorphosis Insectorium Surinamensium* plate XX (Figure 2.5). While the beautiful colors and luminosity of the wings of the butterflies and leaves of the plant allude to Merian’s vision of God evidenced in an idealized natural world, her depictions of the leaves also include holes where the leaves had been chewed through by insects. This inclusion of the life and decaying processes which take place in the natural world, rather than a pure idealization of the plant, may be evidence of her creationist belief. Just as she charges her readers to praise God, “as Creator of even these small and most humble worms,” Merian praises the workings of the organisms which technically degraded the leaves as evidence of God’s wisdom in a harmonious world (Merian 1677).

Maria Sibylla Merian stands apart from other botanical artists of her time for a variety of reasons. She included indigenous knowledge in her writings, even noting the seeds of a peacock flower which were used as abortifacient by female slaves. In her account on why these women would use the seeds, Merian condemned the mistreatment and abuse of slaves. In her paintings, her inclusion of related species also diverges from conventional depictions of the natural world by artists involved in imperial frameworks.
Linnaean Convention

In the wake of the widespread colonization of distant regions by European powers, a revolution occurred in the science of identifying and naming flora, due to the effort of scientist Carl Linnaeus. Beginning in 1735, Linnaeus proposed and propagated an artificial system of classifying plants which was salient in the organization of huge quantities of imported species to Europe during the 18th century. While the system was not colonial in origin, the characteristics which Linnaeus pointed to as most important caused the system to become an important instrument in colonial botany. Linnaeus is an interesting character to analyze in this discourse as many scholars have pointed to his religious framework as informing his naming and ordering of plants, working alongside colonial and scientific motives. According to Paul Lawrence Farber in his book *Finding Order in Nature*, Linnaeus linked the study of nature with the worship of God with nature as a harmonious system (Farber 2000). For Linnaean classification, the ordering and naming of the products of Creation had the potential to reflect that inherent harmony in God’s nature. While this interpretation of spirituality in the work of Linnaeus is less evident than the effect of colonial discourse, there are connections between the two influences. For example, local names of plants were abandoned in this system, as they possessed no scientific value according to Linnaeus. Additionally, according to Linnaeus, these names did not reflect the deeper religious order of God’s Creation that his system attempted to reflect (Farber 2000). He was compared by many, both in neutral and critical lights, to Adam, the first to name God’s creatures (Harrison 2009). While Linnaeus himself never explicitly compared himself to Adam, his writings reflect his thoughts on
the spiritual importance of his work and himself. For example, he says “God has suffered him to see more of his creative work than any mortal before him.” (Farber 2000)

In 1735 Carl Linnaeus published *System Naturae*, and by 1736 the basic ideas of binomial nomenclature appear in his manuscripts. He introduced the Linnaean taxonomic system, sometimes referred to as a sexual system, based on observations of flowering structures (Bleichmar 2012). This development of a universal botanical code enabled all of nature to be represented within the same system, explicitly benefitting the expansion of empire. While a natural system, one based off affinities observed in nature, was difficult to adhere to when the species were being taken out of their natural environments as they were during European expansion and collecting culture, an artificial system relied most heavily on characteristics that could be observed in specimens or illustrations (Dickenson 1998). Characteristics of size, resemblance to other genera, locality, time of development, and others were banned in this convention. This “taxonomic gaze” came to constitute that each representative of a class, no matter the particularities, may stand as a representation of all other members of that same class (Schiebinger and Swan 2016). As such, whether intended or not, the Linnaean system of classification itself worked as a tool of colonization and removal of plants from their environments for economic gain. Linnaeus and his followers advertised a supposedly easy system to identify plants, one which had the ability to bring amateurs into the world of botany. This system gained immediate popularity due to the fact that it could be used anywhere in combination with rising interest of European naturalists of the exotic, and it was soon extensively reproduced in practically every botanical textbook in Europe at the time (Bleichmar 2012).
As a popular artist and naturalist of his time, George Dionysus Ehret worked to popularize Linnaean methods in his depiction of plants. In 1735, Ehret was first hired by Linnaeus to introduce his taxonomic system with an emphasis on visual epistemology in *Systema Naturae* (Bleichmar 2012). This diagrammatic presents the system of identification as simple and organized (Figure 2.6). The methodology of classification is made invisible, presenting the idea that it only required visual training by internalizing the theory within the eyes of the naturalist.

The link between Linnaean classification and the expansion of an Empire can be seen in the 1737 botanical literature *Hortus Cliffortianus* (Figure 2.7; Blunt 1951). Financed by George Clifford, this work was a collaboration between Linnaeus and G.D. Ehret to depict the foreign plants in Clifford’s garden. The frontispiece of this book, by Netherlandish engraver Jan Wandelaar, depicts Europe imagined as a botanical monarch, with tributes from other regions scattered at her feet, explicitly connecting empire with the collection and depiction of botanical subjects (Dickenson 1998).

In 1768 the *Endeavor* voyage departed for Tahiti and Australia, carrying Sir Joseph Banks, Captain Cook, botanist Daniel Solander, and artist Sydney Parkinson (Fara 2003). The pieces produced during this voyage are of particular interest because while they adhere to Linnaean classification, additional influences in Parkinson’s work resist the Linnaean erasure of place and time on plant life. In her book on the connections between botanical illustration and the British empire, Beth Fowkes Tobin speaks to the universalizing impulse which affected Banks (Tobin 1996). As a civic humanist, Banks was, “bent on erasing the particular, and on relegating the specific and local to the realm of fashion and custom.” (Tobin 1996) This meant that individuality and specificity were
suppressed in search of general properties, insisting on the universally applicable truth outside of time, place, or culture. To invoke the universal was to impose a European order on the world, as insistence on one legitimate order best understood by Europeans worked to erase the power of the local, taking power away from non-Europeans to make meanings. As a high-status member of the voyage, Banks’ ways of knowing and use of Linnaean botany greatly influenced Parkinson as an artist, but he does not completely adhere to the Linnaean system of ideal types and instead alludes to spatial and temporal dimensions in his pieces. Scholars have pointed to this inclusion of elements of time as a reference to Dutch still-life conventions of the 17th century. These pieces celebrated everyday objects with details rendered to give a palpable presence of a particular object. They also commonly alluded to the passage of time, according to Ingvar Bergstrom in order to make the viewer, “contemplate the brevity of life, the frailty of man, and the vanity of all worldly things.” (Tobin 1996) The inclusion of temporal elements can be analyzed as an influence of Netherlandish idioms, but Parkinson’s work was rooted in the imperial context in which he worked.

The isolation of his subjects on blank pages in Linnaean conventions work to communicate the universalizing motives invoked in conventional Linnaean discourse. Pieces such as his depiction of *Banksia intergrifolia*, a species of tree that grows along the east coast of Australia, adhere more customarily to imperial depictions (Figure 2.8). In this piece, Parkinson does not represent the root systems, relational systems, or ecosystem as a whole of the plant. In this convention, the subject is represented as independent of neighboring species or climatic conditions. The soil in which it is grounded isn’t represented, nor is the geographical climate in which it grows. This
subject is presented as something that can be isolated from its place of origin and transposed into European soil. This depiction can stand as an ideal representative of a species in the Linnaean context, while not actually depicting the individualities of the specific subject.

**Dutch Still Life Traditions**

For example, Plate 275 of *Joseph Banks’ Florilegium, Xylomelum priform* (Gaertner), an engraving by Gabriel Smith after Parkinson’s original, is rendered with inclusions of elements of time (Figure 2.9). A branch beginning on the left side of the composition splits into two smaller branches, each arching down and right or up and left. Each branch has a cluster of long leaves which radiate from the cluster’s center, and the twist/curl of the leaves suggest a dying specimen instead of a living plant. Two seed pods are represented at various developmental stages. The upper pod is smaller in size, less developed, and juts out horizontally from the branch. The lower one is larger and hangs down with the gravity of the pod, and it is slightly split to expose the nut inside. The positioning of the lower pod suggests that it’s about to drop. By constructing a time continuum through the two different pod stages, Parkinson’s piece suggests a plant’s lifecycle; implies a past and a future. While the parts of the plant considered most important to Linnaeus are what is represented here, the inclusion of time works to resist imperial erasure of cultural specificity.

**Darwinian Conventions**
Like Carl Linnaeus, the work of Charles Darwin and the popularization of his theories had a profound effect on the depictions of plants by artists who championed his cause. Darwin published his theory of evolution in late 1859, where the image of nature as a harmonious balance was replaced by one of a battleground for survival (Chase and Hitchcock 1949). Where adaptations of plants had once stood for evidence of divine wisdom, in Darwinian thought, these adaptations were results of a blind process. Geographical patterns of botanical distribution were presented by Darwin as consequences of historical operations where they previously represented the ideas of the Creator. Darwin’s theories were most widely accepted in Germany, though they were initially met with controversy. On the championing of Darwinian thought, American botanist William Gilson Garlow said that to hold “that the variations and adaptations of plants and animals were not for the benefit of man, but for the benefit of the plants and animals themselves, was a dreadful heresy!” (Chase and Hitchcock 1949) Darwin’s theories were accepted over time and his studies of heredity, variation, and multiplication of organisms provided the bases from which much of the modern ecological theory is derived.

One artist who presented a Darwinian perspective of the natural world was English painter Marianne North. She spent the first part of her life as a travel companion to her father, a man of high political power and also an amateur botanist and naturalist. After the death of her father, North relied on the social and political connections she had made during their travels in order to voyage on her own. There are multiple links to Darwinian theory throughout North’s life, the most prominent being that the primary patron throughout her life was Joseph Hooker. Hooker was one of Darwin’s earliest and
closet allies. He did much to promote Darwin’s writings, and Kew Gardens became one of Darwin’s key institutional supports under Hooker’s direction.

Most scholarly literature on North today revolves around these ideas of imperial expansion with an emphasis on postcolonial readings of her work. Recently, scholars have begun to explore the influence of North’s other relationships and their effect on her representation of plant life, specifically her interest in and championing of Darwinian theory. Scholars such as Phillip Kerrigan suggest that North’s departure from nineteenth century conventions of botanical representation was most primarily due to her desire to depict the environment in which a plant grows (Kerrigan 2010). North’s connection to Darwin can be supposed through either Hooker’s patronage or her father’s relationship with Darwin’s cousin, Francis Galton. Wherever she came to learn of his theories, North spoke highly of Darwin in her own writings and referenced him often. While North’s writings never explicitly mention natural selection or its mechanisms, she frequently expressed admiration of the adaptations of certain species to particular environments in order to further their survival (Kerrigan 2010). Her paintings call to attention to the character adaptations that plants undergo in the Darwinian struggle for survival. While the standard conventions of botanical depiction at the time privileged the taxonomic gaze with the Linnaean erasure of environment and relative species, North’s work speaks to a perspective in which a specific plant is shaped by its particular environment. Kerrigan goes as far as to suggest that the individuality of her style contributed to her work’s widespread reception, as it would not be in competition with existing professional illustrators (Kerrigan 2010). Evolutionary ideas and debates were on the forefront of natural history and academic discourse during the production of her work, with Darwin’s
Descent of Man being published in 1871, the same year as North’s first independent voyage.

North illustrated botanical adaptations as both neutral or non-adversarial to other species and a more sinister characteristic of adaptations. Within her representations of neutral adaptations North tended to depict epiphytic plants and those with aerial and supporting root structures. One such example is her depiction of downward reaching aerial roots in Cluster of Air-roots of a Dragon Tree, Tenerife, 1875 (Figure 3.1). The trunk of the tree is not fully represented, nor are the leaves or flowers as they would be in Linnaean convention. Instead, the focus is primarily on the tree’s root structure which would have been excluded within standard convention. Isolation of this tree from its roots would have made it impossible for North to communicate the adaptive strategies being undertaken by the plant.

The second category into which many of North’s depictions of character adaptations fall is that of the more sinister kind, adaptations which further a plant’s chances at survival at the direct expense of other organisms. These depictions often feature conflict and competition, another pillar of Darwinian theory. Of those characteristics deemed sinister by North, she condemned strangler plants the most as ‘murderers’ in her writings (North 1893). In Poison Tree Strangled by a Fig, Queensland, 1881, North depicts the upward and circular growth adaptations of the fig plant (Figure 3.2). This phenomenon was described by Darwin as the development of a climbing habit through plants twining their stems around a support. Considering her written condemnation of these particular plant adaptations, one would consider her artistic depictions of these plants to betray the sense of strangulation which North speaks to. The
fig’s roots almost completely cover the trunk of the poisonous tree and move upwards towards the overstory in an overwhelming manner, but the designation of the tree being strangled as poisonous presents a worthy opponent for the strangler fig, detracting from the plant’s perceived menace.

In her later depiction of the same strangler plant in Brazil, North depicts the fig as seemingly posing minimal threat to the ecosystem of the tree on which it hangs. The actual palm appears abundant and healthy, and the characteristic hanging oriole nests are conveniently supported by the twines of the strangler fig. The atmosphere behind the tree is cloudless and bright, detracting even further from the sense of malice which could be designated to this interaction. While this may seem to take away from a sense of Darwinian influence on North, it could be evidence as another level of his theoretical influence on her work. In *Origin of Species*, Darwin spoke of the difficulty of recognizing scenes of death in the face of one’s personal impression of nature, the difficulty of constantly bearing in mind the competition and struggle for life if one’s personal impression is far removed from that struggle. On this topic he wrote, “We behold the face of nature bright with gladness, we often see superabundance of food; we do not see, or we forget that the birds which are idly singing round us mostly live on insects or seeds, and thus are constantly destroying life.” (Darwin 1859) This sense, the Darwinian notion that the beauty of a scene can work to hide the competition within the scene is exemplified by North in *Scotchman Hugging a Creole* (1872-3) (Figure 3.3). The title of this piece itself works to confirm this notion. By designating the strangler fig as ‘hugging’ the palm tree, North again hides the supposed menace of the plant behind a
beautiful scene, with her own narration turning away from the struggle for life in favor of a personal impression of a beautiful scene in nature.

North’s writings and depictions also often featured parasitic plants, though they were not condemned in the same way that strangler plants were. This was perhaps due to the less obvious nature of the disadvantage brought onto their neighbor in comparison with the strangulation from the figs. A good example of this is her depiction of *A Chilean Cactus in flower and its leafless Parasite in fruit* (Figure 3.4). This painting features a cactus growing on the side of a mountain in Chile. The parasite only grows on one side of the cactus, which itself flowers on the opposite side. This depiction of a parasitic plant presents a degree of accommodation between two species, not purely a violent struggle. The cactus is portrayed with a mountainous landscape in the background, alluding to its native climate in the high-altitude Andes. The depiction of relational species of plants and inclusion of environmental and climatic conditions defied the conventions of Western botanical depiction during her time and suggest how influences in North’s life informed her depiction of the natural world.

**German Romantic Movement**

Born in Germany four years after North in 1834, Ernst Haeckel was also producing ideas about and representations of the natural world at the height of Darwinian conceptions. Of the influences on Haeckel, many scholars have focused primarily on the influence of the German Romantic movement. Like most Germans of his time, Haeckel venerated J.W. Goethe, claiming the writer as one of his patron saints and quoting his work many times throughout his life. Goethe’s conceptions of nature were informed by
Baruch Spinoza’s conception of the unity of God and Nature (Paget and Thate 2016). According to Goethe, reality was to be found in nature and both scientists and artists needed to understand the common archetypes in nature, either to understand organisms or depict them aesthetically (Richards 2014). In 1860, Haeckel read the German translation of Charles Darwin’s *Origin of Species* (Gregorio 2011). He soon became one of Darwinian theory’s biggest advocates, incorporating elements of Romantic thought into evolutionary theories and developing them later in his life into a philosophic creed which he called Monism. The unity among Goethe’s archetype, now understood through Darwinian principles as the derived structure of a species, was no longer traced back to a metaphysical idea but to a common ancestor. Haeckel’s assertion of origination of the natural world not from God’s creation but from a progress leading from least to most complex is reflected in the way that his works reveal the geometric structures of nature. In 1904, Haeckel published *Art Forms in Nature*, a body of work which captures the effect of his cultural influences on the aesthetic qualities of his productions.

In his depiction of a family of orchids, *Orchidaea*, Haeckel composes the piece in a manner which draws attention to the symmetry and complex composition of the plants, reflecting the progressive evolution from which he believed species origination stemmed (Figure 3.5). This composition features various species from within the family. Recalling Goethe’s archetype, Haeckel may have included the large number of species in order to depict the underlying similarities between the varying species of flowers. While the color, size, and orientation of each flower differ, the underlying structure of each of the orchids resembles one another. This elemental similarity between the different species of orchids is heightened by the balance and symmetry of the overall composition. In this piece,
Haeckel represents the progress of divergent evolution through similar archetypes among differing species, uniting the orchids with others of its kind and ultimately their Darwinian common ancestor.

Haeckel aimed to depict how the incessant struggle for life within nature he learned from Darwin was producing an endless variety of forms and beauty, exemplified by his depiction of pitcher plants, *Nepenthaceae* (Figure 3.6). Characteristic in his work, these plants are also arranged in an overall symmetric composition. Haeckel captures the appeal of the plants by depicting the characteristic light-reddish coloration with darker spots, an adaptation which causes the leaf to look like a flower to prey (Haeckel 1899). In this piece, Haeckel also calls attention to another evolutionary adaptation within these carnivorous plants, pitfall traps. These modified leaves contain a deep cavity of digestive enzymes waiting to break down any prey that becomes trapped. Haeckel captures the mechanism of these adaptations, with the three central pitchers all large and seemingly pulled down by gravity from their bases. Haeckel also carefully depicts the minute hairs which both carry the attracting nectar and trap prey. This characteristic of the plant evolved as a mechanism in the struggle for survival, and Haeckel’s interest in it reflects his interest in the production of an “aesthetic of nature,” how this struggle within nature creates beautiful and interesting forms.

The final piece within *Art Forms in Nature* of specific interest to this thesis is Haeckel’s mosses, *Muscinae* (Figure 3.7). This piece presents a variety of different plant species including the subject, mosses, but also many other neighboring species of plants. Haeckel coined the term “oecologie,” which was a new science of the relations of an organism to its environment (Potts 1976). This painting, where the moss is not the sole
focus reflects his views on the importance of an organism’s relative relationships as well as the fight for growth that the mosses face when in a bank of endless other species. In the poetic final paragraph of *Origin of Species*, Darwin describes an “entangled bank” in reference to how all life forms are connected and bound to one another, guided by natural laws (Darwin 1859). This piece seems especially reflective of these Darwinian ideas, with a huge variety of different species of plants layered on top of one another. Warmer flowers emerge from the tops of cooler green leaves, using color theory to depict a plant’s fight to reach light in dense foliage. Just as Darwin described a scene of the environment, Haeckel uses this depiction of mosses and relative species in order to, “reflect that these elaborately constructed forms, so different from each other, and dependent on each other in so complex a manner, have all been produced by laws acting around us.” (Darwin 1859)

Haeckel and North produced botanical depictions during a time of scientific revolution. Darwinian theory was widely debated and studied during their lifetimes, and as champions of the theory their works reflect concepts within evolutionary theory. Transitioning into the 20th century, some botanical artists began working within frameworks of environmental conservation as they bore witness to the degradation of the environments they were observing. Deforestation for cattle ranching and logging, rising sea levels due to climate change, human encroachment and destruction of the environment, and the rapid loss of biodiversity across the globe began to hold stake in the thought processes of artists depicting the natural world.

**Conservation**
Margaret Mee moved from England to São Paolo with the man who would become her husband at the age of 43 to care for her ailing sister Catherine, where she would go on to organize fifteen expeditions into the Amazon, an area which was being rapidly degraded during the time she spent there. In 1957, five years after her arrival to Brazil, Mee took her first expedition into the Amazon Basin. Her second expedition into the jungle took place in 1963, with the other expeditions following closely after one another (Tomasi 1997). Mee presents an interesting analysis as during the time of her work in Brazil, policy regarding the Amazon and its conservation were rapidly changing to satisfy consumer desires. Her early writings speak to her concern with rubber prospectors and their treatment of the environment, speaking to excessive use of the insecticide DDT and the “sickening smell of crude rubber that lingered throughout” (Bruce 2018). The development of the Trans-Amazonian highway beginning in the 70s and deforestation practices concerning logging, mining, and cattle ranching were degrading the natural world before Mee’s eyes. Her early works adhered to the previously set conventions of botanical painting, with the Linnaean ideal of a singular plant against a blank background. By the end of her career, Mee’s pieces generally include dense and varied tropical backgrounds, emphasizing the plant’s dependence on its local environment. Her botanical paintings speak to her desire to conserve and protect the plethora of species within the Amazon that she so loved to depict. On this topic Mee said, “We must be hopeful. Every biologist knows what is happening is a disaster. And there are many people in Brazil trying to do something. Somehow, they must find the political will to fight it. And we must help them. The most important thing my work could do would be to contribute to this struggle” (Tomasi 1997). She published two books during
her lifetime, *Flowers of the Brazilian Forests* in 1968 and *Flowers of the Amazon* in 1980.

Mee’s painting of the epiphytic orchard, *Cattleya violacea*, 1981, communicates her contribution to the fight in Amazonian ecological conservation (Figure 4.1). The delicate orchids are set against the trunk of the tree on which they comensally grow. Behind the trunk in focus are other tree forms in the distance. A warm glow emerges near the top of the page, suggesting sunlight escaping through a canopy. Not only does this depiction speak to the nature of the flower, the relative relationships it needs in order to survive, but it also starkly contrasts previously discussed conventions of botanical depiction. Replacing the blank background with a dense scene of various species, this painting makes it clear that the whole system is necessary for the beautiful flower to bloom, reflecting Mee’s promotion of conservation of the Amazonian jungle. Mee achieved a similar effect in another painting of an epiphytic flower, *Gustavia pulchra flowering in the Rio Negro forest in Amazonas*, completed in 1979 (Figure 4.2). This piece shows the flowers growing upon a tree, with many other species of plants and a pollinator in the form of a hummingbird. The subject of the painting, the white flowers illuminated in the middle of the page, are depicted as fragments of a larger system. Instead of being isolated from their environment, they are dependent on it; one part of the whole. Her inclusion of interrelated species and symbiotic relationships within the background draws the viewers’ attention to the forest itself, not just the inflorescence of a certain flower. She visually connects the flowering epiphyte with all the relationships occurring behind it; its beauty made inseparable from the biodiversity and health of the forest in which it grows.
The preface to her 1968 publication *Flowers of the Brazilian Forests* was written by Brazilian landscape architect Burle Marx. In this, Marx expressed his admiration for Mee as an artist “who seeks to portray the intricate beauty of the many plants which have so far passed unnoticed in a world where greed and ambition ruthlessly destroy our wonderful heritage.” (Tomasi 1997) During her time observing and working in the Amazonian jungle, Mee was confronted with its rapid destruction for cattle, logging, mining, and other economic gains at the expense of the natural world. She chose to draw attention to the dependence of certain plants on their ecosystem by recontextualizing her subjects with the relationships that allowed them to flourish. Whether epiphytes like the flowers previously mentioned or her depiction of vines in pieces such as *Philodendron Rio Negro Amazonas*, Mee’s subjects rely structurally on other plants (Figure 4.3). By the end of her life Mee had been granted honorary Brazilian citizenship and was awarded the Order of the Southern Cross in Brazil in 1979 (Bruce 2018). Perhaps most indicative of her public reputation in Brazil was the 1994 Rio Carnival, which featured 3,000 dancers parading to a Margaret Mee theme (Bruce 2018).

Mee does not stand alone as an artist who bears witness to the destruction of the natural world around her. Just as she saw the Amazon jungle exploited for logging, cattle ranching, and transportation in the 70s and 80s, contemporary artists are observing the degradation of their own environments. Deforestation continues, as does climate change, air and water pollution, loss of biodiversity, and harmful practices of waste disposal at alarmingly high rates. Through the use of naturalistic depiction, the following artists communicate valuations and environmental concerns through their paintings of the natural world.
Contemporary Artists

American artist Alexis Rockman creates large painting installations which confront viewers with possible and probable futures for our natural world. Working with biologists and botanists, Rockman uses naturalistic depictions of other-worldly flora and fauna to communicate his cause. He includes keys for each piece so viewers can investigate the different organisms within his paintings. His series *American Icons* presents viewers with notable landmarks in ruin. In an interview, Rockman spoke of choosing the title as a reference to Americans’, “long tradition of entitlement in terms of natural resources.” (Weart 2005) One piece in this series, *Manifest Destiny* (2004), reveals Brooklyn three thousand years in the future, overtaken by rising sea-levels in the face of climate change (Figure 5.1). The piece was commissioned by the Brooklyn Museum.

On the right side of the composition, Rockman portrays the Brooklyn Bridge in ruins. Another bridge on the left side balances out the composition, with this one curved and futuristic in its use of suspension. These remnants of construction are the only evidence of humans within the composition, while it is filled with diverse flora and fauna. Aquatic creatures fill the lower portion of the composition, submerged in water with the construction remnants. Above the water line, many different kinds of birds transverse the page and abundant plant life is shown growing from the remains of the Brooklyn Bridge. Rockman consulted with biologists to discern looming threats to our ecosystems. The rusty stain of the water would be a result of decayed plant matter and is filled with
bioengineered organisms and reasonable predictions for the future of earth’s flora and fauna (Weart 2005).

Within another series of Rockman’s, The Great Lakes Cycle, he also addresses these global issues of climate change and urban expansion. Through visits to some of the Great Lakes and consultation with marine biologist Jill Leonard, Rockman attempted to capture the ecological and physical changes to the lakes over the centuries. His piece Cascade, completed in 2015, focuses on human exploitation of a region for its natural resources (Figure 5.2; Woon 2018). The left side of the composition shows wildlife. There are reindeer moving through the water with a school of fish below them. Rockman has included a variety of interactions and species in the composition, with a wild dog hunting and a beaver building a dam in the faint background. The right side of the composition starkly contrasts the left, with a buoy line separating the two. Above the water line, the eastern white pines which fill the back of the composition are being torn down with bulldozers, smoke cascading into the sky from the construction. An iron ore, a coal burning power plant, and a large commercial fishing boat fill the background. Beneath the water, Rockman includes three boats all lost between 1875 and 1902. In this piece, Rockman explicitly portrays the effect and visualization of human encroachment on the environment. By not adhering to a linear timeline, Rockman is able to better exemplify the outcome of exploitation of our natural resources and presents the viewers with a concrete vision of what may come should our patterns not change.

Rockman’s 2016 painting, Spheres of Influence, examines patterns of migration and their impact on the Great Lakes (Figure 5.3). In this, Rockman uses recognizable forms such as the plane underwater and the boat in the horizon. A DC-4, the Northwest
Orient plane which crashed into Lake Michigan in 1950 is submerged below the waterline, with the H.M.S. Queen Charlotte from the War of 1812 above the water on the horizon. The patterns of migration are enforced by the birds and insects moving across the composition. Rockman portrays both marine and airborne pollutants, as a dark grey cloud illuminated by a fiery glow emerges from the boats. Within the water, a sickly neon green color pours out from beneath the boats. Rockman even uses dramatic changes in scale to depict viral threats to the environment. In the right side of the composition within the water, Rockman uses diagrammatic depictions of yellow rods to allude to diseases. With his pieces, Rockman predicts the end of modern civilization, but not that of all life. Filled with organic growth, his paintings demonstrate the dangerous effects of human encroachment, but also the adaptive ability of nature; that flora and fauna will continue even if humans do not. It is an appeal to viewers to change the conditions which would lead to our civilization’s collapse through depiction of the degradation of our environment.

Rockman uses allusions to human encroachment on the natural world without representing human figures. While there are no people within his composition, the constructions and man-made items throughout evoke the human presence in and effect on the environment. Another artist who evokes a relationship between humans and nature without representing figures is British painter George Shaw. Shaw’s 2016 exhibition in the National Gallery in London, *My Back to Nature*, presents the forest as a place of human transgression. Shaw draws inspiration from historical works within the National Gallery which depict dark forests imbued with anthropocentric symbolism; Titian’s *The Death of Actaeon*, and Bellini’s *The Assassination of Saint Peter Martyr* (Frankel
Inspirited by historical works in which the woods are presented as a place of darkness and fear, Shaw’s paintings evoke the intrusion of human activity in the woods without representing a figure.

Shaw’s piece *The Tree of Whatever* (2015-2016) alludes to the debasement of the environment through the act of littering (Figure 5.4). This painting features the base of a tree filled to the brim with discarded cans, spilling out from the interior of the trunk and onto the ground towards the viewer. Shaw carefully renders the intricate root system of the tree emerging from the soil, the detailed texture of the bark with crevices and gnarls, and the soft moss growing up its base. While the subject of the piece is the tree, the inclusion of such a human-specific element evokes a lingering threat to the environment, an interaction between humans and nature that the audience just missed. Certain colors in the cans are recognizable as popular brands, but in general they are lacking the detail and variation in value which Shaw confers upon to the trunks. This lack of idealization and value change within the cans evokes the mass production creation process in which they were produced, contrasted so starkly with the individuality Shaw has given to the tree.

The analysis of these various artists and the cultural lenses through which they interpret the natural world has led to deeper levels of understanding and analysis of depictions of botanical subjects. The ways an artist considers and values the natural world they are studying has impacts on the production and reading of their works. When analyzing a botanical subject in isolation, the cultural context behind artists has aesthetic implications. Certain spiritual frameworks in Chinese and Japanese botanical art dictate that isolation is an aesthetic representation of harmony. The Linnaean convention of isolating a botanical subject, originally a means of simplifying scientific identification,
was appropriated through colonial motives to become related to ideals of transplantation and imperial erasure of cultural specificity and ecological integrity. The impulses which drive an artist to undertake a study of the natural world can be reflected in their work, whether that study of nature be for spiritual elevation, scientific curiosity, gaining economic or social power, or any other motive. The intended audience of the work, and how the artist wants to affect his or her viewers, informs aesthetic choices as well. Whether a European audience anxious to consume foreign experiences, or a scientific community in revolution, the effect on viewers which the artist is attempting to achieve can dictate compositional, stylistic, or subject choices, even when within similar cultural conventions. As historical vehicles for scientific knowledge, the evolutionary and ecological beliefs of and influence on an artist directs how they consider a plant and the most communicative way to depict its characteristics.

*Local Flora of Louisiana*

When producing depictions of the natural world, I began to consider my own relationship with the environment and why I decided to explore this topic in relation to my paintings. I moved around a lot as a child, but I went to boarding school for all of high school in California. It was there that I first started to develop an intimate relationship with nature. Every year we would take backpacking trips to Yosemite, Mammoth Lakes, or Kern River, carrying everything we needed in our packs. If I were to categorize how I generally considered the world around me, it was in line with ideas of nature as a powerful and unstoppable force. I felt tiny compared to the California Redwoods, surrounded by natural splendor untouched by human encroachment as I slept
under the stars in national parks. As I grew older and learned more about the state of our climate, I began to recognize these idyllic memories as, surely part of what shaped my love of nature, but also as moments of romantic experience in a world which is not entirely reflective of these memories.

I moved to New Orleans as I began university. My father’s family is from here and living in this city was the first time I’d ever lived in the same place as any of my extended family. When my parents divorced my second year at Tulane, my mother moved here to New Orleans. I felt it was important to represent the world around me and the environment which is shaping me. That is why my body of work concerns flora of Louisiana, systems close to my new home. The climate, biodiversity, and health of these ecosystems and plants directly informs the landscape of my home and the lives of so many people I admire. At the same time, it is glaringly obvious that I am not from New Orleans. In terms of cultural influences discussed in this discourse, I’ve also come to analyze myself in similar frameworks. I am not native to this land; I’m a descendent of those who colonized the region and displaced so many indigenous peoples. As a white woman, I am privileged to this day because of my race due to long standing legacies of slavery, and the racism which still plague this country. While I wasn’t in New Orleans during Hurricane Katrina, family members were. Their experience was horrible and traumatic, but they were able to rebuild their lives here and return to their homes. While 70 percent of long-term white residents, like my aunt, uncles, and cousins, were able to return to New Orleans within a year after Hurricane Katrina, the same was found to be true for only 42 percent of long-term black residents in a 2015 report by Louisiana State University (Larino 2018).
As a city below sea level and a region along the Gulf Region, New Orleans and Louisiana are especially vulnerable to the effects of climate change. In 2016 an historic $48 million grant was allocated to relocating the residents of Isle de Jean Charles, most of which belong to the Biloxi-Chitimatcha-Choctaw tribe (Davenport 2016). The land these people inhabited, that their families have been attending to for decades, is sinking into the sea and drowning in salt. Louisiana is one of nine states that account for almost half of the total greenhouse gas emissions in the United States (Broach 2017). The effects of industry on climate are clear in this state, especially a vulnerable area which environmentalists dubbed ‘cancer alley’ because of the air pollution the residents face (Killough and Lavandera 2020). Louisiana’s St. John the Baptist parish currently has the highest Covid-19 death rate in American communities with over five thousand residents, an area where the residents have long been plagued with health problems due to industry overexposure (Laughland and Zonoli 2020). Similar problems faced communities exposed to air pollution in the 2002 SARS epidemic in China. Scientists who researched the outbreak came to the conclusion that infected patients were more than twice as likely to die of the disease when from highly polluted regions (Ciu, Zhang, Froines, et al 2003).

I am so privileged in my experiences in New Orleans in terms of the effects of the current health crisis, with the ability to isolate at my mother’s home with her financial and emotional support, good health and lifelong access to healthcare. This privilege extends to my experiences of the effects of climate change on this city. When my mother moved to Uptown New Orleans close to Tulane, she was also moving into a relatively high elevation ground area that is less susceptible to flooding. The devastating effects of climate change, similar to those of the global health crisis we are currently experiencing
through Covid-19, will undoubtably hit the most marginalized groups in our communities the soonest and the hardest. While these understandings will remain at the forefront of thought as I navigate future experiences in this city, perhaps a failure of this thesis is that the body of work does not explicitly reflect the impact of my socioeconomic status and race on how I view the natural work around me. I believe the question of that impact would benefit from a deep exploration and analysis in itself and is something I will keep in mind in my future work.

The majority of my subjects from preserved lands outside of the city of New Orleans. While the motivation for doing so was to capture certain systems and subjects, the imperative to escape the city for less encroached-on land in a way echoes that same colonial imperative behind the imperial structures discussed. While I wasn’t conscious of this connection to colonial motives during the production of the paintings or explicitly lean into the influence, my decision to represent these subjects could be reflective of the impact of these colonial frameworks and mindsets today. I am immersed in the natural systems of New Orleans on a regular basis and have drawn inspiration from new and relatively distant systems in this project instead, recalling the colonial and exoticism fueled motivations of which my analysis was relatively critical.

When I began imagining a set of pieces, I wanted to lean into specific endangered and vulnerable systems, causing me to venture outside of the city. These paintings are snapshots of my experiences with these plants and systems, and part of that experience is the context with which I approach the subject. Knowing what I do about the threats these systems are facing, my goal has been to take what I have learned in historical analysis in order to capture a botanical subject. Relative species and the inclusion of habitat were
original driving factors for me, with an aim of showing the dependability of these plants on other parts of the system. I hope that these pieces do not come to stand as some of Margaret Mee’s do; depictions of species and systems lost in destruction to human activity. Suppressed detail was necessary in some of the more expansive pieces, but for the most part I tried to pay attention to the individualities within plants; shapes, lengths, angles, shades, and textures. I found that while studying these botanical subjects in painting, I started to gain a deeper appreciation for them. For the most part, my subjects are grasses, weeds, fallen leaves, or individual plants. My hopes were that they would cause viewers to reflect on the diversity of life in Louisiana; an additional thought to the intricacies and complexities of the surrounding natural world. One of the first things I learned in the course of this research was the anthropocentric lens through which we tend to think about nature, how humans have the tendency to categorize apart and distance themselves from the environment. I hope what I’ve created brings viewers closer in some way to the natural world and encourages them to appreciate and think deeper about these environments that are so rare, challenged, and vulnerable. Through careful and purposeful rendering, my paintings provide a space to contemplate botanical subjects within the Louisiana environment. They are a means to communicate the study of nature, a physical embodiment of many hours of investigation into the surrounding natural world. As creative spaces they permit viewers to glean their own meaning, but I hope that the deliberation and time I have given to these subjects leads to a deeper understanding of their value and importance.

For the first piece within this body of work I drove an hour north to the Lake Ramsey Preserve at the Nature Conservancy, within the flatwood’s region of the East
Gulf Coastal Plain. This area features the longleaf pine ecosystem, with some ecologists pointing to it as the highest quality stretch of longleaf pine flatwood savanna remaining in Southeast Louisiana (Lake Ramsey website). This ecosystem used to stretch across almost the entirety of the United States covering an estimated 92 million acres of the American environment as one of the most extensive forest ecosystems in the continent (Oswalt 2012). Only a fraction of the longleaf pine system exists today as around 95% of its original coverage has been destroyed. Stands of longleaf pines are biodiverse ecosystems with a rich variety of grasses and forbs within its ground layer, and this biodiversity is due to an evolutionary adaptation to and dependence on fire. Low intensity surface fires create conditions for an herbaceous ground layer with the widely spaced canopy of the pines letting in plenty of light. Adaptations within longleaf pine leave it resistant to fire while other tree species would dominate the canopy and prevent light from reaching the ground. The growth of hardwoods in longleaf pine stands is usually limited by fires as they cannot withstand the burn. The buds of longleaf pines however are protected by a spiral of long secondary needles and the heat of the fire does not harm the bud, allowing for less competition in growth (Guldin 2019).

My experience with this ecosystem was one of quiet amazement. I had never been to this area of Louisiana before and the first impact I felt when stepping outside was the smell. The air was cool, crisp, and filled with the scent of pine. Mine was the only vehicle parked in the lot, and I never saw another person while exploring the grounds. What I did see was an incredible diversity of scenery and systems of life. First were long stretches of grasses and shrubs with tall slender trees with sparse canopies far off the ground, the longleaf pines. Soon, I was attracted to a part of the reserve where the trees grew dense
and they merged together to obstruct the view of what was behind them. I walked along a path into the forest, the soil of which gained moisture the farther I walked. I came onto a pond surrounded by trees, on the line of the preserve between longleaf pine and bayhead ecosystems. Between where I stood and the pond was the burnt stump of a hardwood which had been beaten by a fire, right on the edge of the two ecosystems. What really appealed to me about this scene was the variety and vigor of the plants on the ground layer, and how it captured the affiliation of two systems. While at first glance the stump appeared defeated by some thing to me, the greenery emerging out of the fallen leaves, branches, and pine needles was bursting with vitality and life.

When painting this piece of the Lake Ramsey Preserve, *Hardwoods in a Longleaf Pine Stand*, I kept certain parts of the ecosystem in mind (Figure 6.1). The ground beneath the trees filling the background is a mix of colors and textures, and the foregrounded canopy reveals moments of bright blue sky above. As I recalled my experience, I wanted to capture the quality of the air in my depiction of the scene. I used a pale blue with a uniform texture to communicate coolness and clarity. In relation to the scent, the wrapping quality of the foliage around the forested seep echoes how the scent of pine enveloped my senses. As I worked through the layers of foliage, North’s depiction of a strangler fig and a poison tree immediately came to mind in the layered leaves of varied textures. The composition gives a view into the forested background dominated by hardwoods, where the canopy builds up density and less light leaks through. I traced dramatic highlights along the edges of some of the branches, portraying how the light fell through onto the ground in the foregrounded areas. I also worked the color of the sky into the water in order to communicate an open space instead of a dense
overstory in some areas, letting others be covered up through regions of density where the bayhead ecosystem took prominence. I paid attention to the variety in plant life in the front of the composition, both living and decaying. Leaves and pine needles of various shapes and colors scatter along the soil, where I also used highlights to emphasize the amount of sun reaching the ground. Grasses spill over the soil with leafy plants emerging over the water line. The burnt tree trunk took many layers of colors to capture the depth within its dark colors. Hints of moss emerge from the darkness of the burn as it begins to grow from the stump. My hopes are that evidence of fire within this painting is not malevolent as fire within a woody forest holds associations for many people. Instead, the brightness and vitality of the greenery immediately surrounding it are my attempt to communicate a place of fire within the system, one that is not detrimental.

The next piece I began was inspired by a book I was reading at the time when I visited Lake Ramsey, Richard Power’s *The Overstory*. This novel centers around nine people’s experiences with trees who are brought together to address the destruction of forests. While winning the Pulitzer Prize for fiction in 2019, Powers drew heavily on modern scientific discourse and discovery within his book. The introductory chapter to one of his characters, botanist Dr. Patricia Westerford came to mind as I made my way through Lake Ramsey. In one part, she critiques the forestry practice of the removal of dead logs, as “dead logs are far more alive than living ones.” (Powers 2019) She meets two young scientists who are disproving the theory of removal by studying all the intricacies of the ecosystem within a fallen log. This idea was weighing on my mind as I came upon a dead log in Lake Ramsey, filled with soil and overflowing with greenery. The bark of the dead tree was burned in parts, but the overall scene gave the impression
of vitality and life, not that of death and decay. I photographed the scene and worked with those to compose a bigger canvas so I could address the details and layers within the log in the piece, *Fallen Log, Lake Ramsey* (Figure 6.2).

The scene from which I drew inspiration was very dense and layered so I worked in the order of the perspective. The base of the composition is made of layers of leaves and soil. The burnt log rests on the soil where organic life surrounds and engulfs it. The soil within the fallen log is varied in tone and value, fertilized by the continuous growth of life which it is embedded in. From there, I kept piling leaves, grasses and sticks around and on top of the log. I really felt that the piece started to come together as I added the top layers of greenery. A bright vine with healthy leaves had fallen across the log, contrasting beautifully against the decaying leaves and the soil beneath. More vines with smaller, more angular leaves spread across the soil from the top. I attempted to highlight the variety in greenery through their shapes. I think the moments where vines, leaves, pine needles, or grasses cross from one portion of the painting into another are the most successful. In those moments, the piece is cohesive and alive.

After visiting Lake Ramsey, I wanted to explore another environment in Louisiana which I had not experienced yet. My advisor, Professor Nelson, reminded me of Jean Lafitte National Park. I had heard great things about this area, and it was under forty minutes away, so I went to Barataria Preserve within Jean Lafitte. This is a piece of our wetlands, a unique and biodiverse ecosystem. This is an area which is especially vulnerable to rising water levels and saltwater intrusion, another reason I felt compelled to represent it. Within various elevations there were so many kinds of trees and ground layer plants. Water covered some areas with more greenery emerging from the aquatic
plants. Every surface I saw was covered in life, layered with the grey net of Spanish moss or a coating of leaves. As I walked, I documented numerous plants of different shapes, sizes, colors, and textures.

For my first piece inspired by my trip to Barataria Preserve, I was moved by Dürer’s *Great Piece of Turf* (1503). As a student of art history, I had learned much about Dürer’s paintings, but I was not very familiar with this piece. When I first saw it in the course of this research, I was struck by the individuality of his grasses and the density he achieved through such delicate forms. As I read more about the influences on Dürer, the piece started to unfold itself in more dimensions. I felt a growing appreciation for the composition and perspective he gave to the plants, elevating a seemingly insignificant group of plants to the one worth of detailed study. As I walked through Jean Lafitte, I was amazed by the diversity of plants I saw. I decided to draw on Dürer’s composition and perspective in order to represent these plants in a piece titled *Piece of Wetlands* as a nod to Dürer’s (Figure 6.3). The way Dürer chose to study his plants was a useful tool for me to explore the plants of Jean Lafitte in his unique composition and perspective and the careful rendering of found plants.

I began by compiling various botanical subjects I had captured through photography in order to fill the canvas with the diversity I had witnessed throughout the park. I used a very pale background, mostly cool with a warm glow emerging right behind the greenery. I did this to contrast with the greens and denote an atmosphere of warmth and softness to the plants. I built up botanical subjects from the back to the front, finding the plants within my stock house of images. This was not a composition which I witnessed myself in nature as Dürer did, but one that I crafted using real subjects in order to create a
perspective which privileges the diversity of the park. An area where I drew direct inspiration from Dürer’s piece is in the portrayal of the root systems. This depiction, where it departs from a scene which could have been observed from one perspective, was of particular interest to me. Painting this piece recalled moments of gardening for me. As I placed plants and anchored them into the composition with their roots, I was reminded of planting vegetables in my garden.

In the course of this project, I started thinking about themes of agriculture and how the plants in a community can tell a history and a story of culture. I immediately thought of regional and national plants, Louisiana’s state flower being southern magnolia. With agriculture still lingering in my mind, I wondered what vegetables capture an essence of New Orleans and immediately thought of okra and sassafras. Okra has a recognizable shape and texture, and sassafras possesses bright yellow flowers, thus I was formally drawn to both plants. Gumbo, while not exclusively a dish of Louisiana, has become culturally associated with New Orleans. The leaves of sassafras are ground into a thickening paste called filé which is used in addition to or as a replacement for okra. As both plants are typically associated with gumbo, I decided to use them to represent the city. Okra, sassafras, and southern magnolia were the subjects I chose to create the triptych, Portrait of New Orleans (Figure 6.4). For this depiction, I isolated the plants from their environments and relative species, while not necessarily for motives which benefitted imperial expansion. I did so recalling portrait tradition and eastern traditions of spacial harmony; I wanted the focus to be solely on the subject as those were the three I chose to represent my ideas. I wanted to present the botanical subjects within the context of portraiture, denote prominence and focus through the composition. I also drew
inspiration from Haeckel's *Ascidiae*, where a dark background emphasizes the forms depicted on top of it. I relied heavily on aesthetic visuals and less so on the individuality of the subjects. I used a variety of sources to gain perspective of the subjects and created sketches in compositions and relative sizing that I desired. I used these sketches to establish the basic anatomy and coloration of the subjects in the paintings, and then relied on aesthetic decisions to guide the details. For example, I used lighter highlights around some edges in order to bring the subject further out from the background. They would not display this characteristic in real life, but the glow aided in presenting the plant as a portrait-like subject.

I chose to present the okra in flower. I did so because while the seed pod is very recognizable, I myself probably wouldn’t recognize the okra flower and I wanted all three in the triptych to be in flower for balance. I used highlights to bright out the unique shape of the seed pod and the joints of the stems on the trunk. For my depiction of sassafras, I was aware of the fact that the leaves of the tree are what we typically associate with sassafras. I placed them near the center of the composition and depicted them close in size to the okra pod. I painted the flowers coming off the leaves, one portion drooping lower from the weight of its buds. The darker background benefits this depiction as it allows the delicate light-yellow flowers emerge. In the piece on southern magnolia I represented the recognizable flower and also included an additional bud in this composition. Beneath these I layered the dense leaves of the tree. As a triptych, the white in the okra and southern magnolia flowers balance each other nicely. The stems off the right side of the okra visually lead into the sassafras, where the flowers move the eyes to the southern magnolia. This piece’s intentions and conceptual meaning to me evolved
throughout its production. I isolated these pieces for the sake of focus, balance, and visual aesthetics. Yet when analyzing my place in the larger frameworks discussed earlier, these pieces could stand as a reflection of my place as a descendant of those who wished to isolate botanical subjects from cultural context due to colonial motives.

While visiting Jean Lafitte, I found my final subject for this body of work and a means to return to my original goal of depicting botanical relationships and systems. I was amazed by the diversity of plant life I was experiencing, especially in respect to what was growing in the water. I was used to seeing the fast-moving water of beaches or rivers, and even Audubon Park’s sometimes green body of water didn’t compare to the waters at Jean Lafitte. In some areas the water was covered in noticeably more greenery than the land’s surface was. Plants of all different kinds burst out of the water and floating trunks of trees on top of the water. One such trunk really struck me. The color of the original tree was barely discernable as the portion of the fallen trunk floating in the water was overgrown with plant life. Grasses, leaves, vines, and even some flowers burst out of this dead log. I felt compelled to undertake another exploration of the vast ecosystem within a log and documented the subject for my final piece, *Floating Ecosystem* (Figure 6.5). This view presented me with a different perspective as well as a different set of botanical subjects growing from the trunk, and I felt it was a nice way to connect the whole body of work.

I used layering in the background of this composition to build up the ground, with touches of green where grasses and moss grew in the distance. I used minimal value changes and a tinted wash over the background to communicate the foggy atmosphere in the moment of my experience. The perspective gave me the opportunity to pay attention
to the root structures of the trees, which layered and spread out from their trunks. Meeting the edge of the soil is a body of water completely covered in aquatic greenery. Closer towards the soil, the surface is covered completely by these plants. As the perspective moves towards the viewer, the specific shape of duckweeds within the water becomes discernable. The green and yellow disks emerge from the dark water, gaining clarity and value as they move towards the viewer in perspective. Within the floating log, dried grasses and leaves hang down in layers of toned neutrals. Plants of multiple varieties burst out in vitality from the floating log, all individual in their color, shape, length, and angling.

**Conclusion**

This project drew examples from thousands of years of depicting the natural world. This analysis of the lenses through which an artist views and depicts the environment was important to me as an artist doing just that. The eastern traditions and values discussed regarding harmony and balance led to new considerations in composition and perspective. In western traditions, the goals and values of the artist affected the study of nature with the return to naturalism in the Renaissance. Through analysis of religious frameworks, Dürer’s individualized depictions of humble weeds and the insect damaged holes in Merian’s leaves came to light as reflections of divine wisdom, spirituality guiding compositional and subject choices. With the boom of European expansion at the end of the 16th century, those depicting the natural world were faced with communicating their findings with their patrons and European consumers. Analysis of artists working within this framework presented depictions of plants as pictorial products which could be
brought back to Europe. Eckhout’s basket of spices and the transformation of Merian’s pineapples displayed fruits new to Europe as exotic and enticing, ultimately ready for European consumption. This expansion and desire to assimilate new findings into a European system greatly benefitted the acceptance and wide-spread popularity of Linnaean conventions. Linnaeus sought to create a system which reflected the inherent harmony in the Creator’s nature. His productions presented an organized natural world, a new way of identification made simpler than previous systems. This simplicity and urge to represent all of nature within the same system, whether intentional or not, benefitted the expansion of empire. Linnaean conventions, which mandated the disregard of all relational systems to a plant, aided in producing visual representations of the isolation of a plant from its natural environment in order to transplant into a European system. Even for artists under the supervision of strict Linnaean advocates, traditions of other cultural influences were found to dictate aesthetic output. For artists like Sydney Parkinson, regional traditions such as temporal and spacial allusions in still-lifes provided another layer of the ways in which an artist’s external informants affects their representations of the natural world. Darwin provided artists with a new way of viewing the environment through his developments in evolutionary theory. North’s depictions display a Darwinian perspective of the environment, where plants are constantly undertaking adaptive strategies in the struggle for survival. Her pieces center on root systems and interactions between botanical subjects, parts of a system which previous conventions labeled as irrelevant. Ernst Haeckel brought together two of his influences in his monistic movement, Goethe and Darwin. Through the lens of Darwinian theory, Haeckel represented variants of Goethe’s archetypes in nature; evolutionary variations from a
common ancestor. As I transitioned to painters working within more contemporary contexts, the theme I found most compelling was conservation of the natural world. Artists were newly faced with the widespread destruction of ecosystems, pollution of air and water, and loss of biodiversity. Margaret Mee took fifteen expeditions into the Amazon in order to capture species which were being rapidly lost. Her paintings present the subjects which founded her passion in conservation, inextricable from their natural environments. Her subjects are structurally and symbiotically dependent on other organisms in her depictions, communicating the need to protect the vast and dependent ecosystems within the jungle. Alexis Rockman’s work also depicts the relationships between organisms and the larger systems in place in the natural world. Dealing with themes of human encroachment, pollution, bioengineered species, and impacts of migration patterns, Rockman uses the naturalistic depiction of the natural world as a communicative tool. He creates environments which use plants and animals to speak to human relations with the environment. George Shaw’s work also features representations of the natural world which allude to human’s relationship with it, alluding to both historical and contemporary themes. These themes of conservation, representations of the environment for the sake of its preservation are where I found the most purposeful inspiration in my work.

There are many subjects which I still hope to represent and reflect on in the future, especially in the immediate New Orleans area. I plan on undertaking studies of the plants I care for in my small vegetable garden, the vines reaching over and through neighbors’ fences, or the ferns and mosses growing on the oaks in our streets. The paintings I have produced so far do not stand as the complete culmination of what I’ve learned through
this thesis, but they will serve as catalysts for future representations. I’m pleased with this body of work and proud of the pieces as I believe they are successful in my original intentions. That said, the research from this thesis has taught me about the complexity of overlapping and juxtaposing cultural influences, and future representations will in hopes address a wider variety of those influences.

In my paintings, I found a language to communicate plant life which I had not had before. While I won’t judge if their impact on others is successful, to me they are valuable reflections of botanical subjects which I hold dear. In the recent times of relative isolation, the ability to connect with environments inside my studio has been such a relief, as has gardening and taking care of my living plants. I’m thankful to have access to endangered ecosystems such as longleaf pine and wetlands, and my study of them has increased my awareness of their vulnerability. Before this year I was lacking in my knowledge of the natural world within Louisiana, all the incredible biodiversity that this area has to offer. My paintings are an attempt to communicate my discoveries and were an extraordinary opportunity to reflect on all the incredible systems surrounding me.
Works Cited


