INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA 800-521-0600

I MI[®]

•

NOTE TO USERS

This reproduction is the best copy available.

UMI

University of Alberta

Understanding Gardens: An Analysis of Seventeenth-Century Culture

by

Julaine Juel Gosling

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of **Masters of Arts in History**.

Department of History and Classics

Edmonton, Alberta

Fall, 2000



National Library of Canada

Acquisitions and Bibliographic Services

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque nationale du Canada

Acquisitions et services bibliographiques

395, rue Wellington Ottawa ON K1A 0N4 Canada

Your file Votre rélérence

Our file Notre rélérence

The author has granted a nonexclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission. L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-59720-2

Canadä

University of Alberta

Library Release Form

Name of Author:	Julaine Juel Gosling
Title of Thesis:	Understanding Gardens: An Analysis of Seventeenth-Century Culture
Degree:	Masters of Arts in History
Year This Degree Granted:	2000

Permission is hereby granted to the University of Alberta to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.

Julaine Gosley Julaine Juel Gosling

Julaine Juel Gosling 49 Sierra Grande Estates Sherwood Park, AB T8G 1A2

Sep. 28, 2000 date

Abstract

Seventeenth century gardens are cultural artefacts. The form and function of the various gardens of this period reflect contemporary perceptions of man's place in nature. A form of conspicuous display, the design and content of a garden were organized to reflect the owner's place in society. Gardens and gardening were important cultural and social activities that reflect contemporary ideologies and beliefs. The changing designs and the transference of gardening knowledge reflect the political and religious turmoil Englishmen and women experienced.

The printed texts of this period contain a wealth of information on gardening and garden design but these texts have more to offer than information on contemporary practice. Printed texts also encapsulate the struggles for truth and authority writers underwent in establishing the material in printed texts as knowledge. Illustrations, found in both texts and in paintings, are reproductions of actual gardens. How these images were presented by the artists and read by contemporary audiences further explains how gardens functioned in seventeenth century English society. University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Understanding Gardens: An Analysis of Seventeenth-Century Culture submitted by Julaine Juel Goszing in partial fulfillment of the requirements for the degree of Masters of Artsin History.

Dr. Julian Martin (supervisor) Dr. Andrew Gow

Dr. David Gay

Lesley Jormack (Chair)

Sep.13,2000 date

Table of Contents

Introduction1
Chapter One 10
A. What is a Garden?; B. Different Gardens; B.1 Kitchen Gardens; B.2 Botanic Gardens; B.3 Pleasure Gardens; B.4 Stuart Gardens; C.1 Garden of Eden; C.2 Medicine, Plants, and Universities; C.3 Doctrine of Signatures; C.4 Classification; C.5 Religions; C.6 Politics; C.7 Conspicuous Display
Chapter Two
A. Printed Texts; A.1 Printing Process; A.2 Printing Press and the Revolution; A.3 Truth & Authority; A.4 Piracy; A.5 Readership; B Botanical Illustrations; B.1 Woodblocks; B.2 Etching & Engraving; C. Genres; C.1 Herbals; C.2 Husbandry manuals; C.3 Polemics
Chapter Three
A. Gentlemanly Behaviour; B. Flower Culture; B.1 Influx of New Plants; B.2 Consumerism; C. Estate Planning; D. Paintings; D.1 Landscapes
Conclusion
Bibliography
Early Modern Texts90
Modern Scholarship103
Illustrations

Introduction

Why gardens and gardening? Having stumbled upon garden history after a passing remark by a professor, I began to explore the literature available. Reading through the existing material, I was disappointed initially with the poor quality of historical research. Focused upon a few big names, historians did not mention many other individuals from the period. As my knowledge of the period depend, I was further disappointed by the absence of modern theories concerning basic events of the period. Gardening history remains a completely separate area of study, removed from the currents of modern historical scholarship. My background in seventeenth-century history opened my eyes to some startling connections between gardens, gardening, and English culture in this period.

This essay explores the types and varieties of seventeenth-century gardens and places them into the context of the time by analysing them as cultural artefacts. Understanding the motivations for creating and maintaining these gardens allows us to better understand visions of nature, the role of conspicuous display, and the importance of outdoor environments in this period.

Gardens are a manipulated form of nature. Overarching views of nature and how humans interpret their place in the natural world strongly influenced the design and layout of these artificial environments. Gardens are nature altered and shaped according to human perceptions of how the natural world should appear. The manipulation of the environment that is undertaken in these spaces reflects how the human creator perceives the world around them. Whether it is a simple cottage flower garden or an elaborate estate landscape, the aim to control nature is evident. As codifications of particular visions of the natural world, gardens offer historians a unique window into contemporary perceptions. Trends and patterns in the creation of gardens become evident by the existence of common patterns and designs throughout certain time periods.

The political and religious turmoil of the seventeenth century created an unstable society. Several fundamental institutions came under attack and the authority of the state was fragmented. During this turmoil, the authority of knowledge and the institutions upon which its authority rested were challenged. When authority erodes, the solutions to questions of knowledge have a special urgency. Gardens reflect the mindsets of humans by outlining personal interpretations of how the natural world should appear and function to serve human purposes at particular moments in time.

Gardening in this period is not part of a grand evolution that culminated in the formation of the English landscape garden. Writers have spilt much ink discussing the origins of this phenomenon. Their misguided search for 'origins' has blinded them to the true nature of gardens in our period. Recent work in this field has called attention to empirical deficiencies and omissions; however, deficiencies in theory have not been noticed.¹ As my argument will demonstrate, there is more to seventeenth-century gardens than merely a primitive step in the evolution of garden design. Indeed, there are connections to the gardens of the eighteenth century; but seventeenth-century gardens were situated in different contexts and were constructed by different people. Instead I suggest that the wider dynamics of garden design in this period are more complex and intriguing.

Political and aesthetic categorization of seventeenth-century gardens in gardening literature has structured historical analysis into a narrow and unrelated channel of study. Scholars analyze seventeenth-century gardens in the context of an evolution from 'formality' to 'naturalism'. Gardens are discussed in the context of 'Stuart Absolutism' and continental design influences. The classification of gardening trends is based on dates of political events and, as a result, accurate descriptions of trends in design and the context of garden construction is restricted. I suggest instead that there was one homogeneous gardening trend in the period.

Early modern texts constitute the largest source of historical data on gardening and gardening practice. Technique, design layouts, and common practice as described in these texts provide tantalizing hints about contemporary practice. Yet these texts provide more than a window into past techniques, since the language of these texts and the manner in which they were presented reflect contemporary ideas about proper

¹ "Until recently no one was, by training, a garden historian and few were historians of botany." Douglas Chambers, *Planters of the English Landscape Garden* (London: Yale University Press, 1993), p. 1.

knowledge and authority. Garden authors had a tenuous hold on authority. The relative newness of the genre and of the printed text made the authority of the knowledge questionable. The readers' interpretation of the authority of the knowledge contained in these texts and the author's status were key factors in the success or failure of these treatises. But how did contemporary audiences read these texts? The printed material on gardening during this period displays a struggle for authority and acceptance. Exploring the context of printing is a means for understanding how gardens and gardening fit into seventeenth-century life by witnessing the struggles of authors to gain acceptance for their ideas.

In this essay I examine gardens both as physical objects and metaphorical constructions. The combination of utilitarian practicality and aesthetic display in these gardens is witnessed in the varieties and species of gardens. Gardens were an essential part of every seventeenth-century household. How the gardens were constructed and the purposes they served for the humans of the house reflect social and cultural aspects of English life. Messages encoded into these gardens reflect political and religious ideologies of the times. Therefore, to understand how these gardens were 'read' by contemporaries, I explore the various beliefs and values that influenced those who possessed or constructed gardens.

In the seventeenth century, gardens were a form of conspicuous display; they demonstrated the power, status, and authority of the owner. On the large estates of the gentry and nobility, nature was altered in very structured and symbolic manners to reflect the lord's place in the world. Manipulation of the environment to suit a personal agenda was one of the key means by which a gentleman could authenticate his status. This idea slowly pervaded English society during the seventeenth century as landowners sought to establish their own personal authority through a manipulation of the world around them.

The integration of garden and house indicates key assumptions of how Englishmen and women shaped their environments. The ubiquity of gardens in the country and throughout society demonstrates their fundamental importance in everyday life. The rebuilding and construction of houses and estates that marked the seventeenth century allow us an insight into contemporary perceptions of everyday life. Houses and gardens were modelled on ideas of status, authority, religion, wealth, and practicality. The changing styles of garden design and house construction also mirror the religious and political instability of the period as Englishmen and women sought to establish and reestablish their identity and authority.

Understanding how and why these gardens were constructed reflects social perceptions of the order of English society and the owner's place therein. Shifting designs and the reorganization of gardens undertaken at certain points in the century reflect changes in human beliefs. With which events, either political or religious, do these changes coincide?

Gardens were cultural objects and gardening was a cultural act. It was gentlemen who planted gardens. Elaborate, highly symbolic and continually revamped, their gardens were conspicuous displays of status, wealth and power. It was assumed that a gentleman would have a garden and this assumption suggests several important lines of research for understanding gentlemanly behaviour of the time. Why was it assumed that a gentleman have a garden? How were these gardens constructed? What effect did this practice have on other levels of English society? Gardens manifest particular mindsets about how nature should appear and how it should serve man.

Garden history stories rarely emerge in modern historical discussions of the seventeenth century. Myopic and narrow-minded, the historiography of this field sadly lacks context. Grand, whiggish narratives override general themes and trends and a lack of method diminishes the quality of analysis performed on contemporary material. The historical study of gardens in this period suffers from scholarly isolation; the literature does not reflect newer methodologies and analysis from cognate areas of study. However, gardening history overlaps with several important themes of the period. For example, as displays, gardens encapsulate and manifest political, religious, and cultural beliefs.

The range of contemporary material surveyed by garden historians is pitiful. Major figures such as John Evelyn and Alexander Pope receive the highest praise and the majority of the historical discussion. Other individuals rarely enter the narratives and do so only in passing. Why? A wealth of historical material – literary and visual – has survived. Part of the problem with this field of history is the high percentage of nonacademic writers. Untrained in modern historiography and methodology, these writers are unaware of current historical scholarship. These non-academic writers have coloured outside perceptions of the field, especially considering the poor quality of history that is produced by these writers. If left to continue, garden history will narrow completely and remove itself from the main stream of seventeenth-century history.

The classification of seventeenth-century gardens as found in modern literature is irregular and inconsistent. There is no standard for describing the various styles and trends of this period. Most authors classify gardening styles as English manifestations of continental garden designs.² Most authors focus primarily on the English 'formal garden', a term that carries heavy political loading. They seek to explain the English 'formal garden' in the context of Stuart absolutism: an English version of the trends in the French court. Other authors divide the century based on political events: formal gardens until the Civil War, then (with the return of Charles II) the French style, and then Dutch influence with the arrival of William III and Mary II. Yet, garden styles do not change according to political events. This political characterization arises from an excessive focus on royal and aristocratic gardens.

The literature on seventeenth-century gardens is characterized by the influence of continental trends; authors negate the English side of these designs. The gardens were essentially English.³ Seventeenth-century gardens functioned similar to a theme and variation. The idea of a formal garden was the underlying theme in the century and variations included the French style and the Dutch style. The similarities between the formal gardens of the early part of the century and the French or Dutch gardens make it

² See Julia Berrall, The Garden; an Illustrated History from Ancient Egypt to the Present Day (London: Thames & Hudson, 1966); Derek Clifford, A History of Garden Design (London: Faber and Faber, 1962); F.R. Cowell, The Garden as Fine Art (Boston: Houghton Mifflin Company, 1978); Laurence Fleming and Alan Gore, English Garden (London: Michael Joseph, 1979); Martin Hoyles, The Paddington Press, 1978); Roy Strong, Renaissance Garden in England (London: Thames and Hudson, 1979); Roy Strong, Renaissance Garden in England (London: Thames and Hudson, 1979); Roy Strong, Renaissance Garden in England (London: Thames and Hudson, 1979); Roy Strong, Reyal Gardens (Toronto: Pocket Books, 1992); H. N. Wethered, A Short History of Gardening (London: Metheun, 1933); Richardson Wright, The Story of Gardening: From the Hanging Gardens of Babylon to the Hanging Gardens of New York: New York: Company, 1934); Walter Wright, A History of Garden Art (New York: Hacker Art Books, 1966).

hard to accurately describe these gardens as separate styles or trends.⁴ Instead a more general way to classify gardens in the period is to label them Stuart gardens.

Considering the importance of printed texts for this field of history, it is sad to note that rarely are the texts problematized or explained in their historical context. In order to explain the impact of the ideas and practises outlined in the printed gardening texts, we need to understand how these texts were read and accepted by a contemporary audience. Recent work on printed texts and the transmission of knowledge problematizes both reading as a practise and the authority of printed texts.³ Understanding historical texts requires consideration of the context of their composition.⁶

Removed from scholarly circles as gardening history is, many scholars are not aware of the historical value of this area of study. Cultural and social histories of the seventeenth century would benefit from understanding how gardens functioned as conspicuous displays. While recent analysis of printed texts and the establishment of authority in print have focused on 'science' and the role of print in establishing its authority, understanding gardening texts and how the various genres developed are another way of explaining the transformation of printed texts. While the content of the texts aids historical research on contemporary practice and accepted ideas, the texts themselves and the manner in which they were presented to the public deepen our understanding of how printed texts developed authoritative influence.

As I suggested, one main problem with the current discourse of garden history is its lack of attention to context. Humans construct gardens and gardening is a human practice. How these human practices were discussed and how the finished products were represented and described reflected human ideals and aspirations regarding nature. Unfortunately, the modern study of gardens of this period suffers from its isolation from the rest of the historical scholarship on the era. Gardening history overlaps with several

⁴ "Parterres, avenues, canals and clipped greens, the components of late Stuart gardens, might justifiably be attributed to French and Dutch influence, but the gardens themselves were essentially English: accretions of garden compartments each grand and symmetrical in itself but stubbornly refusing to conform to an overall scheme." Bisgrove, *The National Trust Book of the English Garden*, p. 63.

⁵ Adrian Johns, The Nature of the Book (Chicago: U of Chicago Press, 1998) and Kevin Sharpe, Reading Revolutions: The Politics of Reading in Early Modern Europe (London: Yale University Press, 2000).

⁶ As Collingwood has observed, a text answers a question that the author was asking. R.G. Collingwood, *An Autobiography* (Oxford: Clarendon Press, 1939). This is also discussed by Herbert Butterfield, *The Whig Interpretation of History* (New York: W. W. Norton & Company, 1965), p. 93.

important themes of the period, yet scholars have not incorporated new methodologies and forms of analysis from other areas of study.

Until recently, the economic aspect of gardening practice was absent from the literature. Work by Joan Thirsk and several of her students has opened the field to the study of the development of market gardens, plant nurseries, and agrarian improvements. Research on these economic issues has expanded the idea of what a garden meant during the seventeenth century. In addition, this research provides an understanding of the role of utilitarian gardens, whereas the literature has otherwise focused primarily on gardens as aesthetic creations.

An old historiography of botany still underlies much historical analysis of plantrelated activities in this period. Whiggish arguments about seventeenth-century science shape the mindset and methodology of various scholars.⁷ Indeed, this century is celebrated for the 'scientific revolution'. Assuming the existence of this great historical event, texts and ideas from this period are analysed in relation to a growth of science. Yet, scientific knowledge does not mimic nature; it is contingent on society. There is a cultural and social context to the various texts and ideas concerning gardeining. People in the seventeenth century accepted an interconnected social and natural world. This perception has not remained and only recently have scholars postulated methodologies incorporating this interaction. Specifically relating to 'science,' these methodologies can be applied to discussions of seventeenth-century perceptions of the natural world.⁸

Studies of scientific knowledge by authors like Cunningham, Bloor, and Latour explore society and the interconnections of culture in the production of scientific knowledge. As Latour demonstrates in his analysis of 'science', the production of scientific knowledge - truth and facts - is related to the actions of an individual.⁹ As Cunningham has asserted "science is a human activity, a human practice."¹⁰ History is the study of people in the past; therefore, the history of science deserves to be studied as

⁷ A.G. Morton, *History of Botanical Science* (Toronto: Academic Press, 1981) and Joseph Reynolds Green, *A History of Botany* (Toronto: J.M. Dent & Sons Limited, 1914) are frequently referenced as authorities on botany.

⁸ Here I am referring specifically to Andrew Cunningham, "Getting the Game Right: Some Plain Words on the Identity and Invention of Science," *Studies in History & Philosophy of Science*, 19 (1988), pp. 365 -389; David Bloor, *Knowledge and Social Imagery* (Chicago: University of Chicago Press, 1976); and Bruno Latour, *Science in Action* (Cambridge, MA: Harvard University Press, 1987).

⁹ Latour, Science in Action.

¹⁰ Cunningham, "Getting the Game Right," p. 369.

the history of human activity." Why did they write their books, and what factors in their lives affect the shape and content of their compositions? The social setting is missing. In *Knowledge and Social Imagery*, Bloor proposed that science should be investigated as a social institution: a human activity influenced by social and cultural factors.¹² There is a strong connection between normal, natural, and moral, and as Bloor argues, people perceive that what is normal, natural or moral is 'good'.

Another problem has been alluded to, namely the predominance of non-academic authors. The parochial focus of this field in part explains the lack of reliance on recent historical research and the absence of context. Yet another problem with modern gardening texts is the underlying social assumptions. For example, the literature on kitchen gardens and the activities of housewives presented seventeenth-century women as an ideal. Virtuous, moral, and domestic, these women, it is implied, have much to teach modern readers concerning the management of a household.¹³

One main task in my project was to assemble a suitable bibliography of materials. Expanding my research beyond garden literature, I adapted and incorporated materials from overlapping areas of study: religion, politics, housing, culture, medicine and science. Drawing on the work of scholars in several fields, I explored a range of recent theories regarding printed texts, housing culture, economics, and gentlemanly behaviour. Compiling a list of seventeenth-century printed texts dealing with gardens and gardening was more difficult. The various textual and pictorial sources from this period are much broader and extensive than the existing secondary literature suggests. Authors still focus on a few big names of the period, most especially John Evelyn, and they fail to notice other equally important authorities. Quantity does not always equal quality, as in the case of Gervase Markham. Several bibliographical resources served as guides¹⁴, but a large portion of my research was necessarily spent searching through the English Short Title Catalogues.

¹¹ Cunningham, 'Getting the Game Right,' p. 372.

¹² See Bloor, Knowledge and Social Imagery.

¹³ See Christina Hole, The English Housewife in the Seventeenth Century (London: Chatto & Windus, 1953); Rose Bradley, The English Housewife in the 17th and 18th Centuries (London: Edward Arnold, 1912).

¹⁴ Blanche Henrey, British Botanical and Horticultural Literature Before 1800 (Oxford: OUP, 1975), Vol I; Gavin Bridson, Plant, Animal & Anatomical Illustration in Art & Science: a Bibliographical Guide from the Sixteenth Century to the Present Day (Winchester: St Paul's Bibliographies, 1990); Gavin Bridson, History of Natural History: An Annotated Bibliography (New York: Garland Publishing, Inc., 1994).

Illustrations are key to my argument. They provide visual descriptions of the gardens and also encapsulate contemporary beliefs on how these gardens were to be were portrayed and understood. Modern garden history texts include lots of illustrations. Depending on the author's intentions, these illustrations can be contemporary representations or photographs of modern reconstructions. Modern reconstructions are a dangerous type of representation. The ideas and themes encapsulated in these gardens do not accurately reflect seventeenth-century ideas. Indeed there is a circular problem: reconstruction or 'historical' gardeners utilize modern garden history texts and garden historians rely on these reconstructions. Both are using the same material without realizing it.

The story I have to tell about gardening is markedly different. There are different actors, different texts, and a completely different context than found in other garden history books. By integrating research and methodologies from several overlapping areas of study, I have sought to reintegrate garden history into our historical understanding of the seventeenth century. Gardens allow us access to the mindsets of Englishmen and women in this century as the structures and messages built into these controlled environments reflect their worldviews. Breaking away the traditional classifications, I was able to examine the underlying structures and themes that pervaded English ideas about gardens. In place of existing classification, I suggest that there was one overwhelming motive behind gardening in this period – conspicuous display.

I am not presumptuous enough to assume that this paper offers a grand unified theory of seventeenth-century gardening. Instead, I suggest areas of further research, and demonstrate how to break out of the traditional understanding of gardens and gardening in this period. One key point I want to stress is that there is a vast source of primary material waiting to be understood and researched. Gardening history texts usually focus on the same authors, the same illustrations, and the same printed texts. To understand the true dynamics of seventeenth-century gardening, the field of study needs to be widened to include a greater variety of sources, and widened to include new methodologies and forms of analysis.

Chapter One:

.

-

A Taxonomy of Gardens

A. What is a Garden?

Before elaborating on the structure or function of gardens in this period it is necessary to define the word *garden*. The definition of a garden has fluctuated over time as different cultures attribute different values and cultural ideas to the word. We cannot assume that the motivations and definitions for seventeenth-century gardens were identical to modern ones.¹⁵ Exploring the definition of a garden, as seventeenth-century Englishmen and women understood the word, aids further analysis of their aesthetic and utilitarian functions.

Underlying all definitions of gardens is human control of the environment. Gardens, they believed, were spaces where humans assist or perfect nature. In the garden, the individual has control; gardens allowed men an area to control and regulate their environment.¹⁶ Gardens can be intensely private or completely public; how they were constructed was determined by their function. For a garden to be political, it had to be open to the public.¹⁷ Royal gardens, the pleasure gardens in the great estates, and the various parks in urban areas were all public areas. Their layout and design carried strong political messages. Smaller pleasure gardens and kitchen gardens that were laid out with a cottage or country house were quasi-private areas (though the kitchen garden, typically the domain of the housewife and her servants, was more private due to its utilitarian function). The pleasure garden was an extension of the house, an outdoor room for the owners and guests. The gardens established at Universities served a dual purpose; functionally they provided the University with herbs and produce and aesthetically they were open-air spaces for the philosophers and scholars.¹⁸

Gardens were defined by a physical boundary separating them from the surrounding environment. Hedges, walls, and enclosures denoted the limits of property, and

¹⁵ For example, in the seventeenth century, spiritual theories underlay motivations for creating a garden and they guided how the garden was constructed and used. Andrew Cunningham, "The Culture of Gardens," *Cultures of Natural History* (Cambridge: 16 Strategy Sharing True S

¹⁶ Steven Shapin, *The Scientific Revolution* (Chicago: U of Chicago Press, 1996), p. 31; Ann Leighton, *Early American Gardens* (Amherst University of Massachusetts Press, 1986), p. 6; Nichola Johnson, "Citizens, Gardens and Meanings," *London's Pride* (London: Anaya Publishers, 1990), p. 23.

¹⁷ Cunningham, "The Culture of Gardens," p. 43.

¹⁸ Marvis Batey, Oxford Gardens (Amersham: Avebury, 1982), p. 19.

separated controlled nature from wild nature." Gardens were also determined by what they contained.²⁰ A garden containing fruit trees is an orchard, one of primarily flowers is a pleasure garden, herbs are for kitchen gardens, and trees are an essential element to the vast pleasure gardens of the elites.

Gardeners shaped and defined gardens. The work of the gardener preserved the identity of the garden. A garden requires constant work. Idleness creates a non-garden as the space becomes overgrown and re-colonized by native plants.²¹ Many seventeenthcentury authors were concerned with the duties and definition of the ideal gardener.22 This ideal reflected, among other things, religious beliefs of the period. The link between Adam, the Garden of Eden, and seventeenth-century millenarian ideas was particularly strong. As William Coles stated: "[when] God Almighty would have Adam to partake of a perfection of happinesse, even then when he stood innocent, he could find none greater under the Sun then to place him in a Garden."²³ In their search for the second coming of Christ, millenarians sought to recover the original, pre-lapsarian condition enjoyed in paradise.24

B. Different Gardens

During the seventeenth century, there was a wide variety of gardens.²⁵ Large and small, simple and complex, symbolic and useful, these gardens served differing needs for Englishmen and women. Given that gardens were a form of conspicuous display, the layouts, designs, and messages that shaped them reflect the changing ideals and beliefs of

¹⁹ Enclosing land either through fences or hedges is discussed by several gardening authors: Thomas Tusser, William Lawson, Barnaby Googe, and Timothy Nourse. So important was a visible boundary marker that local or royal officials often demanded their use. Patricia Seed, Ceremonies of Possession (Cambridge: CUP, 1995), pp. 19, 21. Even unbounded landscapes required borders. Cunningham, "The Culture of Gardens," p. 38. Enclosures also kept predators, animal and human, out of the garden as well as protecting the plants from the elements. Todd Gray, "Walled Gardens and the Cultivation of Orchard Fruit in the South-West of England," The Country House Kitchen Garden, p. 115.

²⁰ Eleanour Sinclair Rohde, Garden-Graft in the Bible (New York: Books for Libraries Press, 1967), p. 16.

²¹ Cunningham, "The Culture of Gardens," p. 38. The contrast of the space within the enclosure and the wilderness outside was a strong symbol of the church, particularly during the 1640s and 1650s. See Christopher Hill, The English Bible and the Seventeenth-century Revolution (Toronto: Penguin books, 1993), p. 153.

²² For example, William Lawson included a discourse on the ideal gardener in his A New Orchard and Garden (1618). Eleanour Sinclair Rohde, The Old English Gardening Books (Great Britain: Minerva Press, 1972), pp. 54-5. 23 William Coles, Adam in Eden or Nature's Paradise (1657).

²⁴ John Prest, The Garden of Eden: The Botanic Garden and the Re-Creation of Paradise (London: Yale University Press, 1981), p. 70. 25 In Plants from the Past there is an explanation on how to recreate a typical seventeenth-century garden. Considering the complexity of the varieties that existed in the period, how could this 'typical' garden symbolize the entire spectrum of seventeenth-century gardens? David Stuart and James Sutherland, Plants from the Past: Old Flowers for New Gardens (Toronto: Penguin Books, 1989), pp. 42-49.

English society.²⁶ Gardens reflected the changing fashions of the gentry. As old styles and ideas became common, new ideas were promoted. Several different types of gardens existed contemporaneously as gardening styles diffused through the various levels of society. Different gardens had different purposes and different definitions as meaning and context changed with ownership and usage.

Several different types of gardens often existed in the same area. Most cottages had a kitchen garden, a pleasure garden, and an herb garden. These are the gardens we find described in the books of John Parkinson, Gervase Markham and William Lawson. Royal estates and grand country houses included large, sweeping landscapes, elaborate gardens, and intricate designs laden with symbolism and extravagance - they were intended to impress. The builders of these gardens were unhampered by economic necessity and could focus on creating aesthetic places for recreation and contemplation.²⁷

The following sections detail and outline the various gardens of the seventeenth century. Examining pictorial and textual sources, the structure and content of these gardens are outlined. The most significant varieties of these are kitchen gardens, botanic gardens, pleasure gardens, and Stuart gardens.²⁸

B.1 Kitchen Gardens

Kitchen gardens existed to provide garden produce. Small scale gardens were a common feature outside a cottage or manor house. In almost all of the gardening books surveyed, seventeenth-century authors assumed the house or manor had a kitchen or physic garden. Often, a discussion of this type of garden will occupy an entire section of the text.²⁹ The domain of the housewife, this garden contained the vegetables, herbs, simples, and other plants that provided the household with supplies. Women were expected to have knowledge of herbs both for cooking and for medicines.³⁰ Kitchen gardens validate the idea that gardens were more than just aesthetic creations. Some

27 Hazel Forsyth, "Medicinal and Kitchen Gardening," London's Pride, p. 65.

²⁶ The gardens established by the Puritan settlers in New England are an interesting version of English gardening ideas. For more information see Leighton, *Early American Gardens*, V.R. Ludgate, *Gardens of the Colonists* (Washington, D.C.: United States Department of the Interior, National Park Service, 1941).

 ²⁸ Dutch gardens fall beyond the scope of this thesis. For more information on them see: Batey, Oxford Gardens, Ch 7, p. 79; Berrall, The Garden, p. 248; Stuart and Sutherland, Plants from the Past, p.21; Eleanour Sinclair Rohde, The Story of the Garden (Boston: Hale, Cushman & Flint, 1936), pp. 160-168; Strong, Royal Gardens, pp.7, 21-33; Bisgrove, The National Trust Book of the English Garden, p. 61; David Jacques, Arend Van der Hort, The Gardens of William and Mary (London: C. Helm, 1988).
 ²⁹ For example, in John Parkinson, Paradisis in sole paradisus terrestris (1629); John Rea, Flora Ceres et Pomona (1665); Eleanour Sinclair Rohde, The Garden Book of Sir Thomas Hanner (London: G. Howe, 1933).

³⁰ Eleanour Sinclair Rohde, The Old English Herbals (New York: Dover Publications, 1971), pp. 174-186; Yvonne Cuthbertson, Women Gardeners: A History (Denver: Arden Press, 1998), p. 47.

kitchen gardens existed on a larger scale, as farmers grew produce and sold it at markets in the country. Nurseries were the most prestigious versions of these market gardens.

Most authors discuss the various plants the kitchen garden should contain, the arrangement of its beds, and how to collect and preserve the plants.³¹ John Parkinson was more concerned with the contents of the garden than the form, and his text was a vast compendium of plants. Location is essential; as Parkinson suggested, the herb garden belongs on the side of the house to prevent the smell from entering the house.³² Gervase Markham described a typical Jacobean house and garden in his book; indeed, the kitchen garden is a common topic in Markham's books.³³ The practical advice in his text covers how to sow and order the herbs, the growing conditions each plant requires, edible, medicinal herbs, and 'sallet-hearbes'³⁴ for the kitchen garden, and information on sowing, planting and preserving flowers. Other books containing information on kitchen gardens are Leonard Meager's *The English Gardener* (1670), *Profitable instructions for the manuring, sowing and planting of kitchin gardens* (1599) by Richard Gardiner, William Lawson's *New Orchard and Garden* (1618), Thomas Hyll's *The Gardiner's Labrynth* (1563), *The Office of the Good Housewife* (1672), and Timothy Nourse, *Campania Foelix* (1700).³⁵

Another common feature in these texts is a list of beauty recipes. Gerard's *Herball* contains four beauty recipes, Coles includes a few in his *The Art of Simpling* (1656), and there are numerous examples in Parkinson's work.³⁶ Recipes on how to use the various plants from these gardens formed a large portion of these texts.³⁷ Printed material also contained information on still-rooms, the room or building wherein plants were preserved and prepared.³⁸ Another pleasure derived from these gardens was the relief offered by sweet-smelling herbs and flowers. There is much attention in the secondary

37 For example, Markham's Country Contentments (1615).

³¹ In *The English Husbandman*, Gervase Markham outlines the ordering of the kitchen garden (1613). For more information on the actual process see Susan Campbell, "Digging, Sowing and Cropping in the Open Ground, 1600-1900," *The Country House Kitchen Garden 1600-1950* (London: Sutton Publishing, 1998), pp. 9-35.

³² Campbell, "Digging, Sowing and Cropping," p. 16.

 ³³ Rohde, The Old English Gardening Books, p. 62; Martin Hoyles, Bread and Roses: Gardening Books from 1560-1960 (London: Pluto Press, 1995), p. 78.
 ³⁴ John Evelyn also published a book containing information on salad plants Actaria. A discourse of sallets. By J.E. S.R.S. Author

of the Kalendarium. (1699). Rose Bradley, The English Housewife in the Seventeenth and Eighteenth Centuries (London: Edward Arnold, 1912), p. 92.

³⁵ G.E. Fussell and K.R. Fussell, The English Countrywoman: A Farmhouse Social History (London: Andrew Melrose, 1953), p. 91. ³⁶ Rohde, The Old English Herbals, p. 156; Hole, The English Housewife in the Seventeenth Century, pp. 73-74.

³⁸ Hannah Woolley, The Accomplisht Lady's Delight in Preserving, Physic, Beautifying and Cookery (1684). See Fussell and Fussell, The English Countrywoman, p. 87; Hole, The English Housewife in the Seventeenth Century, pp. 70-75. For an illustration of the still-room see **Plate One** and **Plate Two**.

literature to the seventeenth-century use of smells.³⁹ The inclusion of knowledge typically confined to the domestic sphere and the responsibility of the housewife hints at the possibility of an audience of female readers.

The larger scale market gardens and nurseries were more recent developments. These gardens produced the produce sold at market and the plants that supplied a growing gardening industry. Market gardens were normally of fewer than ten acres, carefully laid out with rectangular beds.⁴⁰ The most common crops were parsnips, carrots, turnips, cabbage, colewort, peas, beans, cucumbers, radishes, and lettuces. Most market gardeners or gardeners' labourers were immigrants. Fleeing religious persecution, many protestants fled France and the Low Countries to settle in southern England and brought new farming techniques and knowledge of new crops.⁴¹ Their efforts led to the establishment of market gardens at Sandwich, Norwich, Colchester, Canterbury, Maidstone and London.

Nurseries provided organic material of three forms: live plants, seeds, and bulbs.⁴² The prestige end of market gardening, nurseries supplied plants and trees to wealthy patrons.⁴³ Unlike other forms of market gardening, nurserymen were rarely foreigners. Early nurserymen were former gardeners to noble or gentle households or market gardeners who had amassed enough capital to pursue this new venture.⁴⁴ Similar to kitchen gardens, nurseries were laid out in formal patterns with the plants grown in plots and beds. The same tools were used, and cultivation practises were almost identical to other market gardens.

³⁹ Jack Goody, The Culture of Flowers (Cambridge: CUP, 1993), p.2; Berrall, The Garden, p. 235; Wright, The Story of Gardening, p.251; Keith Thomas, Man and the Natural World (Toronto: Penguin Books, 1983), p.223; Rohde, Garden-Graft in the Bible, p.124; Rohde, The Story of the Garden, p.113; Picard, Restoration London, p. 63, C. Anne Wilson, "Growing Aromatic Herbs and Flowers for Food and Physic," The Country House Kitchen Garden, pp. 86-99.

⁴⁰ Ten acres was established as the maximum in 1649 by the London Gardeners' Company. Joan Thirsk (ed.), The Agrarian History of England and Wales (Cambridge: CUP, 1985) Vol. V i, p. 512.

⁴¹ Thirsk, The Agrarian History of England and Wales, pp. 505-507, 515; John Harvey, Early Nurserymen (London: Phillimore, 1974), p. 30.

⁴² The most famous example was the Brampton Garden nursery run by London and Wise. See Harvey, *Early Nurseymen*, David Green, *Gardener to Queen Anne, Henry Wise and the Formal Garden* (London: Oxford University Press, 1956). See also Malcolm Thick, "Garden Seeds in England before the late eighteenth century: I Seed growing," *Agricultural Historial Review* 38/I (1990), pp. 58-71; Malcolm Thick, "Garden Seeds in England before the late eighteenth century. II The Trade in Seeds to 1760," *Agricultural Historial Review* 38/II (1990), pp. 105-116; Thirsk, *The Agrarian History of England and Wales*, pp. 527-530; Malcolm Thick, "The Supply of Seeds, Plants and Trees to the Kitchen Garden and Orchard, 1600-1800," *The Country House Kitchen Garden*, pp. 36-61.

⁴³ Previously, gardeners that tended the pleasure gardens of the elite obtained their plants either by raising them themselves, buying them from private gardeners, or ordering them from abroad. Thirsk, *The Agrarian History of England and Wales*, p. 504; Harvey, *Early Nurseymen*, p. 27.

⁴⁴ Thirsk, The Agrarian History of England and Wales, p. 525; Harvey, Early Nurserymen, pp. 11, 37. Young gardeners often gained experience by managing the large kitchen gardens on gentry estates. C. Anne Wilson, The Country House Kitchen Garden, p. 7.

B.2 Botanic Gardens

Botanic gardens were plant gardens. For historians studying botany in the past, botanic gardens lie at the academic end of the spectrum and are heralded as a key step in the scientization of the study of plants.⁴⁵ Some historians suggest that the activities of these early gardeners, specifically their collection of data and their patient and detailed observations mirror modern scientific practise.⁴⁶ While the activities of these gardeners may seem familiar, there is a substantial difference between their activity and that of modern botanists. Botanic gardens belong to the study of natural philosophy. These gardens were sites of competing meanings as plants were arranged to illustrate a particular philosophy of nature.⁴⁷ In England, millenarian ideas and theories about the Garden of Eden reached a new level of importance during the religious turmoil of the mid seventeenth century.

In our period, there was one major botanic garden,⁴⁸ the Oxford Botanic Garden.⁴⁹ Established in 1621 by Henry Danvers, Earl of Danby, this garden was both a collection of curious plants and supplied the medical faculty with herbs.⁵⁰ To understand botanic gardens, we need to understand the actions of their gardeners and the founders. These men were collectors and their efforts at assembling plants can be labelled collecting. Collectors in the sixteenth and seventeenth centuries, motivated by highly Christianized

⁴⁵ It is easy to conceptualise the study of the plant kingdom as botany. There is no acceptable word that describes botanical pursuits without evoking modern definitions of the word 'botany'. Yet, there are difficulties that arise in using the word botany - the most obvious is in the definition. According to the *Oxford English Dictionary*, botany is "the science which treats of plants" and a botanist is "one who studies botany."

⁴⁶ Penelope Hobhouse, Plants in Garden History (Great Britain: Pavilion Books, 1992), p. 108; Prest, The Garden of Eden, p. 47; Batey, Oxford Gardens, p. 29; Joseph Reynolds Green, A History of Botany (Toronto: J. M. Dent & Sons Limited, 1914); Edward Hyams, A History of Gardens and Gardening (New York: Praeger Publishers, 1971), p. 127. ⁴⁷ Paula Findlen, Pourssing Netwer, Collecting, and Scientific Colling in Each Medica, In 1970, p. 108; Prest, The Garden of Eden, p. 47; Batey, Oxford Gardens, p. 29; Joseph Reynolds Green, A History of Botany (Toronto: J. M. Dent & Sons Limited, 1914); Edward Hyams, A History of Gardens and Gardening (New York: Praeger Publishers, 1971), p. 127.

⁴⁷ Paula Findlen, Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy (Berkeley: University of California Press, 1994), p. 201.

⁴⁸ There are other examples of botanical gardens. The first, the Chelsea Physics Gardens was more of a medicinal garden and it is beyond the period of study as its full development is more of an eighteenth-century phenomenon. The second is the garden at Westminister. Edward Morgan, Herbarist to the Physick Garden of Westminister, owned by Ralph Tuggie - referred to in Coles, *Adam in Eden* (1657) and Parkinson, *Paradisi in Sole* (1629). Rohde, *The Story of the Garden*, p. 133; R.T. Gunther, *Early British Botanists and Their Gardens* (Oxford: Oxford University Press, 1971), pp. 351-353; Harvey, *Early Nurseymen*, pp. 43-45.
⁴⁹ Historical discussion of the Oxford gardens is sparse. Most scholars only include mention of the garden in a few pages. For a more detailed discussion see: Batey, *The Oxford Gardens*; R. T. Gunther, *Early Science in Oxford* (London: Dawsons of Pall Mall, 1967); R.T. Gunther, *Oxford Gardens* (Oxford: Parker, 1912); Edward Hyans, *Great Botanical Gardens of the World* (Italy, The Macmillan Company, 1969), pp. 102-103; T.G. B. Osborn, "The Oxford Botanic Garden," *Endeawar* 10 (1951), pp. 70-77.
⁵⁰ See **Plate Three**. David Loggan published a set of engravings of Oxford. *Oxonia Illustrata* (1675). Included in this collection is an illustration of the botanic gardens. See **Plate Eighteen** for another example of Loggan's work. Loggan also produced engravings of Cambridge. *Cantabrigia illustrata sive* (1690).

philosophies and their own desires to display a completed collection, created visible and tactile collections of nature.51

The main motivation behind the creation of a botanic garden was to assemble an encyclopaedic collection of plants or a living catalogue of creation.2 For these gardeners, nature was a jigsaw puzzle. Assembling the various pieces in one location would produce a visual model of the finished product.53 The plants excluded from these collections are as important as those included.54

Religious theories underlay botanic gardens, particularly ideas about the Garden of Eden. Adam and Eve, while living in Paradise, had seen the complete assemblage of nature. The driving force behind investigations into the natural world was to recreate Religious theory held that God had revealed a part of himself in this paradise.55 everything he created; a complete collection would therefore reveal God completely. Nature was a text that could be used to discover the divine plan of the cosmos. The book of nature was read and analysed as intensely as the book of scripture.36

A catalogue was an important element in these collections. A published catalogue proved the collector had reached (or almost reached) completion.57 Catalogues are also keys to interpretation as they outline the particular structure and organization of the

⁵¹ Recent literature explores the nature and ramifications of collecting in the early modern period. See Paula Findlen, "Courting Nature," Cultures of Natural History (Cambridge: CUP, 1996), pp. 58-74; Findlen, Possessing Nature, John Elsner and Roger Cardinal, Cultures of Collecting (Cambridge, MA: HUP, 1994).

⁵² Prest, The Garden of Eden, p. 39; Findlen, Possessing Nature, p. 199; Cunningham, "The Culture of Gardens," p. 49. 53 Botanic gardens were not always limited to plants; many contained animals and even rocks.

⁵⁴ If collectors sought to assemble all the plants of the world, what about weeds? What is a weed? The simplest definition of this term is an unwanted plant but how do modern definitions compare to seventeenth-century definitions? Modern definitions of weeds do not label weeds as 'good' or 'bad'. Weeds are plants that tempt the botanist to use anthropomorphic terms such as aggressive and opportunistic. Once a plant has escaped the care and nurturing of the garden it becomes a nuisance or weed. The main problem with weeds is that, unlike garden plants, man cannot control their reproduction. In one of the earliest husbandry manuals there is reference to weeds. John Fitzherbert, Book of Husbandry (1523) but when did the concept of the weed arise? If the concept of 'weeds' co-existed with the botanic garden, did the gardeners include weeds in their collections? Did weeds exist in the Garden of Eden or did they appear after the Fall? How did the hot protestants and millenarians deal with weeds when trying to reconstruct Paradise? Nan Fairbrother, Men and Gardens (New York: Lyons & Burford, 1997), pp. 28, 184-186; Alfred Crosby, Earlogical Imperialism (Cambridge: CUP, 1986), pp. 149, 164, 167; Crosby, Ecological Imperialism, p. 150; Thomas, Man and the Natural World, p. 270.

⁵⁵ What complicated the issue was that theorists believed that the Fall corrupted human senses. Only Adam had pure and uncorrupted knowledge and that power allowed him the ability to use the proper names for flora and fauna. See Shapin, The Scientific Revolution, p. 74.

⁵⁶ Knowledge of nature was deeply relevant to problems of order because the divinely authored book needed proper reading and proper interpretation to secure the right believes and guarantee right conduct. Shapin, The Scientific Revolution, p. 125; Findlen, Possessing Nature, pp. 95-96. "The Creatures of God are to be studyed as Bookes, for in them we may read the Attributes of God and observe some small resemblances ... " Ralph Austen, The Spiritual Use of an Orchard (1653). See also Prest, The Garden of Eden, p. 55.

⁵⁷ Anthony Alan Shelton, "Cabinets of Transgression: Renaissance Collections and the Incorporation of the New World," The Cultures of Collecting, p. 186; Findlen, Possessing Nature, p. 36.

collection.⁵⁸ There are several examples of catalogues of plants published in this period, not all of which are limited to botanic gardens.⁵⁹ Parkinson published a listing of his garden at Long Acre, Thomas Johnson published catalogues based on his botanical excursions throughout England and Wales, and two catalogues of the Oxford gardens were published. Both Oxford volumes were produced under the authority of the first gardener, Jacob Bobart the Elder and his successor and son, Bobart the Younger.⁶⁰

Ultimately it was the overwhelming number of new plants brought from the New World and other foreign countries that destroyed the early hopes for botanic gardens. Indeed, there is a distinction between botanic gardens before and after the opening up of the New World.⁶¹ Believing that God revealed new parts of the puzzle when he deemed man to be worthy, theorists first interpreted the New World as a new piece of the puzzle.⁶² New plants and animals revealed to the explorers proved that they were, they thought, on the right track. Incorporating the new plants into botanic gardens meant they were one step closer to recreating Paradise.

B.3 Pleasure Gardens

In contrast to the more utilitarian botanic garden, pleasure gardens were created for purely aesthetic reasons. Strictly controlled areas, these gardens were the most ordered and structured spaces of 'nature'. In conception and in effect, gardens were rooms.⁴³ These 'rooms' were contained and isolated from the surrounding natural world. Early gardens were walled and private; hedges or walls defined and limited the layout of the

⁶¹ Prest, The Garden of Eden, pp. 42, 91; Shapin, The Scientific Revolution, p. 78, Findlen, "Courting Nature," p. 71.. ⁶² In his Plantarum Libri Sex, Abraham Cowley discusses the New World and explains why the Indies were kept hidden for so long. Abraham Cowley, Plantarum libri sex (1662). Prest, The Garden of Eden, p. 39.

⁵⁸ Findlen, Possessing Nature, p. 36.

⁵⁹ Examples include: John Gerard, The berball or Generall bistorie of plantes. (1597); John Parkinson, Theatrum Botanicum (1640); William Howe, Phytologia britannica; (1650); Nicholas Culpepper, The English Physitian (1652); Robert Lovell, Pambotanologia (1659), Hugh Platt, Floraes paradise (1608), John Tradescant, Musaeum Tradescantianum (1656), Robert Morison's work, and to some extent the work of John Ray.

⁶⁰ The first, *Catalogus plantarum horti media Oxoniensis*, appeared in 1648, published by Jacob Bobart the elder. A small duodecimo book, it consists of a list of the plants in the garden first in Latin-English and second in English-Latin. The second improved edition *Cataologus horti lotanici oxoniensis* appeared in 1658, published by Jacob Bobart the Younger, Dr William Stephens, Principal of Magdalen Hall, and Wood Browne, senior fellow of Magdelan.

⁶³ Leighton, Early American Gardens, p. 10; Forsyth, "Medicinal and Kitchen Gardening," p. 65; Berrall, The Garden, p.228; Rohde, The Old English Gardening Books, p. 6-7; Ellen Eyler, Early English Gardens and Garden Books (Charlottesville: University Press of Virginia, 1963), p. 24; Gunther Mader and Laila Neubert-Mader, The English Formal Garden (London: Aurum Press, 1992), p. 18.

pleasure gardens. A place for walking, gardens were an area for the sedentary to exercise.44

There are several different sorts of "pleasure gardens" in the seventeenth century. Initially, pleasure gardens were parks and walking areas, areas for the wealthy to enjoy the outdoors.⁶⁵ Royal gardens allowed courtiers and nobles places to compete in fashionable activities and displays of wealth. As André Mollet suggested:

the delights of the greatest Monarchs, and Mightiyst Princes, which do find no Divertisments more agreeable, more wholesome, and of more efficacy, to refresh both the Body and Mind after the toilsomnes of Political Studys, and the weighty affairs of State, then walking under shady covertures, and in Garden-Allies, where the pleasant Green, and unimitable Tapistry, composed of fruits and leaves of the (Espaliers (Wallfruits) and Counter Espaliers) and of the Pallissadoes, and curious, and pleasant variety of Enamel'd Flowers, doth furnish a wonderful ravishing object, both to the inward and the outward senses.⁶⁶

For example, during the Civil War, while the court of Charles I was at Oxford, the courtiers used the college gardens as a place to socialize. Charles II used this underlying concept when rebuilding St James's Park. An extremely popular park, Charles II structured this garden as a public area in which he could display himself to his public. St James's Park was one area he could meet his new subjects and re-establish their visual and social contact with the monarch.⁶⁷ As such, there are strong political messages built into the layout and structure of the gardens. After the Restoration, the ideas of parks and public pleasure gardens grew in popularity.⁶⁸ The citizens of London also had garden areas for walking: the Artillery Grounds, Bunhill Fields, Spring Gardens at Charing Cross, Mullbery Gardens, and the fields of Finsbury Manor.⁶⁹

A second type of pleasure garden that developed in this period is the small cottage garden. This is the pleasure garden that we find mentioned in books by Parkinson,

⁶⁴ Thomas, Man and the Natural World, p. 238; Liza Picard, Restoration London (New York: St Martin's Press, 1997), p. 55; Hole, The English Housewife in the Seventeenth Century, p. 153. Timothy Nourse outlines how and where to plant trees near the country house to create walks, Campania Foelix (New York: Garland Publishing, 1982), pp. 302-303. In her travel accounts, Celia Fiennes was careful to include mention of the variety and structure of the walks she encountered on the various estates. See Christopher Morris (ed), The Journeys of Celia Fiennes (London: Cresset Press, 1947) and Christopher Morris (ed), The Illustrated Journeys of Celia Fiennes (London: Macdonald, 1982).

 ⁶⁵ A relatively unmentioned topic, the town gardens are an interesting variation on seventeenth-century gardens. Mireille Galinou, London's Pride: The Glorious History of the Capital's Gardens (London: Anaya Publishers, 1990), p. 6.
 ⁶⁶ Andrew Mollet, The Garden of Pleasure (1670).

⁶⁷ Originally part of St James's Park, the Spring Gardens had existed since the first quarter of the century as a resort of fashion in London. Amherst, A History of Gardening in England, p.221; Strong, Royal Gardens, p. 7; Rohde, The Story of the Garden, p. 139; Fairbrother, Men and Gardens, p. 180.

 ⁶⁸ See Plate Four for a map of the various gardens in London. The full story of London parks and public gardens requires an eighteenth-century discussion. For more information on specific pleasure gardens in London see: Warwick Wroth, London Pleasure Gardens of the Eighteenth Century (New York: Macmillan, 1896) and Picard, Restoration London, pp. 58-60
 ⁶⁹ Picard, Restoration London, p. 63; Hole, The English Housewife in the Seventeenth Century, p. 153.

Gerard, and Markham. Simpler in form and intended for the individual's enjoyment, these pleasure gardens were found in the front of a cottage or house and were quasiprivate areas of open air, relaxation, and contemplation. In various gardening books of the period, there are instructions and layouts on where to place the garden in relation to the house.

An older theme associated with the concept of a 'pleasure' garden concerns human usage of these gardens. There is a long history of the association between gardens and the idealized pleasure of love.⁷⁰ The mediaeval origins of this tradition in literature and art have a strong theological emphasis. Most mediaeval descriptions of gardens are intensely laden with symbolism.⁷¹

Even accounts and interpretations of the Garden of Eden had underlying sexual themes. The idea of the Fall suggests the fallen state of women and men (but mostly women). Gardens are implicitly places for illicit sex - recreating the Fall of man. Gardens allowed for contrived encounters and were an ideal place for lovers to meet.⁷² For our period, the concept of 'pleasure' as related to gardens takes on a different hue. Pleasure is less a religious passion and more of a human desire. The Earl of Rochester's ribald poetry illustrates the hidden world of these pleasure gardens.⁷³ During the Civil War, John Aubrey noted how the gardens at Oxford were much frequented by the courtiers and their ladies.⁷⁴ A strong undercurrent to discussions of women in gardens is the idea of the prostitute or whore who frequents the gardens at improper times of the day or in excess.⁷⁵ For all three types of pleasure gardens, social activity in the physical environment of the garden structured their definition and construction.

B.4 Stuart Gardens

The gardens of the nobility and aristocracy have traditionally been classified as 'formal' gardens. The origin of this term relates to the strict control of nature to produce an artificial and structured environment that characterized these gardens.

⁷⁰ Helen Phillips, "Gardens of Love and the Garden of the Fall," A Walk in the Garden: Biblical, Iconographical and Literary Images of Eden (England: Sheffield Academic Press, 1992), p. 205.

⁷¹ For example, the rose often represented a lady's sexual favours and the walled garden symbolized the virgin (both the Virgin Mary and the virginity of a woman). Phillips, "Gardens of Love and the Garden of the Fall," p, 210; Cunningham, "The Culture of Gardens," p. 39. See also C.S. Lewis, *The Allegory of Love* (Oxford: Clarendon Press, 1936).

⁷² Phillips, "Gardens of Love and the Garden of the Fall," p. 211; Cunningham, "The Culture of Gardens," p. 53.

⁷³ John Wilmot, "A Ramble in St James's Park" John Wilmot, Earl of Rochester. The Complete Works (Toronto: Penguin Books, 1994), p. 31-35.

⁷⁴ Batey, Oxford Gardens, p. 35.

⁷⁵ Arbours in the gardens were places for lovers - secluded and private. Berrall, The Garden, p.228.

Seventeenth-century Englishmen lived in a disordered world, and believed that God had laid everything out regularly before our Fall. Seeking to recreate this regularity, they imposed strict management on the plants in their gardens. Neatness, symmetry, and formal patterns indicated the separation between culture and nature.⁷⁶

The main elements of a formal garden were an enclosure surrounding the garden (either a hedge or a wall), geometrical edged beds containing various ornamental plants, and gravelled walks. Beyond these elements, many other possible variations existed; gardeners adjusted plans for practical considerations. Hedges and walls enclosed the gardens, and divided it into zones.⁷⁷ Paths and walks bordered the beds and ornaments ornaments such as sundials, mazes or knots, topiary, sculptures, bowling greens, and mounts.

For the monarchy, nobility and gentry, these gardens were intensely symbolic. As symbols of the King's peace, these gardens were laden with emblematic and classical allusions to the glory of the monarchy; gardens were an emblem of the monarch's ability to rule his subjects and nature.⁷⁸ Desperate for money, the Commonwealth government decided to use the land holdings of the previous monarch. The close associations with the monarchy and what was perceived as Stuart absolutism made these estates prime targets. Many of the great Tudor and early Stuart gardens were dismantled or destroyed, along with the estate houses, by Cromwell's government.⁷⁹ During the Commonwealth, a commission was sent to make an inventory and value the properties of Theobalds, Nonsuch, Hampton Court and Wimbledon.⁸⁰ Considered extravagant and unnecessary, these estates were stripped and ruined. Wimbledon and Theobalds disappeared.⁸¹

⁷⁸ Hoyles, *Bread and Rase*, p. 12; Johnson, "Citizens, Gardens and Meanings," p. 17; Strong, *Renaissance Garden in England*, p.10. ⁷⁹ Scholars suggest the actions of the Commonwealth government helped to remove the lasting influences of the formal design of gardens, leaving the field open to the French style brought by Charles II. Royal estates were not the only estates affected by the war. Cliffe suggests that at least 80 country houses were destroyed or severely damaged. J.T. Cliffe, *The World of the Country House in Seventeenth Century England* (London: Yale University Press, 1999), p. 12. Mark McDayter, "Poetic Gardens and Political Myths: the renewal of St. James's Park in the Restoration," J of Garden History (1995) 15/3, p. 135.

⁷⁶ Prest, The Garden of Eden, p. 89; Thomas, Man and the Natural World, p. 256.

⁷⁷ As mentioned in the Bible, the Garden of Eden was divided into four zones by a river, Genesis II..10-14. While there is little discussion of the use of rivers in any of the gardening manuals surveyed for this period, the travel account of Celia Fiennes includes numerous references to the use of rivers.

⁸⁰ Wright, A History of Garden Art, p. 458; Amherst, A History of Gardening in England, p. 182. See also Arthur MacGregor (ed.), The Late King's Goods: Collections, Possessions, and Patronage of Charles I in the Light of the Commonwealth sale inventories (Oxford: Oxford University Press, 1989).

⁸¹ The Parliamentary Survey of Wimbledon is reproduced in Amherst, A History of Gardening in England. See also Wright, A History of Garden Art, p. 458; Amherst, A History of Gardening in England, p. 182.

Hampton Court was saved for the Protector and his family. The others were parcelled and sold out. Nonsuch escaped with only the trees cut down.⁸²

During the Restoration period, garden designs and ideas, as demonstrated by André Mollet in France and in England, exemplify the most common principles of the French style of gardening.⁸³ Frequently confused with André Le Nôtre, Mollet's significance for English gardens is strikingly understated.⁸⁴ Mollet's garden design projects include: Wimbledon Manor for Charles I, work at the Swedish Court, work at the French Court, and St James's Park for Charles II.⁸⁵

The influence of the French court was strong in Restoration England as the majority of the Royalists and the entire royal court had spent the previous decade in France. Following the Restoration, Charles II and the nobility adopted several features of the French style of gardening.⁸⁶ Versailles was the model to which everyone looked.⁸⁷ Originally considered indicators of a separate style of gardening, the differences between the French style and the previous formal gardens are merely variations. Unlike enclosed gardens, the hedges in earlier gardens were not intended to exclude the outside world. These elaborate gardens designed with French ideas in mind were intended to dominate the landscape, not ignore it.⁸⁸

⁸⁴ The authors who suggest it was Le Nôtre are: Amherst, A History of Gardening in England, pp. 203-205; Hyams, A History of Gardens and Gardening, p. 175. In a recent article, Pattacini has placed Mollet's contribution into its correct context. Laurence Pattacini, "André Mollet, Royal Gardener in St James's Park, London," Garden History 26/1 (1998), pp. 3-18.

 ⁸² Although Nonsuch survived the Commonwealth, it did not last long. Chades II gave it to his mistress the Countess of Castlemaine who parcelled and sold it. John Evelyn comments on Nonsuch (1666) see Hoyles, *Bread and Raser*, p. 13.
 ⁸³ The gardens that can accurately be labelled as 'French' are those designed by Frenchmen or men trained in France. This was not the first time French ideas influenced garden design, during the reigns of James I and Chades I there are noticeable design ideas that mirror contemporary French ideas. Hyams, A History of Gardens and Gardening, p. 149.

⁸⁵ For information on his Dutch designs see: Florence Hopper, "The Dutch classical garden and André Mollet," J of Garden History (1982) 2:1, pp. 25-40 and Sten Karling, "The Importance of Andre Mollet and his Family for the Development of the French Formal Garden," The French Formal Garden (Washington: Dumbarton Oaks Trustees for Harvard University, 1974).
⁸⁶ Hobhouse, Plants in Garden History, p. 186; Richard Gorer, The Flower Garden in England (London: B. T. Batsford, 1975), p. 28; Berrall, The Garden, p. 247; Wright, The Story of Gardening, p. 251; McDayter, "Poetic Gardens and Political Myths," p.135. Some English estates altered with the addition of French garden designs were: Woburn, Cassiobury, Eastwell Park in Kent, Kirby in Northamptonshire, and Greenwich. There is fuller discussion of the revisions Charles included in Greenwich in Strong, Royal Gardens, pp. 16-19; Hyams, A History of Gardens and Gardening, p. 177.

⁸⁷ Designed by Le Nôtre, the gardens were magnificent. They dominate the landscape and surrounding countryside; structured around the palace, the grounds were purposely laid out to emphasis the dominance of the seat of power. In many ways, this grand French style died with the creation of Versailles. The ultimate expression of control over nature and the dominance of man, these gardens were a magnificent symmetrical formal garden. Leighton, *Early American Gardens*, p. 12; Berall, *The Garden*, p. 211; Wright, *The Story of Gardening*, pp. 270-296.

⁸⁸ Fairbrother, Men and Gardens, p. 29.

One important new element to these designs was the use of the *parterre.*⁸⁹ New College Oxford was the first to follow the French style of parterre gardening in balanced quarters - viewed from an elegant mount.⁹⁰ Another design element typically associated with French gardens is the tree-lined avenue. Popularized by Mollet, avenues became a standard visual symbol in the estates of the nobility and gentry. Yet, the idea of using avenues or walks of trees has origins in Tudor England when they symbolized ceremonial routes.⁹¹ By 1660, avenue planting had become an accepted part of estate planning. The *patte d'oie* is the centre of all the avenues. Radiating outwards, these lines of trees extend the influence of the house or palace outwards onto the countryside.⁹² Standing in the centre, the owner can see the full extent of his domain. The trees also served as a blind, they forced anyone in the avenue to concentrate their attention on the centre or focal point - the house or palace.

Books promoting tree planting, increased planting of avenues and the numerous illustrations from this period demonstrate the popularity of this practise.⁹³ Books and manuals were also printed extolling the virtues of French gardening ideas. Rene Rapin's *Of Gardens* (translated by Evelyn) provides instructions on all kinds of garden matters and celebrates French examples.⁹⁴

One of the most vivid literary examples of the French influence is Mollet's The Garden of Pleasure.⁹⁵ Intended to oblige the Gentry and Nobility to follow Charles' II use of French gardening ideas, the book included designs by Mollet's own hand so they

⁸⁹ Invented by the Mollet family. Discussed in Michel Conan (ed.), *Le Jardin de Plaisir* (Paris: du Moniteur, 1981). As with every new trend, *parterres* were not popular with everyone; John Worlidge complained about them in *Systema Agriculturae* (1669). Bisgrove, *The National Trust Book of the English Garden*, p. 75.

⁹⁰ Batey, Oxford Gardens, p. 43.

⁹¹ Sarah Couch, "The Practice of Avenue Planting in the Seventeenth and Eighteenth Centuries," J of Garden History 20 (1992), p. 174; Reginald Blomfield, The Formal Garden in England (London: Macmillan, 1901).

⁹² McDayter, "Poetic Gardens and Political Myths," p. 142; Prest, The Garden of Eden, p. 93.

⁹³ Some excellent examples of the use of this style in an estate can be seen in Badminton (**Plate Five**), and Bramham Park. See also John Evelyn, *Sylva* (1670); Moses Cook, *The Manner of Raising, Ordering, and Improving Forest-trees* (1676); Johannes Kip, *Britannia Illustrata* (1707); Nourse, *Campania Foelix* (1700). Couch, "The Practice of Avenue Planting in the Seventeenth and Eighteenth Centuries," p. 174; Cliffe, *The World of the Country House*, p. 57.

⁹⁴ John Dixon Hunt and Peter Willis (ed), The Genius of the Place (London: Paul Elek, 1975), p.82. John Evelyn., Of gardens four books first written in Latine verse by Renatus Rapinus; and now made English by J.E. (1672).

⁹⁵ Mollet, *The Garden of Pleasure*. This book was originally published in France as *Le Jardin de Plaisir* in 1651. There is some doubt as to whether Mollet wrote the preface to the text, see Blanche Henrey, *British Botanical and Horticultural Literature before 1800* (Toronto: Oxford University Press, 1975), pp. 201-203. John Evelyn quotes Mollet's book in his notes for *Sylva* (1664). Douglas Chamber, "Wild Pastorall Encounter: John Evelyn, John Beale and the Renegotiation of Pastoral in the Mid-Seventeenth Century," *Culture and Cultivation* (Leicester: Leicester University Press, 1992), p. 174.

would "be made the more intelligible to the curious."[%] The reasoning behind his style of garden design is as follows:

[but], when Art helps this good Mother, and disposes all these Vegetable Productions according to the Orders which she borrows from the divers situations and Soiles which the said Nature provides; It then appears in a regularity, which offends neither the understanding nor the eye-sight, but affords wonderful satisfaction and pleasure, and contributes to the delights of the greatest Monarchs, and Mightiyst Princes...⁹⁷

In the main text of the book, Mollet outlines in exact detail which steps to follow to create the Garden of Pleasure. For example, he states "that the Royal and Lordly House ought to be situated in an advantageous place, thereby to be supply'd with all the requisite things for its Embellishment," and that in front of the house there should be "a great Walk of double or treble rank" in a perpendicular line to the front of the house.³⁸ Other walks lined with trees should be built radiating from the left and right of the house. Suggesting the use of Lime Trees or female Elms, Mollet describes that at the base of the walk there should be a large 'Demy-circle, or Square'.³⁹

Closer to the house, one should place "Imbroider'd Ground-works, knots of Grass, Wildernesses, fine Alleys in Terrasses, and flat Walks, so ordered, that they may still end at some Fountain or Statue". Fountains, statutes on pedestals and 'such like Ornaments' finish off the inward garden. Furthermore, the 'Ground-works' should be framed as to be viewed from the windows, constructing those farther away larger "that if they be very exactly proportion'd to the distance of the sight, they will thereby appear much more beautiful".¹⁰⁰ The remainder of the book outlines nineteen designs for various gardens.

Upon Charles II's return to England, the King rebuilt the gardens in three estates; St James's Park was the first. Mollet's ideas on garden design are best articulated in his

⁹⁶ "Hence it is, *Sir*, that I am emboldned to *Present* and *Dedicate* to Your Majesty, that which the Study, the Experience and the Labour, which I have undergone under Your Auspices and elsewhere, have furnished me with most Remarkable, both as to what hath been observ'd from Antiquity, and what hath been acquired of Modern;" Mollet, *The Garden of Pleasure*, Letter to the Reader.

⁹⁷ Mollet, The Garden of Pleasure, Letter to the Reader.

⁹⁸ Mollet, The Garden of Pleasure, p. 1.

⁹⁹ Lime and Elm were the most popular choices for trees; however, other possible choices were horse chestnut, beech, oak, and conifers. Mollet, *The Garden of Pleasure*, p. 1. See also Nourse, *Campania Foelix* (1700) for more information on specific trees. For more specific details see Couch, "The Practice of Avenue Planting in the Seventeenth and Eighteenth Centuries," p. 179-184.

¹⁰⁰ Mollet, The Garden of Pleasure, p. 2.

design of St. James's Park.¹⁰¹ Laden with political symbolism, St James's Park celebrated and justified the new political order.¹⁰² Charles II intended the park to symbolize a rebirth of nature, a renewed Paradise. This second, recreated Paradise replaced the previous one destroyed by the Commonwealth government. Playing on millenarian ideas, the return of the Stuarts fulfilled the idea of a second coming.¹⁰³ Just as Charles II reclaimed and recultivated the park, so would he reclaim and recultivate the nation.

Included in the park were a canal, a park for hunting, a telescope, physick gardens, free-roaming animals, and long avenues of trees.¹⁰⁴ The canal, which stretched between Whitehall Palace and St James's Palace, was a new element for English gardening.¹⁰⁵ Canals create a particular visual effect. By mirroring the horizon, they add the sense of infinite space. Reflecting the house behind the inner gardens reinforces the visual domination of the seat of power. There are a few problems with the layout of St James's Park that complicate some of the meanings, but overall the park was an amazingly effective political symbol for Restoration England.¹⁰⁶

C.1 Garden of Eden

God created only one garden, the Garden of Eden. All other gardens in the Christian tradition were the result of human skill and art. Paradise and Eden are religious utopias.¹⁰⁷ It is interesting to note that in the biblical description, the Garden of Eden did not contain flowers, only the rivers and the trees are mentioned. No other plants are listed. During the seventeenth century, this theme was tied to millenarian ideas perpetuated by hot protestants. Affecting everything from botanic gardens to

¹⁰¹ Employed along with nephew Gabriel "exclusively for the design and maintenance of the Royal Gardens at St. James's." Mollet was not the only gardener involved in the creation of St. James's Park. Adrian May was appointed "supervisor of the French gardeners employed at Whitehall, St. James and Hampton Court." As an extremely potent and public symbol, George Monck was appointed keeper of the Park as a reward for his assistance in Charles II's return. Pattacini, "André Mollet," p. 10; Amherst, *A Flistory of Gardening in England*, p. 203; McDayter, "Poetic Gardens and Political Myths," p. 136.

¹⁰² There are two previous descriptions of the park that survive, one by Sieur Puget de la Serre in 1638 and one by Sieur Albert de Mandelslo in1640. Quoted in Pattacini, "André Mollet," p. 4. See **Plate Six** for Johannes Kip's illustration of the layout. Charles II realized the importance of symbolism and ceremony in justifying and celebrating his monarchy. For example, when he landed on the shores of Dover he was met by the mayor of the town holding a bible, upon which Charles II subsequently swore to live a good life. See John Spurr, *The Restoration Church of England* (New Haven: Yale University Press, 1991), pp. 29-30. ¹⁰³ McDayter, "Poetic Gardens and Political Myths," pp. 136-137, 140.

¹⁰⁴ McDayter suggests that the inclusion of the telescope in the park symbolized the importance of scientific knowledge in understanding and repairing the post-lapsarian world. The flowers Mollet used in the garden were imported from Paris from his nephew Charles. The animals were mentioned by both John Evelyn and Celia Fiennes. McDayter, "Poetic Gardens and Political Myths," p. 137, 141; Pattacini, "André Mollet," p. 13.

¹⁰⁵ See **Plate Seven** for a depiction of the canal created at Hampton Court.

¹⁰⁶ For a more detailed listing of the problems see McDayter, "Poetic Gardens and Political Myths," pp. 142-145.

^{107 &}quot;Paradise is a garden: a garden is a paradise." Cunningham, "The Culture of Gardens," pp. 38-39. See also Hill, The English Bible, p. 127.

husbandry manuals, this theme is an undercurrent in almost all aspects of gardens and plant collecting during the period.

Seventeenth-century interpretations of the Garden of Eden differed from previous ones. Firstly, the seventeenth-century version focused on Adam.¹⁰⁸ In Paradise, Adam had been a gardener, instructed by God to tend the plants and animals; he willingly submitted to the work, consequently his labour was pleasant.¹⁰⁹ This obedience brought him complete control over his environment. As lord of all nature, Adam knew the names of every creature - knowledge that scholars sought to regain. The effort of gardeners and philosophers was aimed at restoring Adam's lost dominion over nature.¹¹⁰ Seen as an agent of creative evolution, Adam curbed the natural luxuriance of the earth by cutting back excessive growth.

Second, instead of discovering the location where the Garden of Eden still existed, hot protestants sought to recreate paradise. During the religious turmoil of the 1630s and 1640s, the image of the new Eden was particularly clear. Hot protestants believed a return to grace was possible through the relentless search for purity in their personal life and in nature. Yet, puritan intellectuals thought the English were far from regaining dominion because their command of agriculture and technology was considerably more backward than their European neighbours.¹¹¹ The protestants believed that later generations could use experimental techniques to bring about improvements. Tending the soil demanded effort because idleness was unthinkable, even in paradise. Believing that the New Eden would redress this imbalance, man would toil and the earth would give fruit, these protestants sought to hasten the Millennium by making the earth bear fruit.¹¹²

¹⁰⁸ Adam the Gardener and Paradise Lost were the new imagery. Adam was frequently portrayed as a gardener. Batey, Oxford Gardens, p. 37; Charles Webster, The Great Instauration (New York: Holmes & Meier Publishers, 1975), p. 466. Though Walter Blith did state that God was the first husbandman. Michael Leslie, "The Spiritual husbandry of John Beale,"

Culture and Cultivation, p. 156.

¹⁰⁹ "But my purpose is onely to shew you, that Paradies was a place (whether you will call it a Garden, or Orchard, or both, no doubt of some large extent) wherein Adam was first placed to abide; that God was the Planter thereof, hauing furnished it with trees and herbes, as well pleasant to the sight, as good for meate, and that hee being to dresse and keepe this place, must of necessity know all the things that grew therein, and to what vses they served, or else his labour about them, and knowledge in them, had been in vaine." Parkinson, *Paradici in sole* (1629).

¹¹⁰ Webster, The Great Instauration, pp. 324-326.

¹¹¹ Webster, The Great Instauration, p. 335.

¹¹² After Adam was expelled from the garden, it became choked with weeds. Webster, *The Great Instauration*, p. 466. Batey, *Oxford Gardens*, pp. 37-38.
C.2 Medicine, Plants and Universities

The study of plants was undertaken to identify the uses and virtues of plants. Almost all of the uses and virtues discovered were medicinal. There was a long tradition of the study of plants as part of medicine. Scholars, herbalists, apothecaries, and physicians studied and investigated plants for medical knowledge.¹¹³ For example, the Chelsea Physic Gardens was established as a collection of simples, an apothecary's garden, which focused on the medicinal properties of plants.¹¹⁴ The influx of new plants brought by explorers of the newly discovered lands gave a new impetus to the study of medicine as scholars tried to sort, classify, and explain the new plants.¹¹⁵ Medicinal plants were not only of interest to scholars. Kitchen gardens contained herbs used by the household for medicines. Several books were published with the intent of teaching the medicinal properties of plants.¹¹⁶

Just as the average person kept a kitchen garden for their own personal medicines, Universities maintained gardens for their medical faculties.¹¹⁷ These gardens served as collections of simples and gave rise to botanic gardens. On the Continent, Universities established botanic gardens with the aim to assemble a full collection of all medicinal plants. Theorists believed that a completed Botanic Garden, with a complete collection of every plant, could provide physicians with the cure for every injury and infection.¹¹⁸ These gardens provided a tactile and theatrical way to study medicine as compared to the

¹¹³ In The Art of Simpling, Coles explains that nature had a remedy for every disease. William Coles, The Art of Simpling (1656). There is also a 1657 edition. See also Coles, Adam in Eden (1657); John Pechet, The Complete Herbal of Physical Plants (1694); Robert Turner, Botanolo'gia (1664); Gerard, Herball (1597); Culpepper, The English Physician (1652). Gunther, Early British Botanists, p. 19.

¹¹⁴ Dawtrey Drewitt, The Romance of the Apothecaries' Garden (London: Chapman and Dodd, Limited, 1924). Hobhouse, Plants in Garden History, p. 112; Wright, The Story of Gardening, pp. 246, 317-319; Rohde, The Story of the Garden, pp. 155-156; Amherst, A History of Gardening in England, pp. 230-232.

¹¹⁵ One question that troubled seventeenth-century theorists and naturalists was: did God create medicinal plants because he knew man would fall?

¹¹⁶ "A Work of such a Refined and Useful Method, that the Arts of Physick and Chirurgeries are so clearly laid open, that Apothecaries, Chirurgions, and all other ingenious Practitioners, may from our own Fields and Gardens, best agreeing with our *English* Bodies, on emergence and sudden occasions, completely furnish themselves with cheap, easie, and wholesome Cures for any part of the Body that is ill-affected." Coles, *Adam in Eden* (1657). There is a heavy focus on medicinal plants because the majority of herbal writers had medical training. For example, Parkinson was trained as an apothecary (*Ioanni Parkinsons Pharmacopeo Londinensi sclertissimo Botanico consummatissimo*); John Gerard was a barber-surgeon; and Nicholas Culpeper was an apothecary.

¹¹⁷ For discussion of medical nature of these gardens, see Nancy Siraisi, Mediaval & Early Renaissance Medicine (Chicago: U of Chicago Press, 1990); Karen Reeds, Botany in Medieval and Renaissance Universities (New York: Garland 1991).

¹¹⁸ Webster, The Great Instauration, p. 125; Findlen, Possessing Nature, pp. 10, 57; Batey, Oxford Gardens, p. 32. See also Prest, The Garden of Eden, p. 10.

previous textual and bookish tradition of using illustrations or descriptions of plants.¹¹⁹ Collecting plants in these gardens made medicinal knowledge demonstrable.

C.3 Doctrine of Signatures

The doctr-ine of signatures was a medical theory that was revived contemporaneously with the deve-lopment of the botanic garden after losing credibility in the Middle Ages.¹²⁰ In the Gardeen of Eden, Adam had known the names of all the plants and animals because he co-uld read all the visible and silent signatures of nature.¹²¹

..wee that are Christians haue out of a better Scholle learned, that God, the Creator of Heaven and Earth, at the beginning when he created *Adam*, inspiried him with the knowledge of all natural things (which successively descended to *Noab* afterwardes, and to his P-osterity): for, as he was able to give names to all the living Creautres, according to their severall natures; so no doubt but hee had also the knowledge, both what Herbes and Frunits were fit, eyther for Meate or Mediicne, for Vse or for Delight. And that *Adam* might exercise this knowledge, God planted a Gardne for him to live in, (Wherein even in his innocency he was to labour and spend his time) which hee stored with the best and choysest Herbes and Fruits the earth could produce, that he might have not onely for necessiite whereon to feede, but for pleasure also; the place or garden called Paradise importing as much, and more plainely the words set downe in Genesis the second....¹²²

It was widely believed that after the Fall, God had left indications of the correct usage and name for each creature.¹²³ Relearning the signs and signatures of the natural world would p-rovide natural philosophers with Adam's lost knowledge.¹²⁴ For example, William Coles was a strong advocate of this doctrine; he suggested in *Adam in Eden*

¹¹⁹ Findlen, Possessing ENature, p. 9.

¹²⁰ Prest, The Garden of Eden, p. 62; Wright, The Story of Gardening, p. 250; T. F. Thiselton Dyer, The Folk-lore of Plants (New York: D. Appleton and Company, 1989), pp. 202, 215; Agnes Arber, Herbals: Their Origin and Evolution (Darien, Conn.: Hafner Publishing, 1970), pp. 247-258.

¹²¹ Genesis, I. 28 "Theen God blessed them, and God said to them, "Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth." This is a theme discussed by Prrest, *The Garden of Eden*, p. 13; Michel Foucault, *The Order of Things* (New York: Vintage Books, 1970), p. 38.

¹²² Parkinson, Paradisi . in sole (1629).

¹²³ The most typical example cited is Coles' description of the walnut in *The Art of Simpling* (1656). The walnut was used to treat problems with the hurnan brain. The nut was in the shape of a human head; the outer shell was the skull, the inner nut was the brain. See Dyer, *The Folk-lore of Plants*, p. 210; Agnes Arber, *Herbals: Their Origins and Evolution*, p. 252. Another example is the use of eyebright and *Chamomile* for diseases of the eye based on the fact that the flowers looked like eyes. Olav Thulesius, *Nicholas Culpeper: Englisch Physician and Astrologer* (London: St Martin's Press, 1992), p. 110. See also Prest, *The Garden of Eden*, p. 39; Batey, *Oxford Gardiens*, p. 29; Thomas, *Man and the Natural World*, p. 20; William Hunt, *The Puritan Moment: the Coming of Revolution in an English County* (Cambridge, MA: Harvard UP, 1983), p. 123.

¹²⁴ "To make thee truly sensible of that happinesse which Mankind lost by the Fall of Adam, is to render thee an exact Botanick, by the knowledge of so incomparable a Science as the Art of Simpling, to re-instate thee into another Eden, or, A Garden of Paradise". Coles, Adame in Eden (1657).

(1657) "[bringing] together all that was known in the art of physic gardening and at the same time [reviving] the Doctrine of Signatures in the search for scriptural bounty."¹²⁵

Natural philosophers investigated the plant kingdom with religious and moral aspirations. Hot protestants latched onto the idea of a 'Book of Nature'; correct interpretation of nature could help restore man's dominance and restore his rightful dominion over nature.¹²⁶ "The book is a garden: the garden is equally a book in which god's planning of the natural world can be uncovered."¹²⁷ Religiously inclined natural philosophers investigated the Book of Nature as priests - experts in the ability to interpret God's plan of the natural world.¹²⁸ While this theory did not find favour with everyone, the prevalence of the idea and the frequent references to it illustrate the popularity of the theory.¹²⁹

In modern literature on gardening, this theory is described in negative terms as backward, simplistic, and incorrect as opposed to the scientific understanding of plants. Seventeenth-century natural philosophers believed man was the master of the natural world; they sought to restore Adam's dominion over all creatures. Nature was viewed in terms of practical utility for man since God created the world for man.¹³⁰ Modern scholars have placed too much emphasis on the idea that there was a shift from this utilitarian view of nature to an appreciation of flora and fauna in their own right.¹³¹ Searching for the origins of modern science, these scholars want to contrast modern classification schemes with 'old' notions of the world. Instead, the doctrine of signatures

¹²⁵ "The Signatures likenesse are taken notice of, they being as it were the Books out of which the Ancients first learned the Vertues of Herbes; Nature or rather the God of nature, having stamped on divers of them legible Characters to discover their uses, though he hath left others also without any, that after he had shewed them the way, they by their labour and industry, which renders everything more acceptable, might find out the rest, which they did not neglect, but prosequeted with extraordinary diligence, yet have they left sufficient Inquiries for succeeding Ages." Coles, *Adam in Eden* (1657).

¹²⁶ "God hath given to man two great Books, to read and study: *viz*. His Workes, and his word; whereby we may come to know God, and learn out Duty to him. The Creatures of God do all of them speake out the Praises of God; and are not only Examples to us of Obedience, but also do call aloude unto Man, and instruct, and teach him, what he ought to do, and teach him, what he ought to do;" Ralph Austen, *A dialogue (or familiar discourse) and conference betweene the busbandman and frait-trees* (1676). See also Shapin, *The Scientific Revolution*, p. 139; James Knowlson, *Universal Language Schemes in England and France* (Toronto: U of Toronto Press, 1975), p. 12; Martin Kemp, "Implanted in our Natures: humans, plants and the stories of art," *Visions of Empire* (Cambridge: CUP, 1996), pp. 197-229; Prest, *The Garden of Eden*, Thomas, *Man and the Natural World*. ¹²⁷ Cunningham, "The Culture of Gardens," p. 51.

¹²⁸ Shapin, The Scientific Revolution, p. 153; Knowlson, Universal Language Schemes, p. 64.

¹²⁹ Ideas on the doctrine of signatures are evident in the works of John Gerard, William Coles, Abraham Cowley, and Ralph Austen. See Prest, *The Garden of Eden*, p. 62.

¹³⁰ Thomas, *Man and the Natural World*, p. 52. Personally, I believe that the mastery over the plant kingdom that pervaded seventeenth-century mindsets arose from the centuries of breeding and experimentation that altered the structure of several plants. Through the ages, selective breeding and controlled growing allowed the people who worked with plants to control and influence their growth and shape. Plants were continually improved for man's benefit.

¹³¹ This theory was most strongly advocated by Thomas, Man and the Natural World, Hobhouse, Plants in Garden History, Goody, The Culture of Flowers.

offers insight into one of the ideas that motivated the study of the natural world in seventeenth-century England.

C.4 Classification

Classification was an essential part of collecting, as every collection requires some sort of underlying organizational principle or classification scheme.¹³² In seventeenthcentury collections and gardens, there were several classification schemes proposed. One underlying commonality to these collections was the focus on understanding God's creation of the natural world. Taxonomies and classifications of the natural world are an important historical source because they represent an area where cultural and social influences on nature penetrate natural history discussions and descriptions.¹³³ Encapsulating preconceptions from human experience, taxonomies delineate the natural world according to human social and cultural perceptions. When examining these taxonomic schemes, the historian needs to be aware of how much of what is classified is based on human social and cultural perceptions and how much is directly indicated in nature.¹³⁴

Classification schemes proposed in the latter half of the century by men like John Ray or Robert Morison are used as exemplars of early botanical activity. Heralded as pre-Linnaean classifications, the ideas of these gentlemen are slotted into the history of botany.¹³⁵ Indeed, it is widely presumed that the seventeenth century marks the beginning of scientific classification. Were these proposals truly the start of scientific botany? Seventeenth-century classification schemes were derivative; they were not original works but, instead, were based on the same ideals and concepts that had motivated their Renaissance predecessors. Religion played a key part in any discussion of the natural world. Theories about the Garden of Eden, signs and symbols, and man's primacy within God's creation shaped descriptions of the natural world. Protoclassification schemes are either histories of plants or lists designed to help the reader

¹³² Elsner and Cardinal, The Cultures of Collecting, p. 1.

¹³³ Here the words 'science' and 'scientific' are blanket terms. The problem with our modern language is that there is no acceptable word that describes botanical pursuits without evoking modern definitions of the word botany and/or involving the word 'science'.

¹³⁴ Here I rely on the methodologies proposed in studies on science and scientific practice. See Bloor, *Knowledge and Social Imagery*. Scientific knowledge does not mimic nature; it is contingent on society. As Latour demonstrates in his analysis of 'science' the production of scientific knowledge - truth and facts - is related to the actions of an individual. Latour, *Science in Action*.

¹³⁵ For a fuller discussion of taxonomies and the history of botany see Francois Delaporte, Nature's Second Kingdom: Explorations of Vegetality in the Eighteenth Century (London: The MIT Press, 1982).

find useful plants.¹³⁶ The impulses behind their organization are entirely different than eighteenth-century attempts at classification.¹³⁷

Once the anachronistic concepts of 'science' and 'botany' are removed from discussions of these classification schemes, a different analysis can emerge. The natural world was classified and structured with man as the dominant creature. Indeed there was no life, only the three classes of living beings: animals, vegetables, and minerals.¹³⁸ Animals were capable of spontaneous movement, vegetables were capable of growth and sensation but not movement, and minerals were capable of growth but not movement or feeling. Naturalists were concerned with the structure of the visible world and classification according to its characters; they were not concerned with life.

Classification requires a language for description. Unsatisfied with the current state of Latin and unwilling to use a vernacular language, seventeenth-century English scholars and theorists sought a new language.¹³⁹ Scholars sought to reconstruct the language that had existed before the confusion of languages at Babel. A single, uniform language would restore religious harmony and provide man with the original, true names Adam had used in paradise. Such a language would reveal knowledge through its very terminology; they sought written symbols that both represented and defined the thing.¹⁴⁰ This activity is more akin to the aims of later taxonomists who sought to construct accurate classification schemes.¹⁴¹

¹³⁶ The reasons Parkinson states that his book includes more than just a list of plants, he wants to offer a "more generall History." Parkinson, *Paradisi in sole* (1629). Coles published not a "universal History of Plants" but a list of "those which are more usefull" *Adam in Eden* (1657).

¹³⁷ "The difficulties of equating the old English nomenclature to modern scientific usage are considerable. In most cases there is no doubt as to the genus of the plant, but the species is not always easy to determine and in several instances a good deal of doubt persists as to what plant was really being cultivated at the time." John Harvey, *Early Horticultural Catalogues* (Bath: University of Bath Library, 1981), p. 21.

¹³⁸ In *The Order of Things*, Foucault suggests, "life itself did not exist." While his argument offers a newer interpretation of early modern ideas on nature, it is an oversimplification of the more ordinary observation that no body of knowledge was organized around the abstract concept of life. D.W. Harding, "Good-By Man," *New York Review of Books.* 17 (Aug 12, 1971), p. 22; Foucault, *The Order of Things*, pp. 127-8, 160-161. The idea of the three classes of life is also explored in Thomas, *Man and the Natural World*, p. 30.

 ¹³⁹ "In this way, language would not only be a means of acquiring knowledge; it would itself be knowledge, since each 'word' would provide an accurate description of the thing signified." Knowlson, *Universal Language Schemes*, pp. 8-10, 32, 98-107.
 ¹⁴⁰ Samuel Hartlib was excited at the prospect of a language that would teach the virtues and the names of the herbs and plants. Knowlson, *Universal Language Schemes*, pp. 43, 76.

¹⁴¹ There is no sudden shift to scientific nomenclature. Several of the key ideas behind scientific nomenclature have their origins in this search for a universal language. For example, grouping nature from the general to the particular is based on the Aristotelian-Scholastic way of grouping and lists of plants (or animals) should include names and descriptions.

C.5 Religion

Religion was completely absorbed into all aspects of life in the seventeenth century; it affected everything. The basics tenets of their religion structured how the English lived their lives and viewed the world around them. Therefore, understanding the structure and definition of religious beliefs in this period aids in understanding their perception of the world around them and how they structured their immediate environment. There are particular English notions about the relations of gardens and religion that become apparent when examining the sources. Gardens are and always have been spiritual places.142

The origins of the religious turmoil of the seventeenth century lie in the religious settlements of the Elizabethan period.143 Forced underground at the beginning of the seventeenth century, hot protestants focused their energy at the local level as they sought to reform the nation.14 Religious tension coloured this period, and one author has suggested that the actions of these protestants suggest they believed they were fighting a holy war. Partly because of the nature of their anti-institutional biases, and partly because of having gone underground, hot protestantism became a 'voluntary religion'. There was no mass appeal because it was morally rigorous, intellectually demanding and involved strict discipline.145 Ultimately, religious tensions were eased with the establishment of the Restoration Church.146

One standard theme in the secondary literature is the clash between the Puritans' and the Catholic and/or pagan tendencies in local customs, rituals, and religion.147 Hotter protestants railed against these 'heathenish' and 'popish' aspects of English culture seeking a simpler form of faith and celebration.148 Tied to the land and the agricultural season, popular culture contained traditional symbols that enforced the social

148 Underdown, Revel, Riot, and Rebellion, p. 47; Hill, The English Bible, p. 257.

¹⁴² Cunningham, "The Culture of Gardens," p. 39.

¹⁴³ See Patrick Collinson, The Elizabethan Puritan Movement (Oxford: Clarendon Press, 1967), pp.385-467; Patrick Collinson, The Birthpangs of Protestant England (New York: St Martin's Press, 1988).

¹⁴⁴ Collinson, The Elizabethan Puritan Movement, pp. 433, 443-44; Jacqueline Eales, "A Road to Revolution: The Continuity of Puritanism, 1559-1642," The Culture of English Puritanism (New York: St Martin's Press, 1996), pp. 188-189. Yet, they still encountered problems at the local level. See David Underdown, Fire From Heaven (New Haven: Yale University Press, 1992). 145 Collinson, The Religion of Protestants, pp. 189-241. The focus on learning and knowledge underlying the protestant religion created a strong demand for intellectual preachers. To match this demand, a new intellectual career emerged, one that did not require celibacy. Hunt, The Puritan Moment, p. 113; Kenneth Fincham, Episcopal Government, 1603-1640,' Early Stuart Church (Stanford: Stanford University Press, 1993), pp. 71-92.

¹⁴⁶ See Spurr, The Restoration Church of England.

¹⁴⁷ There is a summary of this idea in Goody, The Culture of Flowers. See also Thomas, Man and the Natural World, Underdown, Revel, Rios, and Rebellion, pp.44-72; Ronald Hutton, The Rise and Fall of Merry England (Oxford: OUP, 1994).

hierarchy; rituals and festivities were the popular culture of the old religion.¹⁴⁹ Keith Thomas argues that plant names and virtues were based on older beliefs (religious and otherwise) and the protestants reacted against this knowledge; they sought to correct the inaccuracies and remove the traces of these other beliefs.¹⁵⁰

There were many clashes between Puritan culture and popular religious culture but not for the reasons usually suggested.¹⁵¹ One methodological problem with this old argument is how to define popular religious culture. Arguably, it was a religion of nature. The empirical data upon which this argument rests is recycled through the literature, originally derived from Thomas' *Man and the Natural World*.¹⁵² Most herbals included lists of English names and Latin names for their readers' convenience. Disputes over the names of plants were usually presented as corrections. The listing of various names for plants was designed to aid the reader and prevent them from being tricked. The variation in names for individual plants and the overlap of common names for several flowers made things more complicated.

Recent research in the history of popular religious culture, particularly by Ronald Hutton, shatters the methodological and empirical basis of this standard argument. Hutton concluded that protestantism was a direct ideological challenge to the religion and culture that had developed in the later Middle Ages.¹⁵³ His argument undermines the widespread assumption in the secondary literature that the festive culture and popular perception of nature had developed in a pre-Christian society. Yet, after analysing the annual festivals celebrated in the sixteenth and seventeenth centuries, Hutton traces their origins to the thirteenth century (at the earliest).¹⁵⁴ Pagan roots are non-existent. Seeking to reform the context of worship both physically and ideologically, protestants destroyed

¹⁴⁹ Religiously sanctioned festivals added to social stability by allowing a limited redistribution of economic resources. The integrative ritual culture was weakened by the religious revolution. Hunt, *The Puritan Moment*, p. 133.

¹⁵⁰ Thomas, Man and the Natural World, pp. 81-87. Herbals written in this period seek to correct previous errors. See Parkinson, Paradia in Sole (1629); Parkinson, Theatrum Botanicumi (1640); Johnson, Gerard's Herball (1633); Culpeper, The English Physician (1652).

¹⁵¹ For a discussion of some of the symptoms of this cultural conflict, see Underdown, Revel, Riot and Rebellion, pp. 44-72.

¹⁵² One striking example of this borrowing occurs in Goody's reliance on Thomas' primary material in his *The Culture of Flowers*. ¹⁵³ Hutton, *The Rise and Fall of Merry England*, p. 261.

¹⁵⁴ See Ch 1: The Ritual Year in England and Ch 2: The Making of Merry England in Hutton, The Rise and Fall of Merry England. See also Eric Hobsbawm, The Invention of Tradition (Cambridge: CUP, 1983).

the festive culture of the late medieval church. Their actions provoked a double response: a renaissance of ceremony and nostalgia for old communal merry-making.¹⁵⁵

Millenarianism prompted the search for true knowledge through investigation of the natural world. It created a critical and aggressive attitude to obstacles of the Reformation - hence the opposition to traditional popular culture and symbols.¹⁵⁶ As Collinson argues, there were three stages to the Puritan cultural revolution.¹⁵⁷ Emphasizing discipline and moderation, it is a negative culture. Family tradition strengthened and preserved Puritanism.¹⁵⁸ There was a strong focus on edification, hence the popularity of 'how-to' books. Utilitarian ideas and aspirations met with a favourable climate of opinion, as interest already existed for agricultural improvement.¹⁵⁹ The writers took advantage of this to disseminate information and encourage wider participation.

C.6 Politics

Collecting had always been a gentlemanly pastime. Nature became a desirable object to own, it became commodified in a nascent consumer culture.¹⁶⁰ Patrons could display their accumulated wealth through the possession of natural objects.¹⁶¹ Gardens were collections of plants, organized and structured according to a particular plan, allegorical

¹⁵⁷ First, hot protestants embraced existing cultural forms and used them to their advantage. Secondly, they turned against on the same cultural media (~1580) and attacked the visual, replacing images with sermons. Thirdly, the protestant literary culture emerged which attacked the oral culture of imagery. The ideal Puritan culture would be literate and without imagery. Collinson, *The Birthpangs of Protestant England*, Collinson, "Elizabethan and Jacobean Puritanism as Forms of Popular Religious Culture," *The Culture of English Puritanism* (New York: St Martin's Press, 1996); Collinson, *Religion of Protestants*. Puritans interpreted the second commandment as rejecting all representation; they feared images distracted from worship. They sought to reform Christian worship by eliminating iconography. Goody, *The Culture of Flowers*, pp. 192-198. Collinson argues that the lack of imagery was not exclusive; there were still uses for visual moral messages in Puritan culture. *The Religion of Protestants*, p. 236.

¹⁵⁵ Hutton, The Rise and Fall of Merry England, p. 261. The renaissance of ceremony is strongly manifest in the celebration of the restoration in 1660. See Underdown, Revel, Riot, and Rebellion, pp. 270-291.

¹⁵⁶ The success of the protestants opposition varied from region to region. Ultimately it depended on the strength of godliness in the area. Underdown, *Revel, Riot, and Rebellion*, pp.49-50. See Webster, *The Great Instauration*. This was not always the case, "[for] to set down those improper, bastard, and insignificant names, which are used in divers Counties of this Land, and amongst some writers also, would require much pains to little Purpose." Coles, *Adam in Eden* (1657).

¹⁵⁸ Collinson, The Birthpangs of Protestant England, p. 94; Collinson, "Elizabethan and Jacobean Puritanism as Forms of Popular Religious Culture," p. 33. For discussion for the transmission of godliness in families see: Jacqueline Eales, "A Road to Revolution," p. 200; J.T. Cliffe, The Puritan Gentry: The Great Puritan Families of Early Stuart England (London: Routledge & Kegan Paul, 1984); J.T. Cliffe, Puritans in Conflict: The Puritan Gentry During and After the Civil Wars (London: Routledge, 1988); J.T. Cliffe, The Puritan Gentry Besieged (London: Routledge, 1993).

¹⁵⁹ Webster, The Great Instauration, p. 467.

¹⁶⁰ Findlen, "Courting Nature," p. 66; Findlen, Possessing Nature, p. 15.

¹⁶¹ "Stuffed with rarities and oddities, such cabinets were *accessible* proof that there were indeed more things in heaven and earth than were dreamed of in traditional philosophies." Shapin, *The Scientific Revolution*, p. 90. Cliffe lists some English examples of houses containing cabinets of curiosities in *The World of the Country House*, p. 45.

mirrors reflecting a perfect and complete picture of the world.¹⁶² To collect everything is to be like God. To classify and arrange these collections, patrons hired naturalists. The collecting interests of these patrons allowed natural history to shift from being largely textual and bookish to something tactile and theatrical.¹⁶³

Collecting transformed natural history. To better organize and understand their collections, collectors became travellers; they needed to experience nature in its original form.¹⁶⁴ Assembling objects in a museum, laboratory, botanical garden or anatomy theatre allowed the collector to display their accumulated wealth and knowledge. Knowledge was transferred from the discursive to the visual. Objects in these collections were touchstones for verifying claims to produce truths - they visibly demonstrated the collector's philosophy of nature.

Collecting allowed men to control nature and gave them the ability to measure things. In *Science in Action*, Latour elaborates how interpretation is controlled and how it shapes knowledge produced.¹⁶⁵ As 'centres of calculation', these patrons hired naturalists to categorize and classify their collections. New objects obtained from overseas travel and as gifts from friends needed names.¹⁶⁶ There is strong power in naming objects. The actions of these naturalists determined how the objects were understood in the field of natural history. The seventeenth-century social order thrived on classification with its rules, labels, sets and systems. Patronage was the key to success for both the naturalists and the patron.¹⁶⁷ Patronizing collectors made a lord appear learned and munificent. Naturalists sought out patrons to promote their ideas of order and classification.

C.7 Conspicuous Display

Gardens were a visual and extremely powerful symbol of authority. In a period of religious contention and political turmoil, the gentry were eager to establish their authority. For these men, their source of wealth, power, and status was land. The

¹⁶² Anthony Alan Shelton, "Cabinets of Transgression: Renaissance Collections and the Incorporation of the New World," *Cultures of Collecting* (Cambridge, MA: HUP, 1994), p. 185; Elsner and Cardinal, *The Cultures of Collecting*, p. 3.

¹⁶³ Findlen, Possessing Nature, p. 9.

¹⁶⁴ Findlen, Possessing Nature, pp. 158, 199, 201, 240.

¹⁶⁵ Latour, Science in Action.

¹⁶⁶ The most successful collectors depended on gifts to make their collections complete. Findlen, "Courting Nature," p. 67. "Names revealed truths and conveyed authority." Kevin Sharpe and Stephen Zwicker, *Politics of Discourse* (Berkeley: University of California Press, 1987), p. 7.

¹⁶⁷ The influence of patronage is visible in the book trade, authors printed letters to their patron at the start of the book. For example, Parkinson dedicated his *Paradisi in sole* (1629) to Queen Henrietta Maria. It was hard to print information; botanical gardens fit into court culture but lengthy encyclopaedias served professionals more than patrons. Findlen, "Courting Nature," p. 73. See also Findlen, *Passessing Nature*, p. 346; Elsner and Cardinal, *The Cultures of Collecting*, p. 2.

increase in the number of gentry families between 1570 and 1630 created a frenzied competition in ostentation as both long established families and newly risen ones sought to defend their status and consolidate their claims. Gentry and nobility spent their money in predictable ways - on their lands and on personal possessions.¹⁶⁸ The size and structure of the various country houses remodelled or built indicate the ambitions of their owners.¹⁶⁹

The same is true for gardens. New garden design ideas caught on quickly as squires imitated their lords' estates and yeomanry mimicked the squires. Nobles and gentry were always eager to try new styles and fashions.¹⁷⁰ During the seventeenth century, there were new stimuli to fashion. The Grand Tour and the time spent in Europe during the civil wars exposed English gentry to continental ideas. The French style of formal gardening was extremely popular, particularly when Charles II adopted it for his own gardens at St. James's, Greenwich, and Hampton Court. Later in the century, more and more gentlemen spent 'the season' in London. They brought back the ideas and fashions that they witnessed at court and in the city to their country estates. Many gardens were reworked several times during one gentleman's lifetime.¹⁷¹

There was a strong gradation of garden design as new ideas were gradually absorbed into the local vernacular.¹⁷² The various gardening instruction manuals and plant books of the period offer us a chronology of the absorption of the various types of gardens. Once authors began to write about these gardens, the leading edge of gentlemanly fashion had already moved on. One example of this absorption is the development of the cottage flower garden. Originally, the nobility and gentry collected various plants, particularly flowering plants, and arranged them in structured garden collections. As these new and exotic plants became more readily available, squires and yeoman could afford to purchase them and include them in their own garden. The physic or botanic

 ¹⁶⁸ James Rosenheim, The Emergence of a Ruling Order (London: Longman, 1998), p. 6; Stone, Crisis of the Aristocracy, p. 583.
 ¹⁶⁹ Mark Girouard, Life in the English Country House (London: Yale University Press, 1978), p. 3.

¹⁷⁰ Produce and vegetables also followed fashion. Sampling new foods in London spurred many gentlemen to have the foodstuffs at home. Wilson, *The Country House Kitchen Garden*, p. 5.

¹⁷¹ The gardens at Badminton underwent several changes. There are two paintings of Badminton and the depictions of the gardens in these two images differ. The painting by Thomas Smith (c. 1705) shows gardens to the left of the house different than those in Kip's engraving painting (**Plate Five**). For more information see Douglas Chambers, "Story's of Plants' The Assembling of Mary Capel Somerset's botanical collection at Badminton," *Journal of the History of Collections* 9/1 (1997), p. 54. ¹⁷² Girouard, *Life in the English Country House*, p. 8.

garden was absorbed into local practice as the cottage garden. Indeed, it is possible to trace the absorption of the various garden styles through the layers of English society.¹⁷³

¹⁷³ The exception is kitchen and herb gardens; these existed due to practical necessity. The enclosed gardens of earlier periods became the common pleasure garden. By the end of the century, the idea of using the garden as another room for the house was widespread.

Chapter Two:

Understanding Printed Texts

.

A. Printed Texts

Gardening literature from the seventeenth century is an amazing resource. The printed texts not only contain contemporary information on gardening techniques, designs, rationales, and layouts but are also testaments to the problems of authority and status that plagued the gardeners and authors. The context of printing and its development in England provides context for understanding the development of gardening literature. The story of the printing revolution has been interwoven into the history of gardening and garden books. But the acceptance of this traditional argument has coloured the interpretation of the printed text and its relevance to the study of gardens.

Incorporating recent historical work on the printing press restructures our historical understanding of how these printed texts were read and utilized by a contemporary audience.¹⁷⁴ Understanding the physical process of printing in England during this period offers new information on how these authors worked to establish the authority of their literature. Indeed, the material contained within these texts provides the best resources for understanding general knowledge on gardens in this period. While it is hard to determine accurately levels of literacy during the seventeenth century, certain facts about the intended audience can be determined by the structure and content of the book.

A.1 Printing Process

Between 1500-1800 the printing process was pretty much the same.¹⁷⁵ Several aspects of the printing process provide key information for historians regarding readership and intended audience. Understanding the production, readership, and authority of printed texts provides a more contextual discussion for the various texts that provide key historical information.

The print house and the nature of the industry determined how a printing business was run and how the master printer managed his work. The basis of the printing trade is

¹⁷⁴ Johns, The Nature of the Book; Steven Shapin, A Social History of Truth (Chicago: U of Chicago Press, 1994).

¹⁷⁵ I outline the English process of printing because it differed in some significant ways from continental examples. Philip Gaskell, A New Introduction to Bibliography (Oxford: Clarendon Press, 1972), pp. 171, 180.

the print house.¹⁷⁶ Printing houses were both public and private spaces. Print shops were connected to the home of the bookseller, merging a domestic area with a commercial enterprise.¹⁷⁷ Printing was a complicated process, involving several workers – a compositor, pressmen, a print master, and various apprentices.¹⁷⁸ Considering that several books were usually being printed simultaneously, various methods and techniques were developed to limit errors.¹⁷⁹ Elaborate techniques were developed for ordering the printed sheets.¹⁸⁰ Determining the length of the book was very crucial. The master had to know how much paper to order to ensure he could complete the job. English printers did not have a local industry of paper production to rely upon; they were forced to import paper from France.¹⁸¹ Undoubtedly this affected the price of books in England.

Size was a reflection of importance and price. The four normal formats for book printing were folio, quarto, octavo, duodecimo, and half-sheet versions of quarto, octavo or duodecimo.¹⁸² Cheap books were small - they used less paper; for example, Hugh Platt's *Delightes for Ladies* (1602) was printed as a duodecimo. Herbals were expensive

¹⁷⁶ Tight political control and a monopolistic trade guild restricted activity. The 1586 Star Chamber decree limited the number of master printers to 25; the 1637 decree reduced the number to 23 (including the King's printers and those at the Universities); and the 1662 Licensing Act limited the number of London printers to 20. Gaskell, *A New Introduction to Bibliography*, p. 171; Frank Mumby, *Publishing and Bookselling* (London: Jonathan Cape, 1949), pp. 93, 103, 114. For more information on the structure and dynamics of the print house, see Johns, *The Nature of the Book*. For a case example of a print house see D.F. McKenzie, *Cambridge University Press*, 1696-1712 (Cambridge: CUP, 1966); D.F. McKenzie, *Stationers' Company Apprentices*, 1605-1640 (Oxford: The Oxford Bibliographical Society, 1961); D.F. McKenzie, *Stationers Company Apprentices*, 1641-1700 (Oxford: The Oxford Bibliographical Society, 1974).

¹⁷⁷ "[Truths] were produced at home - the home of a Stationer." Johns, *The Nature of the Book*, pp. 120,136. ¹⁷⁸ For a fuller discussion of the actual process of printing see Gaskell, *A New Introduction to Bibliography*, Ronald McKerrow, *An Introduction to Bibliography for Literary Students* (Oxford: Clarendon Press, 1927); Percy Simpson, *Proof-Reading in the Sixteenth, Seventeenth and Eighteenth Centuries* (London: OUP, 1935).

¹⁷⁹ Errors that were missed in the proofs were often printed in an Errata as a separate sheet in the book. For example, in Coles, The Art of Simpling (1656) there is an erratum. See McKerrow, An Introduction to Bibliography for Literary Students, pp. 252-263 for more information on the errors of compositors. See also: Gaskell, A New Introduction to Bibliography, p. 166; McKerrow, An Introduction to Bibliography for Literary Students, pp. 128-129.

¹⁸⁰ Printed in the corner of the sheet, these signatures existed in various formats. For example, A, B, C.... Aa, Bb, Cc..., Aaa, Bbb. Or they used variation in upper and lower case. A register at the end of the book listed the signatures and served as a guide to the binder. Placed at the end of each leaf, catch words indicated the next word on the subsequent leaf. The practise of using a catch word became standard by the sixteenth century. Gaskell, *A New Introduction to Bibliography*, pp. 51, 53; McKerrow, *An Introduction to Bibliography for Literary Students*, pp. 26, 73-76, 84.

¹⁸¹ Considering the variation in papers, the odds of obtaining the exact same paper were very small. There was a confusing variety of paper available: quality, weight and size varied between suppliers and between batches. Different or imperfect paper would be reserved for the middle sheets where it would be less obvious. Gaskell, *A New Introduction to Bibliography*, pp. 66, 124, 142. One standard trope in the 'printing revolution' story is that the supply of cheap paper motivated the printing of books. Yet, the case example of England, where there was no adequate local supply of paper since the English wore wool and not linen, unsettles this assumption. For a more complete discussion of paper production see McKerrow, *An Introduction to Bibliography for Literary Students*, pp. 97-108.

¹⁸² Printers were reluctant to produce large books because of expensive production costs, the length of time required, and the limited market for large books. Although herbals were initially published as folios, later editions were produced as octavos or quartos - less cost to the publisher. Johns, *The Nature of the Book*, p. 449; Tessa Watt, *Cheap Print and Popular Piety*, 1550-1640 (Cambridge: CUP, 1991), p. 1. For a description on how these book sizes were achieved through folding sheets see Gaskell, *A New Introduction to Bibliography*, pp. 88-105; McKerrow, *An Introduction to Bibliography for Literary Students*, pp. 164-174.

because of their size (used more paper and ink) and the cost of illustrating the pages. Published as folios, herbals were large and heavy; the folio version of Fuchs' Herbal weighs 5 kg (11 lb) and Parkinson's *Theatrum Botanicum* is almost impossible to lift.¹⁸³ Usually smaller versions of popular herbals were issued for general use.

Information on book prices is scarce. According to the Term Catalogues, large folios could cost anywhere from 8 shillings to 16 shillings (usually bound). A copy of Parkinson's Paradisi in Sole (1629) or Gerard's Herball (1597) could cost 11 shillings; Johnson's 1633 edition of Gerard's Herball was priced at 42s 6d unbound and 48s bound: a very small price. Small manuals, such as those by William Lawson, were intended for a larger audience and often cost no more than a shilling. For example, Nicholas Culpeper intended his English Physitian (1652) for a wider, more common audience. First printed as a small folio, the price was set accordingly at three pence.¹⁸⁴

Ink was very important in the printing process; however, competition with other printers forced many to cut corners.¹⁸⁵ The actual process of making of ink was very secretive.¹⁸⁶ Ink was essential to the printing; a good black pigment was key.¹⁸⁷ Without good ink, the work turned brown and the pages of the book would stain.¹⁸⁸ This suggests there is a correlation between ink quality and the type of book. Better ink quality meant the book was designed to last; poor quality ink was used for texts that were not intended for longevity. For example, Ralph Austen's 1653 edition of *A Treatise of Fruit-Trees* has bleeding of the ink through the pages.

Printers and publishers were retailers. Each bookseller retained small batches of bound books as sample copies. Usually a book or treatise was purchased in sheets and

¹⁸³ Wilfrid Blunt and Sandra Raphael, The Illustrated Herbal (New York: Thames and Hudson, 1979), pp. 128, 171.

 ¹⁸⁴ McKerrow, An Introduction to Bibliography for Literary Students, p. 134; for information on the Term Catalogues see p. 138. Rohde, Garden-Craft in the Bible, p. 144; Blunt and Raphael, The Illustrated Herbal, p. 167. Thulesius, Nicholas Culpeper, p. 107.
 ¹⁸⁵ For making ink, the most costly and time consuming part of the process was the production of the nut or linseed oil. If either heating time or fuel were cut down, the bodying of the oil would not occur to the required degree. Oil must be stored for a year to remove impurities. Other causes of staining are the use of non-drying oils, improper pigmentation, or poor ingredients. Using non-drying oils like hemp and rape also caused staining. If the black pigment was not sufficiently ground and incorporated, it would leave white marks or blobs on the paper. Nut oil has less of a tendency to turn yellow than linseed

and incorporated, it would leave while marks of blobs on the paper. Nut on has less of a tendency to turn yellow than inseed oil but is more expensive and not used as frequently. Colin Bloy, *A History of Printing Ink, Balls and Rollers, 1440-1850* (London: Evelyn Adams and Mackay Limited, 1967), pp. 89-91.

¹⁸⁶ There are several recipes for making ink, which have survived, and these are reproduced in Bloy, A History of Printing Ink, Balls and Rollers, pp. 99-125. For more information on ink see also Gaskell, A New Introduction to Bibliography, pp. 125-6; and Bloy, A History of Printing Ink, Balls and Rollers, pp. 53-54.

¹⁸⁷ Black pigment was the result of pitch, lampblack or iron pyrites. There is a detailed explanation of the production of lampblack in Bloy, A History of Printing Ink, Balls and Rollers, pp. 42-46. Inks were created with other pigments besides black. For information on printing with two colour inks, see See McKerrow, An Introduction to Bibliography for Literary Students, pp. 329-336.
¹⁸⁸ Bloy, A History of Printing Ink, Balls and Rollers, pp. 9, 88.

bound by one's book binder along with several other books. Frequently, customers gave instructions for binding when ordering a text because binding was expensive and costs did not decrease with the quantity printed.¹⁸⁹

Printers were self-serving publicists; they issued booklists, circulars and broadsides as advertisements. Title pages to books included the firm's name, emblem and shop address.¹⁹⁰ There were several ways to advertise a book: printed publisher's lists carried by salesmen, book-fair catalogues, retailers catalogues and collections of trade announcements, title pages posted as street advertisements, booksellers' lists at the end of books or a printed proposal (developed in mid-century).¹⁹¹ Print houses offered incentives for publication including private subscription, serial publication. Aimed at lowering the cost of buying books, these incentives increased the market for books.

A.2 Printing Press and Revolution

To understand the true relevance of the various printed texts that contain information on plants and gardening, scholars need to incorporate recent historical work on the printing press. One main problem is that unlike modern texts and printed works, there was no stabilized identity for print in the seventeenth century. Printing was a relatively new process and printed texts were in a state of typographical flux.¹⁹²

There are several assumptions built into the traditional argument about the nature of the 'printing revolution' that limit historical analysis. One main problem is that printing is analysed out of context; the printing revolution is discussed outside of history. Understanding the real labours of those involved in printing, publishing and reading changes our historical understanding the role and utilization of printed texts in the seventeenth century.¹⁹³

Second, the underlying assumption is that the newer, more permanent status of knowledge contained in printed texts led to progressive change. Scholars assume

¹⁸⁹ For a detailed description of the process, see Gaskell, *A New Introduction to Bibliography*, pp. 147-153. An example of this is Mollet's *Garden of Pleasure* (1670). At the front of the book is a handwritten list of other material bound with the book. See **Plate Nine**. Gaskell, *A New Introduction to Bibliography*, p. 146; McKerrow, *An Introduction to Bibliography for Literary Students*, pp. 121, 125.

¹⁹⁰ Elizabeth Eisenstein, The Printing Revolution in Early Modern Europe (New York CUP, 1983), p. 29.

¹⁹¹ Gaskell, A New Introduction to Bibliography, pp. 181-183. There is a list of books printed for and sold by Thomas Bennet appended at the end of the 1700 edition of Campania Foelix.

¹⁹² "The "printing revolution", if there was one, consisted of changes in the conventions of handling and investing credit in textual materials, as much as in transformations in their manufacture." Johns, *The Nature of the Book*, p. 35. ¹⁹³ Johns, *The Nature of the Book*, p. 19, 28.

printing started a communications shift; they assume the printing press acted as an agent of mass production.¹⁹⁴ The increased output of books and reduction in the number of man-hours required to complete a book dramatically influenced the number of books available. The resulting knowledge explosion dramatically altered scholarly work and allowed for wider distribution of knowledge as manuals, instruction books, and reference material. Yet, printed texts were not inherently trustworthy; trust was the result of hard work.¹⁹⁵

A third assumption concerns the comparison of texts. Did book owners really compare their texts? Eisenstein suggests that a well-stocked bookshelf might contain several texts on a subject; by comparing the knowledge contained in these texts, contradictions became visible.¹⁹⁶ Confidence in old theories was weakened, creating a market for and allowing for the emergence of new intellectual work. Was the information in printed texts accepted at face value or was it problematized? Authors sought to correct these contradictions. Yet, as Johns argues, textual corruption increased with printing. Piracy and careless printing perpetuated errors in printed materials.

The acceptance of printed material and the trust placed on the knowledge contained in texts is especially reflected in two areas: science and religion. Modern scientific practice is dependent on printed material as the basis of its authority; this encourages modern scholars to search for the origins of this trust. Historical accounts of gardening and the study of plants contain traditional assumptions about the origins of science. The analysis of printed texts in this context is coloured by older, more traditional arguments concerning early 'scientific' practice. Johns draws a more suggestive argument, problematizes the link between printed texts and early science.¹⁹⁷

¹⁹⁴ See Eisenstein, The Printing Revolution, Marshall McLuhan, Understanding Media: the Extensions of Man (New York: McGraw-Hill, 1964); Marshall McLuhan, Gutenberg Galcos: the making of typographic man (Toronto: U of Toronto Press, 1962).

¹⁹⁵ Eisenstein, *The Printing Revolution*, pp. 13, 42, 86, 253, 262. William Ivins, *Prints and Visual Communication* (Cambridge, MA: HUP, 1953), p. 2. Hill suggests that the availability of the Bible, particularly an English edition, was a stimulus to learning to read. *The English Bible*, p. 11. Several of the strategies employed to invest text with authority are outlined in Johns, *The Nature of the Book*, Ch. 6 & 7.

¹⁹⁶ Eisenstein, The Printing Revolution, pp. 43, 51, 73; Johns, The Nature of the Book, p. 31.

¹⁹⁷ Print was not immediately accepted as a tool of natural philosophy. Consider the actions of the Royal Society, in the later part of the century, in using manuscripts to disseminate their knowledge. Concerned with piracy and usurpation, this society sought different avenues and methods for establishing the authority of their knowledge. Johns offers a more detailed explanation in Ch. 7: Piracy and Usurpation, *The Nature of the Book*.

Most standard historical accounts focus on this relation between printing and protestantism, tying the 'printing revolution' to the Protestant Reformation.¹⁹⁸ Protestantism focused on the individual and the Bible. From the beginning, protestants urged personal reading of the Bible as a means to salvation. As Eisenstein argues, the protestants used the press as a mass medium. Protestants focused on words and literacy, not images. Literacy was key.¹⁹⁹ Protestant ideas on literacy and the value of printed texts have important ramifications for gardening history. As discussed in a later section, protestant reforms used printed material to promote particular agendas.

A.3 Truth & Authority

The story of a book does not end with its creation. Who read the book? How was it used? For what purposes and to what effects? These are questions that should also be asked.²⁰⁰ Historical discussion of gardening and plant books would benefit from vigorous use of the methodologies and concepts suggested in recent research. The historiography of gardening celebrates texts as key steps in the progression and evolution of knowledge. Texts become objects, their status in historical analysis fixed and permanent. There is no questioning of the nature of the books or the status of the author. But because printed texts were historical objects they need analysis beyond the information they offer the reader. Early modern printed texts were not intrinsically trustworthy. Readers questioned the author's authority.²⁰¹ Before the knowledge in a printed text could be trusted, the reader had to ask if the book could be trusted to be what it claimed. Popularity was the result of trust placed in the author.

Recent research on printing in early modern England has revealed differences in, among other things, the definition of key terms. Author, writer, publisher, and authorship had different meanings in the seventeenth century compared to today. In this period, an author is the person responsible for a given printed work; a writer is anyone who composes a work.²⁰² Authorship was attributed by others and not through

¹⁹⁸ Eisenstein, The Printing Revolution, p. 35.

¹⁹⁹ The Bible is a unique text. Despite the mistrust of knowledge in other printed texts, the Bible remained an accepted and authoritative book. See Hill, *The English Bible*, David Cressy, *Literacy and the Social Order* (Cambridge: CUP, 1980); Watt, *Cheap Print and Popular Piety*, Eisenstein, *The Printing Revolution*, p. 145.

²⁰⁰ Johns, The Nature of the Book, p. 3. See also William Eamon, Science and the Secrets of Nature (Princeton: Princeton U Press, 1994).

²⁰¹ Johns, The Nature of the Book, p. 30, 50. See also Shapin, A Social History of Truth.

²⁰² Johns, The Nature of the Book, p. xx. See also Mark Rose, Authors and Owners: The Invention of Copyright (Cambridge, MA: HUP, 1993).

self-election based on the status of the author. Readers judged a book not by the cover but by the author. The character of the bookseller affected the authority of the book as much as did the status of the author.²⁰³ Title-pages gave the reader an immediate sense of credibility. The information contained in these frontispieces gave the reader an immediate indication of the book and author's status.

How did writers establish their status as authors? The prefatory letters of these texts demonstrate the manner in which authors sought to solidify their authority.²⁰⁴ Often containing lengthy justifications, these introductory remarks shaped the readers' perceptions before they were exposed to the material contained in the text. Various letters were included, written by influential men, the choice of authority varying according to the author's intent.²⁰⁵ Letters to the reader were included to justify the author's intentions. Herbal authors justified their material by arguing that they were including new plants and new knowledge, in addition to correcting previous errors.²⁰⁶ Most printed material on gardening was unoriginal or plagiarized. A common theme in prefatory letters is justification of experience, since experience gave a gardening author authority.²⁰⁷ For example, Leonard Meager had thirty years of practical experience; John Parkinson began to write late in life; and Stephen Blake justified his text based on practical experience.

Many authors translated foreign works, trying to transfer some of the original author's authority to themselves. For example, Henry Lyte translated Dodoens' *Crujdeboeck* (1578), John Evelyn translated *The French Gardiner* (1658), and Richard Surflet

²⁰³ John Beale was reluctant to allow the publication of his work. When the material was printed he obscured his authorship. Michael Leslie, "The Spiritual husbandry of John Beale," *Culture and Cultivation*, p. 151. Printers had considerable control over authorship since they decided what was printed and in what format. Earnon, *Science and the Secrets of Nature*, p. 106; Johns, *The Nature of the Book*, p. 147.

²⁰⁴ An unfortunate example of the problems associated with printing is Gabriel Plattes. Although he published several texts, he apparently died of starvation in the mid-1640s. Timothy Raylor, "Samuel Hartlib and the Commonwealth of Bees," *Culture and Cultivation*, p. 94.

²⁰⁵ Howell included two epistles: one to the Common reader and the other to the Critical reader. The second edition (1644) contains epistles to the Knowing Reader, the Common Reader, and the Critical Reader. James Howell, *Dendrologia* (1640). In Gerard's *Herball* there are letters from twelve friends and acquaintances including de l'Obel, Pierra Pena, and Revd. Thomas Newton. For more information see Henrey, *British Botanical and Horticultural Literature*, p. 40. See also: R. H. Jeffers, *The Friends of John Gerard (1545-1612) Surgeon and Botanist* (Connecticut, US: Herb Grower Press, 1967). At the end of his catalogues, his first publication, there is a note by de l'Obel, dated June 1, 1596, attesting that he had seen Gerard's garden and the author truly had grown all the plants named. The second edition also contains the addition from de l'Obel, this time dates July 1, 1599. Henrey, *British Botanical and Horticultural Literature*, p. 39.

²⁰⁶ In the preface to *Paradisi in Sole* (1629), Parkinson gives his reasons for writing his book. First previous authors have not described plants, just listed names. Second, Parkinson lists previous names and errours to offer a more 'generall History'. Third this volume has pictures and fourth a listing of the "Vertues and Properties of [the plants] in a breife manne" is also included.
²⁰⁷ Experience was also essential to the truth and authority in books of secrets. See Earnon, *Science and the Secrets of Nature*, p. 194.

translated Charles Estienne's *The Countrey farme* (1600). Yet, producing English translations of foreign works was not without problems. This method of gaining authority was not foolproof; the author could be criticized for def-orming the original material or for trying to pass off other men's writings as his own.

One important example of authority is the original edition of JoIhn Gerard's Herball (1597). Did John Gerard plagiarize to produce his Herball?²⁰⁸ Two seventeenth-century authors, Stephen Bedwell and Thomas Johnson, believed Gerard used Priest's translation of Stirpium historiae pemptades as the basis for his Herball.²⁰⁹ Indeed, there is much confusion in the secondary literature regarding the originality of the text in Gerard's Herball. Accusations of plagiarism were very serious as they threatened the author's status. Gerard must have been highly sensitive to criticism and used several methods to establish his authority.²¹⁰

The authority of Gerard's text was undiminished by hints of plagiarism, and in 1633 the successors to John Norton's firm decided to publish a new edition.²¹¹ After the publication of Gerard's book in 1597 no new herbals were printed until Parkinson's *Paradisi in Sole* appeared in 1629. Hearing that Parkinson was almost r-eady to publish his second book, *Theatrum Botanicum*, the publishers hired Thomas Jo-hnson to correct, amend and reprint a new edition of Gerard.²¹² These booksellers feared that the new

²⁰⁸ Henrey argues that Gerard never used the translation Dr Priest began and that he never even saw irt. Instead, she suggests that Gerad's text was based upon the work of William Turner, Robert Dodoens, Pierre Pena, Matthais de l'Obel, Henry Lyte, and Tabernaemontanus. Henrey, British Botanical and Horticultural Literature, pp. 43-6. The more traditional argument is found in: Arber, Herbals, p. 129; Anderson, An Illustrated History of the Herbal, pp. 221-223; Hobhouse, Plants in Gearden History, p. 120; Rohde, The Old English Herbals, p. 98; Rosetta Clarkson, The Golden Age of Herbals and Herbalists (New Yoork: Dover Publications Inc, 1972), pp. 34-43.

²⁰⁹ Rohde states that de l'Obel mentions in his *Illustrationes* that Gerard pilfered from *Adversaria* withourt acknowledgment. Rohde, *The Old English Herbals*, p. 104. The bookseller John Norton, having been warned by James Gærret, realized the full extent of the errors and blunders that riddled Gerard's text. Henrey notes this was mentioned in Williæm Howe, *Stirpium illustrations* (1655). Gerard did have two defenders: Barker, surgeon to the Queen and Bredwell. See Gæreen, *A History of Botany*, p. 43.

²¹⁰ Gerard did not make any claims to scholarship. Basically, Gerard used existing plant descriptions fcom these authors and added English localities along with notes based on his own experiences and observations. Henrey, *Britzish Botanical and Horticultural Literature*, p. 44. See also R. H. Jeffers, *The Friends of John Gerard (1545-1612) surgeon and botanics* (Connecticut, US: Herb Grower Press, 1967).

²¹¹ The successors to John Norton's firm were Adam Islip, Joice Norton & Richard Whitakers. Blunt and Raphael, The Illustrated Herbal, p. 166; Henrey, British Botanical and Horticultural Literature, p. 48.

²¹² Bisgrove, The National Trust Book of the English Garden, p. 53; Arber, Herbals, p. 134.

material in Parkinson's herbal would threaten the authority of Gerard's knowledge and name. The publishers rushed. Once again, the publishers chose an author whose authority was based upon the prior publication of a small treatise of plants.²¹³ Completed in just one year, Johnson corrected the numerous errors in the text and the printers included different woodcuts. The decision on which images to include was easy; they borrowed from the Plantin collection, though a few were drawn by Johnson himself.²¹⁴

A.4 Piracy

Establishing authority as an author was hampered by the problem of piracy. How did piracy affect readership and printing? As mentioned previously, there is much debate over the authority and origins of John Gerard's *Herball*. How did contemporary readers view plagiarism? Another author who was not always scrupulous was Gervase Markham. Was he a pirate? The answer to this question lies in the seventeenth-century definition of a pirate and the manner in which Markham conducted his publishing activities.

Piracy was a major concern for authors; it affected the credibility of everything printed. Piracy in this period was epistemic: it affected the structure and content of knowledge.²¹⁵ Unauthorized printing could 'unauthorize' authors. The status and credibility an author built around his name could be shattered by the printing of pirated versions of his work. In the seventeenth century, there were numerous cases of piracy. A few examples in the literature on plants stand out. Culpeper printed an unauthorized English translation of the Royal College of Physicians' *London Dispensatory* (1649). Markham incorporated large sections of other authors' material in his books. Authors in

Publication of Parkinson's *Theatrum Botanicum* (1640) was stalled for several years. The knowledge that the printer Richard Cotes had entered Parkinson's book in the Register of the Company of Stationers of London on March 3, 1634 suggested that the work was almost ready for printing. Parkinson's book, however, was not printed until 1640. In his letter to the reader, he bemoans the actions of Johnson and these printers. "...to accomplish this, *bic labor boc opus erat*, this was a taske lay some what heavy on me to undergoe, and tooke up no small time to finish, hosoever Master *Johnson* agility could easily wade through with it, and his younger yeares carry away greater burdens, for faith he, heavy taskes are worst borne by them that are least able, but his quicke speed may conclude with this adage *Canis festinans weas parit catulosr*, but how and in what sort it is don I leave to judicious censure, not to sharpe toother and tongues selfe-gnawing envy, that will traduce all others workes to magnifie their owne..." Parkinson, *Theatrum Botanicum*.

²¹³ Thomas Johnson, Descriptio itineris plantarum investigationis ergô suscepti, in agrum cantianum anno Dom. 1632. Et enumeratio plantarum in Ericeto Hampstediano locisq[ue] vicinis crescentium. (1632); Iter plantarum investigationis ergo susceptum a decem socijs, in agrum cantianum, anno. (1629).

²¹⁴ See Henrey, British Botanical and Horticultural Literature, p. 50.

²¹⁵ Johns, The Nature of the Book, p. 33.

this period were well aware of the problems of piracy and the concerns readers had with credibility. In his book, Moses Cook warned readers not to believe all they read.²¹⁶

What was piracy? One definition of piracy offered for this period was the violation of copy-ownership. Unfortunately pirates were not a distinguishable social group. As with authorship, 'piracy' was a label attached by users.²¹⁷ The Stationer's Company developed a few tactics for dealing with the problem of piracy and protecting credit in printed texts. When the Star Chamber was abolished in 1641, licensing of printed texts ceased to be effective. Tight political control made the industry very sensitive to political disturbance.²¹⁸

In the 1653 edition of his *English Physitian* Nicholas Culpeper complains that two pirated editions of his book were published in 1652. Arguing against their authority, he identifies for the reader how these copies can be recognized.²¹⁹ Here the status of the printer comes into play, Culpeper stated that all other copies of his book not printed by Peter Coles were unauthorized. Yet, Culpeper himself was guilty of piracy. His translation into English of the *London Dispensatory* was issued without the authority of the Royal College of Physicians.²²⁰ The material contained in this volume regarding medicines was considered the purview of learned physicians. Culpeper made this information accessible to a wider audience by including personal notes and comments, and by translating both the language and the information contained in the original book.²²¹

With most authors, the common assumption is that more editions meant greater popularity as an author. New books did not always mean new knowledge. The high volume of books published by Gervase Markham and the dubious origin of the materials

²¹⁶ Cook, The manner of raising, ordering, and improving forrest-trees (1676), Hoyles, Gardeners Delight, p. 36.

²¹⁷ The copy contained the material the printer used to produce a printed text. Johns, *The Nature of the Book*, pp. xx, 167, 174. ²¹⁸ Johns oudines some of the methods for dealing with piracy in *The Nature of the Book*, pp. 187-265. During the troubles of the mid-century, particularly after the abolishment of Star Chamber, there was a new found freedom in the printing industry as the decrees enacted by Star Chamber were no longer enforced. The average output, as indicated in the Wing catalogue, was 1000 texts per year but during the political hysteria, the number rose to 2000 texts. Mumby, *Publishing and Bookselling*, p. 109; Gaskell, *A New Introduction to Bibliography*, p. 160; Cressy, *Literacy and the Social Order*, p. 47. From 1642-1649 there was only one botanical book published: Bobart, *Catalogues plantarum Horti medici oxoniensis* (1648). The book trade consisted mainly of controversial pamphlets or news-sheets. Henrey, *British Botanical and Horticultural Literature*, p. 167.

²¹⁹ Henrey, British Botanical and Horticultural Literature (Toronto: Oxford University Press, 1975), p. 87.

²²⁰ There was a broadside published in 1652 attacking this publication. Rohde, The Old English Herbals, p. 163.

²²¹ The translating of this book continued after his death. William Salmon produced the new English edition of the London Dispensatory. Thulesius, Nicholas Culpeper, p. 160.

contained in these works suggests this author was less than scrupulous.²²² Punishments and reprimands for his actions did little to deter this author.²²³ Indeed, the entry in the *Dictionary of National Biography* labels Markham the first English 'hackney-writer.'

Markham took advantage of the market for husbandry books.²²⁴ Several books were printed on the same subject, under different titles, the content remaining the same.²²⁵ Another trick Markham used was to produce a 'new' book containing a compilation of older books. The Way to Get Wealth contains six previous works: Cheape and Good Husbandry, Country Contentments, The English House-wife, The Inrichment of the Weald of Kent, Markhams Farewell to Husbandry, A New Orchard and Garden.²²⁶ William Lawson's A new orchard and garden was frequently published with Markham's A way to get wealth. The authors were contemporaries and friends, but there is little explanation offered in the secondary literature as to why Lawson would have let Markham include his work in the author's books.

A.5 Readership

Literacy

The story of a book does not end with its creation. How was it used? By whom? For what? And to what effects? Literacy is hard to estimate.²²⁷ Literacy consists of two parts - reading and writing. For the purpose of this topic, only the reading aspect of literacy will be explored. Rough estimations suggest that literacy rates were very low in England during the period. Learning to read took time, initiative, and exposure to competent teaching; therefore, it is an effective marker of social and economic position. Basic social and economic realities limited contact with printed books.²²⁸

²²³ The memorandum Markham was forced to sign in 1617 is quoted in Fussell, *The Old English Farming Books*, p. 24. ²²⁴ "I think it would be almost impossible to compile an exact bibliography of Markham's work today: it was probably impossible in his own, and he purposely made it so: but from a literature of farming point of view the period 1600-40 was primarily his." Fussell, *The Old English Farming Books*, p. 32.

²²² Wendy Wall suggests that Gervase Markham's presentation of husbandry manuals contributed to the production of a national identity. Markham tied his values to the land and created a community of English readers. By translating and adapting foreign works, Markham sought to provide 'English' advice on husbandry. While the argument Wall offers is unique, her interpretation of Markham does not hold with the evidence. Wendy Wall, "Renaissance National husbandry: Gervase Markham and the Publication of England," *Sixteenth Century Journal* XXVII: 3 (1996), pp. 767-785.

²²⁵ Rohde, The Old English Gardening Books, p. 61; Fussell, The Old English Farming Books, p. 24.

²²⁶ For the origins and publications of these books see Fussell, The Old English Farming Books, p. 29-31. Henrey, British Botanical and Horticultural Literature, p. 160; Rohde, The Old English Gardening Books, p. 60.

 ²²⁷ For a more detailed outline of the problems of estimation and methods employed see: Cressy, Literacy and the Social Order, p.
 42; Margaret Spufford, Small Books and Pleasant Histories (London: Methuen, 1981); Watt, Cheap Print and Popular Piety, p. 7.
 ²²⁸ Watt, Cheap Print and Popular Piety, p. 5.

Literacy was highly desirable, particularly for those who already possessed the ability to read. Literacy was important, men of God and man of letters argued. Writing was the cornerstone of the protestant religion. With it, people were better equipped for salvation and could lead a life of duty and godliness learned through personal reading of the Bible.²²⁹ Writers of devotional and inspirational works urged literacy as a means to spread religion.

Assuming literacy is tied to book production and levels of literacy, book ownership and the history of education are all connected.²³⁰ Improved education increases literacy and the demand for books. More books produced meant more books available and this stimulated literacy. Based on these assumptions, multiple editions of a particular book can be explained as the result of increased interest in the book or the topic. Yet, owning a book was not an indicator of literacy; for example, Bible ownership was not always related to literacy.²³¹

Was there a pressing need for literacy? No. Many people lived their lives not unduly troubled by salvation or involved in a routine that did not require literacy. Knowledge was transmitted through the overlap between the world of print and the oral culture. Books were read aloud in public places, information learned through reading was passed on to illiterates, reading was taught through an oral process.²³² Reading could be dangerous; it could imperil the soul, damage the mind and subvert society.²³³ Among the protestants who urged literacy, there is much discussion of correct books to read. Wicked' books did more damage than good. Through reading, documents are put to use.²³⁴ A deceptively simple practice, reading has been treated as taken for granted in historical analysis. Learning to read is different from learning by reading. Modern

²²⁹ Cressy, Literacy and the Scaial Order, p. 1; Hunt, The Puritan Moment, p. 117; Collinson, The Religion of Protestants, pp. 193-194; Hoyles, Gardeners Delight, p. 7. See also Hill, The English Bible.

²³⁰ Cressy, Literacy and the Social Order, pp. 45-46.

²³¹ There were several non-reading uses for this book: swearing oaths, record dates, warding off spirits, divination, healing, and soothing children. Cressy, *Literacy and the Social Order*, pp. 48-51.

²³² Texts and the knowledge contained in them radiated out from several focal points: marketplace, parish church, godly household, the inn or alehouse. Watt, *Cheap Print and Popular Piety*, p. 5; Cressy, *Literacy and the Social Order*, pp. 2, 14.

²³⁴ Books had two functions: utility and possession. As items of utility, they conveyed information. Books were also possessions. Large, beautifully illustrated volumes such as herbals or florilegia were purchased as omaments.

scholars assume that reading was undertaken and performed in the same ways by people in the past as by people in the present.235

Language

Another factor limiting readership was language. Previously, scholarly works had been printed in Latin, the universal language. During this period, vernacular languages began to encroach on areas normally reserved for Latin. Yet, despite the increasing use of more common languages, there was no expectation that a vernacular language might replace Latin, the scholarly language.²³⁶

There were several reasons why an author might choose Latin; firstly, as an imitation of past scholarly practise. Latin had a long history of use by scholars; natural historians relied on Latin as the language for their classificatory schemes and/or lists of plants.²³⁷ Secondly, the use of Latin allowed for the transmission of material across cultural and linguistic barriers. Latin counteracted geographical isolation. Many important books published in the vernacular were translated into Latin.²³⁸ Most herbals included a double index - one of English-Latin names and another of Latin-English names.²³⁹ As William Coles stated, "[for] the *Herbarists* greater benefit, there is annexed a *Latin* and *English* Table of the several names of the Simples; With another more particular Table of the Diseases, and their Cures, treated of in this so necessary a Work."²⁴⁰ Thirdly, many of the authors who employed Latin were medically trained.²⁴¹ Trained in Universities, these physicians were probably more comfortable presenting their material in Latin.

²³⁵ For more information on a truer analysis of reading as a practise that varies across time and space see Johns, *The Nature of the Book*, Ch 6: the Physiology of Reading.

²³⁶ Learning a language besides Latin and English was difficult. Only through a private tutor or a Grand tour could knowledge of other languages be learnt. Knowlson, *Universal Language Schemes*, pp. 28, 30. See also Robert Illiffe, "Foreign Bodies: Travel, Empire and the Early Royal Society of London. Part I. Englishmen on Tour," *Canadian Journal of History* 33/3 (1998), pp. 357-385. Furthermore, Latin legitimized knowledge, setting it apart from local, popular, and oral knowledge that was transmitted in the vernacular. Eamon, *Science and the Secrets of Nature*, p. 93. During the Middle Ages, literacy was a measure of the ability to read and/or write Latin. Eamon, *Science and the Secrets of Nature*, p. 93.

²³⁷ Knowlson, Universal Language Schemer, p. 7. William Stearn, Botanical Latin (London: Thomas Nelson and Sons, 1966), p. vii. Thomas Johnson is most famous for publishing an edition of Gerard's herbal in 1633 but he also produced several small tracts on native flora. Often accompanied by distinguished apothecaries, Johnson went on several plant hunting expeditions. Written in Latin, the small tracts list the plants discovered in the various areas to which he travelled. Why Latin? He was imitating the herbal tradition because his aim was to publish a descriptive and illustrated flora of British plants.

²³⁸ Cumbersome, this process was not used very often. Knowlson, Universal Language Schemes, pp. 29-30; Stearn, Botanical Latin, p. 14; Arber, Herbals, p. 265; Eamon, Sciene and the Secrets of Nature, p. 94. Popular books were often reprinted in several languages. Important French books were translated into English, for example Mollet's Garden of Pleasure (1670). Crispin van de Passe's A garden of flowers (1615) was published in Dutch, Latin, French and English.

²³⁹ William Turner stated in his preface that he chose to write in English rather than Latin to allow his herbal to be used by all members of the medical profession. Henrey, *British Botanical and Horticultural Literature*, p. 26. ²⁴⁰ Coles, *Adam in Eden* (1657).

²⁴¹ For example: Thomas Johnson, Robert Morison, Crispijn van de Passe, Phillip Stephens, Jacob Bobart, William Howe.

This reliance on Latin is frequently referred to in the secondary literature as an indicator of the increasing 'scientization' of botany. However, there was no switch to using Latin for botanical works, merely a resurgence of previous scholarly habits. Plant structures began to receive attention later in the century with the advent of new instruments (namely the microscope) and greater attention to detail. Natural philosophers needed words to describe these structures and adapted the Latin language to suit their purposes.²⁴²

B. Botanical Illustration

Another important element in early modern gardening books was illustrations. Images were essential to plant descriptions; words are clumsy and imprecise for description, definition, and classification. It is hard to describe something in words that someone has not seen.³⁴³ Images give us an immediate and definite awareness of an object. Unfortunately, the literature on botanical illustrations has not kept pace with the ideas on printed images. Visual thinking is different from verbal thinking.²⁴⁴ There is a unique, visual language and set of conventions encoded in images. One problem that historians need to face is that we perceive 'pretty' drawings as more accurate.²⁴⁵ The illustrations of plants and gardens in various texts served several purposes. Herbals contained images of plants as a guide to identification, gardening manuals included images to illustrate designs and layouts, picture books contained engraved plates of remarkably detailed images for the viewer's pleasure. These various applications affect how historians should analyse the images. There are several questions that relate to this argument.

The first question to ask is from where were the images obtained? Tracing the source of the illustrations (i.e. the source of the plates or woodblocks) in a book is an important first step in analyzing the images. Illustrations were not always drawn specifically for the book; particularly in England, printers and authors appropriated plates and blocks from other sources. These images were extracted from the original

²⁴² Steam, Botanical Latin, p. 29.

²⁴³ Ivins suggests that the translation involved in reading words makes reading an inferior process for description. Printed words are addressed to the eye and then translated to sounds addressed to the ear. Images are addressed immediately to the correct sense organ - the eye. Ivins, *Prints and Visual Communication*, pp. 52-54, 59.

²⁴⁴ Prints were repeatable visual statements. Printing allowed authors the ability to exactly repeat pictorial statements. Victoria Dickenson, *Drawn from Life* (Toronto: U of Toronto Press, 1998), p. 242; Ivins, *Prints and Visual Communication*, p. 2.
²⁴⁵ Bert Hall "The Didactic and the Element". *Picture Visual Visual Communication*, p. 2.

²⁴⁵ Bert Hall, "The Didactic and the Elegant," Picturing Knowledge: Historical and Philosophical Problems Concerning the Use of Art in Science (Toronto: U of Toronto Press, 1996), p. 16.

context; sometimes they rented the actual images, often they re-engraved or redrew familiar images.

The next question to ask is what purpose did illustrations serve in plant books? Images are drawn for communicating information; they fill a need and have a role in shaping knowledge.²⁴⁶ Botanical illustrations keyed the reader into the text in a decorative and emblematic manner. Including illustrations, the author matched inherited knowledge with directly observable fact.²⁴⁷ Were the images of plants included in herbals diagrams or pictures? I am inclined to believe they are diagrams. Diagrams are simplified figures that convey the essential meaning; the viewer makes inferences about the image.²⁴⁸ Using woodblocks, which are essentially line-drawings, the artist could limit or control what the image showed. The inclusion of the flowering and the fruiting stages in the same images made these images more generic or symbolic of the actual plant.²⁴⁹ Seventeenth-century images of plants were stiff and formal, frequently drawn symmetrically (whether they appeared as such in nature or not), the plants often reduced to geometric regularity or formulaic structures. The engraver was forced to decide how to represent the plant.²⁵⁰ In the end, the images were limited to the artist's knowledge and experience of the world.

What purpose did the images of plants serve in herbals? If they were included to key the reader to the plant's general form and appearance, then the images can be classified as diagrams. The images in herbals were diagrams. Contrasting the images to the illustrations in a book such as Crispin van de Passe's *A Garden of Flowers* (1615) demonstrates the different purposes the images serve.²⁵¹ *A Garden of Flowers* is a picture book. The plants are shown growing in soil, a unique type of representation. In most depictions, plants are depicted against a white background - the context is removed.

²⁴⁶ Dickenson, Drawn from Life, p. 5.

²⁴⁷ Martin Kemp, "Taking it on Trust: Form and Meaning in Naturalistic Representations," Archives of Natural History 17 (1990), p. 128.

²⁴⁸ Hall, "The Didactic and the Elegant," p. 9; Gill Saunders, Picturing Plants (United Kingdom: Zwemmer, 1995), p. 8.

²⁴⁹ Only in the herbal of Otto Brunfel do the woodcuts portray particular plants. Individual and full of personality, these plants have wilted leaves, broken stems, and accidents of growth. In contrast, the plants in Fuchs' woodcuts are careful schematic representations.

²⁵⁰ Should he portray the plant entirely, display the roots and bend the blossoms, or concentrate on blossoms and shorten the stem? Leighton, *Early American Gardens*, p. 161. Saunders argues that new plants were a catalyst for the shift away from existing images of plant to the production of original drawings. New and unique plants was a problem for artists; they needed to see the plants in order to draw them as most were of completely unknown forms. Saunders, *Piduring Plants*, pp. 12, 65, 104. ²⁵¹ John Parkinson used a few images from Crispin van de Passe's 1615 text. Wilfrid Blunt, *The Art of Botanical Illustration* (London: Collins, 1950), p. 102.

How did this change the reader's perception? In this book, the plates were more significant than text.²⁵²

Treating these images as diagrams changes the manner in which they are understood. As authors sought a wider audience, they changed the images in the text. The closer an image appears to 'photo-realism', the less training is involved for the reader.²⁵³ One standard trope in discussions of herbals is the influence of Renaissance naturalism in shaping botanical illustrations. The standard assumption is that the revival of naturalism in the Renaissance led to newer, more accurate depictions of plants.²⁵⁴

Thirdly, how are the images presented? Botanical illustrations present each species of plants as a discrete entity. Each plant has its own essential significance and assigned position.²⁵⁵ Style is also important. Parkinson's woodcuts, produced by a native engraver, were done in an older style. Crude and simplistic, these woodcuts do not compare to the images produced in the Plantin collection. Publishers and authors were aware that colour portrays different information.²⁵⁶ Images in herbals were intended to be coloured. In *A Garden of Flowers* there are detailed instructions for how to colour the plates; Fuchs' woodblocks were deliberately cut with fine lines to assist in colouring, and coloured copies of Gerard's *Herball* (1597) have survived.²⁵⁷

There is a difference between images made specifically for the purpose of illustrating a text and those included as decoration.²⁵⁸ Images could also be used for decoration, not illumination. The title-pages of the sixteenth century were created from several decorative woodcuts printed together. Decorations were also used in the text itself. For example, Hugh Platt's *Delightes for Ladies* (1602) had woodcut borders surrounding each page of the book.²⁵⁹ Since decorations were made as woodblocks, the images could be

²⁵² Saunders, Picturing Plants, pp. 41, 48-54.

²⁵³ Hall, "The Didactic and the Elegant," p. 10.

²⁵⁴ Blunt, *The Art of Botanical Illustration*, p. 1. "By careful observation and meticulous measurement, and by portraying strictly what could be seen, the universe as it was created would be uncovered to human view. This separation between the constructions of men and the works of God meant that the landscape and the animals and plants in it must be classified anew." Dickenson, *Drawn from Life*, p. 230. Also p. 45

²⁵⁵ Significance and position was frequently determined by the medical virtues of the plant. Kemp, "Taking it on Trust Form and Meaning in Naturalistic Representations," p. 132.

²⁵⁶ Saunders, Picturing Plants, p. 15.

²⁵⁷ The title-page and portrait of Gerard are reproduced in Henrey.

²⁵⁸ Ivins, Prints and Visual Communication, p. 44; Dickenson, Drawn from Life, p. 237.

²⁵⁹ See also R.B. McKerrow and F.S. Ferrow, Title-Page Borders Used in England & Scatland 1485-1640 (London: CUP, 1932).

reused in several different types of books. Floral borders and designs were a favourite decoration in religious works.

B.1 Woodblocks

Another part of the printing process is the production of images. There were several techniques for producing illustrations available to the seventeenth-century printer: relief prints consisting of woodcuts, surface prints including line engravings or etchings upon metal. There were different purposes for each type of illustration. Regardless of which process was employed, illustrations were expensive to produce. The cost of illustrating a text equalled all the other costs of producing a book, including purchasing the paper.²⁶⁰ Detailed below is a description of the actual technique, used in the herbal tradition for woodcuts and title-pages for etchings/engravings. How and why these types of producing illustrations were used reflects the costs of the books and therefore the type of audience.

Wood-cutting or xylography is the oldest method of producing illustrations for books.²⁶¹ As discussed in the previous section on printing, the techniques employed between 1450 and 1800 were relatively uniform. Durability made this medium appealing and cost-effective as the same woodblock could be reused in several books.²⁶² Three collections of woodcuts provided the mainstay of illustrations for English herbals: the woodcuts produced for Brunfels, Fuchs, and those contained in the Plantin collection.²⁶³

The woodcuts of Otto Brunfels first appeared in his *Herbarium vivae eicones* published in 1530.264 Original works, these woodcuts show the personality of the plants. Based on

²⁶¹ Originating in China, this practise existed until roughly 1800 when it was replaced by wood-engraving. Douglas Bliss, A History of Wood-Engraving (London: Spring Books, 1964), pp. 2-4. For a more detailed explanation see: McKerrow, An Introduction to Bibliography for Literary Students; Gaskell, A New Introduction to Bibliography for Literary Students; Bliss, A History of Wood-Engraving, pp. 1-3; Woodberry, A History of Wood-Engraving, Saunders, Picturing Plants, p. 14.

²⁶⁰ Gaskell, A New Introduction to Bibliography, p. 158; Watt, Cheap Print and Popular Piety, p. 262.

The high cost of illustrating a text prevented several authors from using illustrations. For example, John Rea complained in his preface that he had to forgo including costly cuts, and John Ray was unable to illustrate his *Historia*. Henrey, *British Botanical and Horticultural Literature*, p. 214.

²⁶² Apparently one engraver in the seventeenth century, Papillion's grandfather, had a woodblock that lasted ninety years at 500/600 pulls a year. Bliss, A History of Wood-Engraving, p. 7.

²⁶³ I do not give biographical information on these authors; they are discussed only in the context of their relevance to the topic of botanical woodblocks. One author has suggested that there are only five collections of woodblocks that are of first-rate importance for all herbals: Brunfels, Fuchs, Mattioli, Plantin and Gesner-Camerarius. Arber, *Herbals*, p. 241.

²⁶⁴ The second volume appeared in 1531, and the third in 1536. The title of the work translates living portraits of plants'.

original drawings by Hans Weiditz, the images are portraits of individual plants.²⁶⁵ Realistic illustrations, Weiditz's plants have wilted leaves, accidents of growth and broken stems.²⁶⁶ Although these woodcuts are usually mentioned in traditional 'origins' theories concerning herbals, they were not reprinted in *any* English herbals.

Another celebrated sixteenth-century herbal is *De Historia Stirpium* (1542) by Leonard Fuchs. The woodcuts in this herbal consist of very thin lines and no shading; the author did not want to interfere with the colouring of these images. Prepared by three artists, the plants in these woodcuts were idealized. Unlike Brunfels, there is no individuality in these images; the plants are more generic representations. The book was published originally as a large folio but smaller versions of the herbal soon emerged - containing only pictures.²⁶⁷

Fuchs' woodcuts were repeatedly used in England. William Turner's New Herball was illustrated with woodcuts from the octavo edition of Fuchs' herbal.²⁴⁸ The original edition of John Gerard's *Herball* contained nearly 1800 woodcuts. Sixteen images were original cuts, and a few were used from l'Obel but the bookseller John Norton obtained the vast majority of the images by renting woodcuts from the Frankfurt publisher of Tabernaemontanus.²⁴⁹

Another excellent source of images was from the printing house of Christopher Plantin. This sixteenth-century Antwerp printer arranged with three leading herbalists -Rembert Dodoens, Charles de L'Ecluse (or Clusius), and Matthias de L'Obel - to create a joint collection of woodcuts. Plantin's collection of botanical woodcuts was an amazing

²⁶⁵ Some of Weiditz's original illustrations have been found. Prepared in colour and drawn on both sides of the page, these images would have provided the source material for the woodcutters and the colourists. Blunt and Raphael, *The Illustrated Herbal*, p. 122; Frank Anderson, *An Illustrated History of the Herbal* (New York: Columbia University Press, 1977), p. 124; Arber, *Herbals*, pp. 206-209.

²⁶⁶ See Plate Ten.

²⁶⁷ For more information on the three artists see Blunt and Raphael, *The Illustrated Herbal*, pp. 124-125; Anderson, *An Illustrated History of the Herbal*, p. 143; Arber, *Herbals*, pp. 212, 217-219; Blunt, *The Art of Botanical Illustration*, p. 49. An octavo with four figures per page and no text appeared in 1545 and a duodecimo with single figures per page appeared in 1549. The woodcuts used in these smaller books are the ones frequently reprinted in later herbals. Henrey, *British Botanical and Horticultural Literature*, p. 7.

 ²⁶⁸ Henrey, British Botanical and Horticultural Literature, p. 26; Blunt and Raphael, The Illustrated Herbal, p. 126; Arber, Herbals, p. 121; Blunt, The Art of Botanical Illustration, p. 55. Rohde suggests that Turner's herbal was printed abroad so as to secure the woodblocks. The same reason Henry Lyte published his book on the continent. Rohde, The Old English Herbals, p. 83.
 ²⁶⁹ Jacob Dietrich or Jacobus Theodorus of Bergzabern. A pupil of Brunfels, his Neuw Kreuterbuch appeared in 1588-91. His second book, published in 1590 was entited Eiannes Plantarum and contained only the woodcuts. The illustrations from Tabernaemontanus' book were not original either but reproduced from Bock, Fuchs, Mattioloi, Dodoens, de l'Ecluse, and de l'Obel. Henrey, British Botanical and Horticultural Literature, pp. 9-10; Arber, Herbals, p. 76; Blunt and Raphael, The Illustrated Herbal, p. 128; Arber, Herbals, p. 76.

resource for printers.²⁷⁰ Well into the seventeenth century, these blocks were reused in texts. For example, Thomas Johnson's edition of Gerard has 2,766 blocks from Plantin's house. The illustrations for Henry Lyte's English translation of Dodoens's *Crujdeboeck* were also from this collection.²⁷¹

Some English authors did commission new blocks for their books. John Parkinson commissioned a new set of cuts, crudely imitated from several sources, for his *Paradisi in Sole* (1629).²⁷² It was hard for the craftsmen and artists to avoid the rectangular restriction of the images. Trees were often drawn with square crowns, the upper limits of their foliage limited by the top boundary of the woodblock.²⁷³ Essentially line drawings, the artist was restricted in the level of detail he could reproduce. New demands for realism and accuracy forced the replacement of the woodblocks for depicting plants. In the end, the qualities that made woodblocks durable and cheap led to their replacement. As the accuracy of botanical illustrations increased, woodblocks could not be cut to reflect the level of detail the new images required.

B.2 Etching & Engraving

Engraved plates were more precise and detailed.²⁷⁴ Why did they not replace woodcuts earlier? There are several reasons. Surface prints are larger and cannot be placed directly in the form with the text. Engraved plates wore out faster and cost more to make and print; they were luxuries. During most of the seventeenth century, engraving was reserved for the title pages of books.²⁷⁵ The artwork and symbolism

²⁷⁰ Most of the work was done between 1566-1576 and the chief artist was Pierre van der Borcht (1545-1608). There was a second illustrators employed at the house, Arnold Nicolai. Of the 2117 known woodcuts in the Plantin collection, 1856 are images of plants. Henrey suggests there are 3,874 remaining blocks. Henrey, *British Botanical and Horticultural Literature*, pp. 9-11; Blunt and Raphael, *The Illustrated Herbal*, pp. 153, 160

²⁷¹ Bliss, A History of Wood-Engraving, p. 154; Blunt and Raphael, The Illustrated Herbal, p. 163.

²⁷² Most of the woodcuts were original, but some were copied from de l'Ecluse, de l'Obel and others - the Plantin collection. Bliss, *A History of Wood-Engraving*, p. 155; Arber, *Herbals*, p. 136. The blocks for the first edition were done by Switzer an English wood engraver. Switzer is referred to in John Evelyn's *Sculptura* (1662) as the wood engraver who illustrated the herbals of Parkinson. Henrey, *British Botanical and Horticultural Literature*, p. 161. See **Plate Thirteen** and **Plate Twenty-Six**. ²⁷³ Arber, *Herbals*, p. 215.

²⁷⁴ Engraving is the opposite of woodcutting. Woodcuts are prepared by cutting away spaces in the image; the lines cut for engravings are the actual lines that make up the image. It is mechanically simpler to pull impressions from lines below the surface of a sheet of metal than from coarse lines that stand up on the surface. George Woodberry, A History of Wood-Engraving (New York: Harper and Brothers, 1883), p. 55; Ivins, Prints and Visual Communication, p. 49. See also McKerrow, An Introduction to Bibliography for Literary Students, pp. 112,119; Gaskell, A New Introduction to Bibliography for Literary Students, pp. 156-159; David Strang, The Printing of Etchings and Engravings (London: Ernest Benn Limited, 1930).

²⁷⁵ Engraved title-pages belong to Stuart England. In the sixteenth century, only nineteen title-pages were engraved. Henrey, British Botanical and Horticultural Literature, p. 41. The popularity of these title-pages, however, declined by 1691. Alfred Johnson, A Catalogue of Engraved and Etched Title-Pages (Oxford: Oxford University Press, 1934), pp. viii, x. Henrey suggests that the five most interesting engraved title-pages of botanical books belong to Ralph Austen, A Treatise of Fruit-Trees (1653), Rea, Flora Ceres & Pomona (1665); Chades Cotton, Planters Manual (1675); Thomas Johnson The berball or Generall historie of plantes (1633); and Parkinson, Theatrum Botanicum (1640).

exhibited in some title pages demonstrates the extent to which this art was perfected. As for the production of woodblocks, there was no strong native English industry for engraving; most important engravers in the period were immigrants from the continent. By the end of the century there was an increase in the use of engraving and several books were published consisting exclusively of engraved plates, for example Oxonia Illustrata (1675), A Garden of Flowers (1615), and Britannia Illustrata (1707).

In the previous century, printers used woodblocks for the title-page, either carved as one image or a collection of several decorations together.²⁷⁶ The trend was to have a handsome copperplate title-page and few illustrations in the body of the work. Designed as embellishments, the title-page told the reader the contents of the book, with or without the name of the author, the date of printing, and the name of the printer or bookseller. Title-pages conveyed a wide range of information through visual representation.²⁷⁷ All the necessary information was given to direct the purchaser where to obtain the book. Often used as advertisements for book sales, the beauty and quality of the engraved title-page attracted potential customers.

Remarkably, little is known about the engravers. Produced separately from the text, title-pages were embellishments. Title-pages were frequently reworked to adapt them to later editions; often different editions would be engraved by different artists.²⁷⁸ There were set patterns for title-pages of specific types of books. Filled with emblems and allegories, these title-pages were rich with symbolism. The typical pattern for title-pages was based on the Roman arch with symbolical figures on either side; for the most part, this pattern was found in the title-pages of herbals.²⁷⁹ A portrait of the author was included along with several allegorical figures or important ancient authors. Another

²⁷⁸ See **Plate Seventeen**. For example, the first edition, *A booke of Flowers Fruids Beastes* (1661) has an engraved title-page by Francis Delaram. The title-page for the second edition, *The second booke of Flowers, Fruids, Beastes* (1663) was done by W. Simpson. A third edition of the book *Flora Flowers, Fruids, Beastes* (1660-1665?) has a title-page engraved by John Payne. Johnson, *A Catalogue of Engraved and Etched Title-Pager*, p. ix. The images from this text were reproduced in Gavin Bridson, *Plant, Animal and Anatomical Illustrations in Art and Saence* (Winchester: St. Paul's Bibliographies, 1990).

²⁷⁹ For example, Parkinson's *Theatrum Botanicum* (1640) depicts Adam and Solomon. The frontispiece to Gerard's *Herball* (1597) includes a representation of Flora. Thomas Johnson's edition of Gerard's *Herball* (1633) has Theophrastus and Dioscorides along with Ceres and Pomona. The title-page to John Rea's 1665 publication includes depictions of Flora, Ceres, and Pomona, see **Plate Sixteen**. See also **Plate Twenty-Four** for the use of allegorical figures. Corbett, "The Engraved Title-page to John Gerarde's *Herball*," p. 223.

²⁷⁶ **Plate Eleven**: the title-page to Turner's *New Herball* (1538) consisted of several woodcut decorations put together. Lyte's translation of Dodoens's book was also printed with a woodblock title-page (there is a reproduction of the title-page in Henrey, p. 33). **Plate Thirteen**: Parkinson's *Paradisi in Sole* (1629) was also printed with a woodcut title-page.

²⁷⁷ Margery Corbett, "The Engraved Title-page to John Gerarde's Herball or Generall Historie of Ptantes, 1597," Journal of the Society of Bibliography of Natural History 8/3 (1977), p. 223; McKerrow, An Introduction to Bibliography for Literary Students, pp. 89-91.

common feature was a half portrait of the author holding a plant.²⁸⁰ Finally, there was some sort of representation or allusion to God. There are several representative engraved pages to examine: Gerard's *Herball* (in both the 1597 and 1633 editions), Parkinson's *Paradisi in Sole* (1629) and *Theatrum Botanicum* (1640), and Culpeper's *English Physician* (1652).²⁸¹

Gerard's *Herball* of 1597 contained an engraved page by William Rogers, which was unusual at a time when woodcut images were still the standard for title-pages.²⁸² In the original edition, the author's portrait does not appear on the title-page but is included on a separate page. The 1633 edition by Johnson retains the portrait, placing it at the bottom of the title-page. Parkinson's portrait is not on the title-page for *Paradisi in Sole* but does appear in *Theatrum Botanicum*. Unlike the other title-pages described, Culpeper did not have an elaborate title-page for his herbal. The frontispiece for the *English physitian* is the same (although re-engraved) as in his 1649 edition of *Physicall directory.*²⁸³ Engraved by Thomas Cross, the frontispiece is a portrait of the author.

There is no reference to God in the Rogers' engraved title-page for Gerard's Herball. The word "Jehovah" in Hebrew characters that appears at the top of the title-page engraved by John Payne is reminiscent of John Parkinson's Paradisi in Sole.²⁸⁴ The same symbol is repeated on the title-page to Theatrum Botanicum. Whereas the 1597 title-page for Gerard's Herball contained a garden scene and floral decorations intertwined around the figures, in the 1633 engraving, the plants are contained in pots.²⁸⁵ Flowerpots also appear on the title-page of Paradisi in Sole on the outside of the depiction of the Garden of Eden.

²⁸⁰ John Parkinson holds a primula (Plate Twenty-Six). In his portrait, John Gerard holds a potato flower (see Plate Twenty-Five). Leighton, *Early American Gardens*, pp. 142, 147; Henrey, *British Botanical and Horticultural Literature*, pp. 41, 161-163.

²⁸¹ The title-pages are reproduced as Plate Twelve, Plate Thirteen, Plate Fourteen, Plate Fifteen, and Plate Twenty-Six.

²⁸² For a more complete analysis of this title-page see Corbett, "The Engraved Title-page to John Gerarde's *Herball*," pp. 223-230.

 ²⁸³ Henrey, British Botanical and Horticultural Literature, p. 85. Compare Culpeper's portrait to Gerard's as it appears in the 1597 edition of *The berbal* (Plate Twenty-Five) and the 1633 edition (Plate Twenty-Six).
 ²⁸⁴ Compare Plate Thirteen and Plate Seventeen.

²⁸⁵ Considering it was Johnson' personal drawing of bananas that was included in the illustrations, the inclusion of a bunch of bananas in one of the flower pots on the title-page is interesting. Henrey suggests the engraver commemorated the bunch of bananas Johnson received from his friend Dr Argent. Henrey, British Batanical and Horticultural Literature, pp. 51-53. See also Christopher Currie, "The Archaeology of the Flowerpot in England, Wales, circa 1650-1950," J of Garden History 21 (1993), pp. 227-46.

The earliest examples of books consisting entirely of engravings were produced on the continent; it is only towards the end of the seventeenth century that such books were produced in England. The first example of such a book is *A Garden of Flowers* (1615).²⁸⁶ The engraver, Crispin van de Passe, belonged to a family of distinguished engravers. Originally published in Utrecht, the popularity of this picture book of flowers led to its publication in Dutch, French, Latin, and English.²⁸⁷ The illustrations of the flowers are unique and there are no equals in any English books until the eighteenth century.

One engraver of particular significance is David Loggan.²⁸⁸ Although of primary interest for his book Oxonia Illustrata, Loggan was responsible for the title-page to John Rea's Flora Ceres and Pomona.²⁸⁹ Appointed Public Sculptor' at Oxford, he later published Oxonia Illustrata, a collection of engravings that detail the various colleges and their gardens.²⁹⁰ Amazingly detailed and precise, these engravings are 'snapshots' of the gardens after the Restoration. Appended with a cross-list of page numbers for Anthony Wood's Fasti Oxoniensis, David Loggan intended this picture book to accompany Wood's textual description of the colleges. Loggan details not only the buildings of the colleges, but the gardens as well. His depiction of the Oxford botanical garden is one of the few surviving illustrations.²⁹¹

C. Genres

Gardening books varied in size, shape, form, style and genre.²⁹² Garden writings are neither 'literature' nor popular culture; garden books are both academic works and popular books.²⁹³ How then can these writings be understood? There are three genres that roughly classify the writings of this period: herbals, husbandry manuals, and polemic texts.

Herbals have been woven into histories of botany, medicine, and popular lore. Seventeenth-century herbals offer us insight in early forms of classification, description,

²⁸⁶ See also Spencer Savage, "The Hortus floridus of Crispijn vande Pas the Younger," *The Library* Series IV. 4 (1924), pp. 181-206.

²⁸⁷ Some of the images are copied in Parkinson's *Paradisi in Sole* (1629). Henrey, *British Botanical and Horticultural Literature*, p. 161. ²⁸⁸ Born in Danzig in either 1633 or 1635, he was in London by 1658 and died there in 1692.

²⁸⁹ See Plate Sixteen.

²⁹⁰ See Plate Eighteen for examples.

²⁹¹ See Plate Three.

²⁹² There was excessive copying and republishing of important works and translation of continental works was extremely common. The translations were of French and Dutch originals; there were no Italian gardening books translated in this period. Rohde, *The Old English Gardening Books*, p. 38.

²⁹³ Hoyles, Gardeners Delight, p. 36.

and depiction of plants. Husbandry manuals are practical, how-to books that offered farmers, gardeners, and interested readers knowledge of the earth.294 Polemics are a relatively new area of historical interest for this period. Based on ancient Roman precepts on one's behaviour in exile, these treatises offer insight into accepted morals and behaviours for the sequestered elite of mid seventeenth century England.

While a few books were written specifically for a female audience, there is scarce evidence to suggest that a wide audience existed among women.25 The plausibility of a female readership for gardening books (given the dedications and prefatory letters of authors such as Nicholas Culpeper, William Lawson, Hugh Platt, and John Rea) deserves to be explored further.2%

C.1 Herbals

Herbals contained pictures, descriptions and classifications. A cross between a botanical listing of plants and a medical compendium of simples, they served seventeenth-century England as reference manuals.297 Since most plant knowledge was gained orally, herbals were used as reference books: the reader could learn the healing qualities of herbs whose appearance he was familiar with. As catalogues of 'simples', herbals were read or consulted by physicians, apothecaries and students of botany.

The secondary literature has a common story about the origins and development of herbals.298 Tracing their 'evolution' from ancient sources to later scientific treatises, scholars argue that the herbal tradition aided the development of botany as a science. Basing their argument on older literature concerning the printing press, these scholars tie printing to the development of more accurate and 'scientific' herbals.299 At the end of the seventeenth century, we are told, the herbal tradition ends when it splits into two

²⁹⁴ Husbandry manuals were not restricted to plants; many works were printed on apiary, farriery, viticulture, orchards, and soil. 295 See Cressy, Literacy and the Social Order, pp. 145-149, 176.

²⁹⁶ See Cuthbertson, Women Gardeners, Fussell and Fussell, The English Countrywoman, June Taboroff, "Wife, Unto Thy Garden': The First Gardening Books for Women," J of Garden History 11/1 (1983), pp.1-5; Hugh Platt, Delightes for Ladies (1600). 297 "A herbal has been defined as a book containing the names and descriptions of herbs, or of plants in general, with their

properties and virtues." Arber, Herbals, p. 14.

²⁹⁸ Arber, Herbals, Hobhouse, Plants in Garden History, Hyarns, A History of Gardens and Gardening, Anderson, An Illustrated History of the Herbals, Blunt and Raphael, The Illustrated Herbal, Rohde, Old English Herbals, Clarkson, The Golden Age of Herbals and Herbalists.

²⁹⁹ The wider exposure printed herbals received led to the discovery of errors and major problems. Physicians and apothecaries decided to update these texts with new illustrations and new knowledge. Readers tried to match their local flora to the descriptions offered in the ancient Greek and Roman pharmacopoeias and were frustrated in their attempts. Inaccurate illustrations, antiquated descriptions, and the different localized floras led to the development of new herbals.

new trends - the florilegia and the scientific treatise.³⁰⁰ Florilegia emerged as a new genre because the vast number of new plants brought to England needed to be identified, described, named and illustrated. The previous focus on medicinal properties continued, but in a separate book. These new books of flowers focused on aesthetic not medicinal properties.³⁰¹ But if we deconstruct this argument about the herbal tradition, a different account emerges.

Seventeenth-century herbals included plants of medicinal, culinary, and aesthetic English herbals were collections of information gleaned from other importance. sources. There were several standard features in these herbals. Indices were essential and frequently included both an index of Latin names and one of English names. Most authors realized the problem of name duplication and sought to appeal to the widest audience by listing all the known names for particular plants. Another feature was a description of the plants either in the text or with illustrations. While it was typical to include descriptions of the plants, this was not always the case. There was an established tradition of printing lists of plants and their various names.302 Woodblock cuts were essential for an herbal. Unlike most contemporary books, woodcuts were more common than scarce in herbals. The author needed to provide visual and textual descriptions of the plants.³⁰³ Intended as a reference manual, these books were consulted by both literate and illiterate people; since the illustrations aided readers in identifying particular plants. To economize, plants were drawn with both the flowering and the fruiting stages in the same image, and as mentioned earlier printers borrowed or reused prints from existing books.34

For the seventeenth century, three 'standard' herbals receive the most attention in the secondary literature: those by John Gerard, John Parkinson, and Nicholas Culpeper.

301 Most of them could not be classified according to their medical properties. Saunders, Picturing Plants, p. 88.

³⁰⁰ Arber argues the herbal split into the medical pharmacopoeia and botanical flora, Herbals, p. 268.

³⁰² In the previous century, William Tumer published two works on plant names. *Libellus de re berbaria novus* (1538) contained a listing of 140 plants written in Latin with the Greek and English names added. The second, *The names of berbes in Greke, Latin, Englishe Duche & Frenche with the commune names that berbaries and apothecaries use* (1548) contains 105 plants. Lovell's *Pambotanologia* (1659) was intended as a pharmaecopia. The book included an alphabetical catalogue of plants but there were no descriptions or aids to identification.

³⁰³ Thomas, Man and the Natural World, p. 52.

³⁰⁴ Blunt and Raphael, The Illustrated Herbal, p. 126. For example, one woodcut of clematis, first seen in Dodoens' Pemptades (1583), reappeared in de l'Obel, de l'Ecluse, Gerard and Parkinson's books. Arber, Herbals, p. 232.
All three present basically the same material; the difference lies in the nature and context of each book.³⁰⁵

The herbal of John Gerard (1545-1612), a barber-surgeon was printed, reprinted, and updated. This book was a key reference manual for the seventeenth century; its popularity derives from his prose; the material is presented with vigour, charm, and style.³⁰⁶ Chatty and full of tidbits of information, Gerard's descriptions of plants are highly readable.

In contrast to Gerard's herbal, the descriptions offered by John Parkinson are more constructive. While much of his information was borrowed from previous authors, the descriptions and advice are based on personal experience with plants.³⁰⁷ An apothecary and a gardener, Parkinson was intimately familiar with plants both for their medicinal and aesthetic properties. Justifying his endeavours, Parkinson explains that his herbal is intended to assist the reader by providing accurate knowledge.³⁰⁸ *Paradisi in Sole* offers instructions and information on planting gardens. Plants are listed according to their utility and the type of garden in which they belonged.³⁰⁹

Theatrum Botanicum is a large folio herbal of over 1,755 pages filled with more than 2,700 woodcuts of plants. In this encyclopaedic text, the plants are classified in seventeen classes or 'tribes'. Placing stress on the medicinal properties, each plant is accompanied by an illustration and a paragraph on its virtues. The text itself is a compilation of the works of Pliny, Dioscorides, Galen, Tragus, de L'Obel, Dodoens, Clusius, and Pena.³¹⁰

Nicholas Culpeper, an apothecary, published numerous works including a book on midwifery, an herbal, and an unauthorized translation of the Royal College of Physicians

³⁰⁵ See **Plate Nineteen** for a comparison of book sizes between these three herbal authorities. Leighton suggests that these three texts were the standard (and perhaps only) volumes available to the protestant settlers in New England. Leighton, *Early American Gardens*, pp. 140-141.

³⁰⁶ Leighton, Early American Gardens, p. 140.

³⁰⁷ Parkinson published his books late in life; Theatrum (1640) was published when he was seventy-three.

The flowers he discusses are flowers he grew in his Long Acre garden. John Riddle, "John Parkinson's Long Acre Garden 1600-1650," J of Garden History 6/2 (1983), pp. 112-124.

³⁰⁸ "First, having perused many Herbals in Latine, I observed that most of them eyther neglected or not knowne the many diversities of the flower Plants, and rare fruits are known to vs at this time, and (except *Chaim*) have made mention but of a very few. In English likewise we have some extant, as *Turner* and *Dodonaeus* translated, we have have said little of Flowers, Gerard who is last, hath no bout given vs the knowledge of as many as he attained vnto in his time" Parkinson, *Paradisi in sole* (1629), preface to the reader.

³⁰⁹ John Tradescant the Younger's personal copy of this book exists in the Bodleian Library. It contains notes in his hand as well as notes by Elias Ashmole. Blunt and Raphael, *The Illustrated Herbal*, p. 169. ³¹⁰ Thorndike, *A History of Magic and Experimental Science*, p. 62.

in London's *Pharmacopoeia*.³¹¹ Throughout his medical works is a strong focus on the true simples - herbs.³¹² His *English Physitian*, in fact, was an herbal. Designed as a complete guide to medicine and therapeutics, this book contained a catalogue of herbs according to their planetary disposition and a description of English herbs in alphabetical order.³¹³ Written in English with easy and straightforward text, this book was intended to be a reference manual for common people. Unlike previous herbals, there are no illustrations in the *English Physitian*; Culpeper chose to exclude them knowing they would inflate the price of the book.³¹⁴

C.2 Husbandry Manuals

Husbandry manuals provided a wealth of practical information for the gentlemanly farmer or the country yeoman. Manuals and how-to books put valuable information into the hands of people who could profit from them; frequent editions illustrate their popularity.³¹⁵ By the later part of the century, protestant idealists adopted this genre. Intended to spread spiritual lessons and diffuse practical knowledge to the lower sorts, this genre was shaped by the ideas of men like Samuel Hartlib and his circle. Other authors saw this genre as an easy way to make money (for example, Markham). Husbandry manuals offer us insight into agricultural practices, religious ideologies, and the diffusion of 'practical knowledge'.

Husbandry manuals and herbals were a sub-genre of natural history.³¹⁶ Mirrored in these texts are the social and political conflicts of English society. This is manifest in

³¹¹ For the most complete (and perhaps only) biography on Nicholas Culpeper see Thulesius, Nicholas Culpeper. Other sources of information include: a short biography in Culpeper's School of Physick (1659) written by W. Ryves; an small and largely incorrect article in the Dictionary of National Biography. F.N.L. Poynter, "Nicholas Culpeper and his Books" Journal of History of Medicine 17 (1962), pp. 152-167; Rex Jones, Genealogy of a Classic: The English Physician of Nicholas Culpeper (San Fransisco: University of California, 1984); Henrey, British Botanical and Horticultural Literature, pp. 82-88.

³¹² Culpeper's interest in plants and herbs was fostered during his youth. Excursions with his mother and grandmother to collect plants raught Culpeper common herbal knowledge. As well, his grandfather's library contained a copy of William Turner's *New Herball*. Culpeper read this book and was influenced by Turner's simple descriptions. Turner wrote the herbal to rectify the dismal plant knowledge in England, this herbal was written for the common man. Ironically, the word 'herbal' did not appear on the title-page of Culpeper's book until the end of the eighteenth century. Henrey, *British Botanical and Horticultural Literature*, p. 87.

³¹³ Astrology underpinned almost all of Culpeper's work. The herbal descriptions he offered are classified according to planetary disposition. Modern scholars dismiss or scom Culpeper's work as superstitious or laced with occultism; their disdain is coloured by their present-centeredness. Culpeper's ideas were not unusual during the seventeenth century. Many advanced thinkers saw astrological botany as an advance on metaphysical explanations. The idea was popular with radicals and often associated with millenarianism. Contemporary criticism of his ideas did exist. Coles included a fierce critique of Culpeper's astrology in his *The Art of Simpling* (1656).

³¹⁴ Only one illustration appears in the text - a portrait of the author, see Plate Fifteen.

³¹⁵ Cressy, Literacy and the Social Order, p. 7.

³¹⁶ Rebecca Bushnell, "Experience, Truth, and Natural History in early English gardening books," The Historical Imagination in Early Modern Britain (Cambridge: CUP, 1997), p. 181.

three different ways. First, authors used their practical texts on gardening advice to advance their own social position.³¹⁷ Sixteenth-century texts focused on the manorial lord because it was from him that innovations and changes in agricultural technique spread. Texts in the seventeenth century sought to disseminate their knowledge to a wider audience, with the author taking the place of the lord. Secondly, readers judged the author's credibility based upon knowledge about his social position, his sources, and his intended audience.³¹⁸ Claims to truth were linked to how the author saw his own place in society. Thirdly, there is tension in the literature, and between authors, over the true source of knowledge – was it for example, the gentleman farmer or the plain husbandman? Recourse to knowledge was valued differently according to the author's social rank. Authors like Markham focused on their status as Englishmen. Having learnt from other Englishmen working the land, these authors sought to 'spread' their knowledge.

Husbandry manuals were written on a wide variety of topics, yet underlying all of them is a strong emphasis on experience. Barnaby Googe wrote about his personal habits and daily activities to provide the reader with practical information.³¹⁹ Robert Sharrock stated in his *The History of Propagation* (1659) that he relied on his own experience. In *The Compleat Gardeners Practice* (1664), Stephen Blake complained there were not enough books dealing with the practical side of gardening.

There are numerous treatises on husbandry printed in the seventeenth century written by a wide variety of authors. William Lawson deals with garden pests and diseases.³²⁰ Hugh Platt was an authority on soils and manures.³²¹ The literature on trees had two focuses: their use in avenue planting and as a resource of timber.³²² Focusing on practical ideas and experiments, the treatises on fruit trees and timber are examples of how the practical aspect of agriculture could benefit society. Almanacs provided detailed

³¹⁷ Bushnell, "Experience, Truth, and Natural History," p. 185.

³¹⁸ Bushnell, "Experience, Truth, and Natural History," p. 182.

³¹⁹ Googe, Rei rusticae libri quatuor (1577); Fussell and Fussell, The English Countryman, p. 44.

³²⁰ National Trust Book p. 52.

³²¹ See also Richard Gardiner, Profittable Instructions for the Manuring, Sowing and Planting of Kitchen Gardens (1599).

³²² John Smith, England's improvement reviv'd digested into six books / by Captain John Smith (1670); John Smith, England's improvement reviv'd: in a treatise of all manner of busbandry & trade by land and sea. (1673); Evelyn. Sylva (1664). See also Peter Goodchild, "John Smith's Paradise and Theatre of Nature," J of Garden History 24 (1996), pp. 19-23.

month-by-month advice on what to do in a garden.³²³ Worlidge attempted to write an agricultural encyclopaedia in 1669. Referring to previous books on farming and including detailed methods of practical farmers, this text was an immense source of information.³²⁴

Husbandry was gentlemanly and godly. Agriculture was a major preoccupation of Puritan reformers; their writings dominate the literature.³²⁵ These authors sought to study God's activities in nature through the pursuit of husbandry. These authors were strongly influenced by their religious beliefs and they correlated husbandry to Adam's labour in the Garden of Eden. Adam is frequently portrayed as a gardener.³²⁶ Tending the soil demanded effort - idleness was unthinkable, even in paradise. Agricultural labour was a consequence of the Fall but hot protestants saw this labour less as a punishment and more as fulfillment.³²⁷

Their utilitarian ideas and aspirations met with a favourable climate of opinion, as enthusiasm already existed for agricultural improvement.³²⁸ The writers took advantage of this to disseminate information and encourage wider participation. Not interested in horticultural novelties, but in an increase of agricultural productivity, these writers expected their work to have a practical effect; many sought to make their work accessible to the lower classes in an attempt to improve society. Their efforts at promoting change did not stop with the publication of texts; they sought to exert influence through

³²³ The first such book was Sir Thomas Hanmer's *Garden Book*. This text has escaped the notice of several authors, John Evelyn's *Kalendarium hortense* or *Gardener's Almanac* is frequently cited as the first of its kind. The manuscript for Sir Thomas Hanmer's book was completed in 1659; the book was not printed until 1933. Eleanour Sinclair Rohde, *The Garden Book of Sir Thomas Hanmer* (London: G. Howe, 1933). See also Jenny Robinson, "New Light on Sir Thomas Hanmer," *J of Garden History* 16/1 (1988), pp. 1-7.

 ³²⁴ G.E & K.R Fussell, *The English Countryman* (London: Andrew Melrose, 1955), p. 66. This text went through numerous editions, the first one appearing in 1669. Worlidge, *Systema Agriculturae* (1669). For more information on texts by John Worlidge see Henrey, *British Botanical and Horticultural Literature*, pp. 205-206; Fussell, *The Old English Farming Books*, pp. 68-72.
 ³²⁵ Leslie, "The Spiritual husbandry of John Beale," p. 156; Raylor, "Samuel Hardib and the Commonwealth of Bees," p. 106.
 ³²⁶ For example, see Milton's description of Adam in *Paradise Lost*. Adam was represented on the cover of both John Parkinson's books. Webster, *The Great Instauration*, p. 466; Hill, *The English Bible*, p. 28.
 ³²⁷ Leslie, "The Spiritual husbandry of John Beale," p. 158.

³²⁸ After 1640, husbandry writers became increasingly critical to previous literature; they carefully read and commented upon old books in their introductions. For example, Blith commented that the *Mason Rustique* was of little use to us. Gabriel Platts published a series of short tracks between 1639 and 1644; he wrote primarily for those without learned education.

legislation and the promotion of improved methods.³²⁹ However, these reformers were not successful in achieving a major program of legislation.

Samuel Hartlib and his circle of friends and acquaintances shaped husbandry manuals and the knowledge contained therein.³³⁰ Hartlib encouraged several authors to publish their work and was instrumental in organizing the publication of several of the most important texts. For this group, husbandry afforded spiritual lessons and material profits.³³¹

C.3 Polemics

The ideas and assumptions contained in the literature demonstrate the effect political events have on gardening writing and the ideological debates gardening provokes. The religious and political upheavals that characterize this period had a lasting impact on gardening practise and theory.³³² Indeed, gardening was a suitable employment for those retired from active life. There are examples of hidden discourses in numerous texts.³³³

Seventeenth-century authors were well aware that claims made about the plant kingdom could be translated to the domain of humans. Claims to truth in husbandry manuals were also influence by the gardener's claim to alter nature. Either the author suggested that the nature of plants could be changed to serve human purposes, or that the inherent property of plants could not be changed by art.³⁴ Gentlemanly texts, like *Paradisi in Sole* (1629), argued that the plant world cannot be altered by artificial means.

³²⁹ Ralph Austen argued for an organized system of enclosure to benefit the poor in *A treatise of frait-trees* (1653). Anthony Lawrence suggested that planting orchards in enclosures would benefit everyone. *Nursenis, orchards, profitable gardens, and vineyards encouraged* (1677). Nourse also suggests that "in the Hedges Fruit-Trees may be planted, the Profit whereof in some Years equals half the Rent of the Ground: but this, I say, is local, or a Profit only in such Countries where Fruit-Trees are thrifty and flourishing." *Campania Foelix* (1700), p. 28. Cressy Dymock wanted to establish a college or society of good husbandry to teach agriculture. Webster, *The Great Instauration*, p. 469.

³⁵⁰ Another important individual in gardening literature is John Evelyn. For more information see: Geoffrey Keynes, John Evelyn: A Study in Bibliophily with a Bibliography of his Writings (Oxford: Clarendon Press, 1968); Jeanne Welcher, John Evelyn (New York: Twayne Publishers, 1970); Peter Goodchild, "No Phantasticall Utopia, But a Reall Place'. John Evelyn, John Beale and Backbury Hill, Herefordshire," J of Garden History 19/2 (1991), pp. 105-127; Douglas Chamber, "Wild Pastorall Encounter", pp. 173-194.

³³¹ See Appendix One in *Culture and Cultivation* for a listing of all husbandry works edited and published by Samuel Hartlib. Raylor, "Samuel Hartlib and the Commonwealth of Bees," p. 106. See also Mark Greengrass and Michael Leslie and Timothy Raylor, *Samuel Hartlib and Universal Reformation* (Cambridge: CUP, 1994); Webster, *The Great Instauration*, Fussell, *The Old English Faming Books*, pp. 40-50.

³³² Hoyles, *Bread and Roser*, pp. 7, 11. Several examples of men who retired from society to focus on gardening are Henry Oxinden, General Lambert, Sir Thomas Hanmer. Fairbrother, *Men and Gardens*, p. 18. See also Hoyles, *The Story of Gardening*, pp. 5-20.

³³³ See Steven Zwicker, "Lines of Authority: Politics and Literary Culture in the Restoration," *Politics of Discourse*, Steven Zwicker, *Lines of Authority* (London: Cornell University Press, 1993); Nigel Smith, *Literature and Revolution in England 1640-1660* (New Haven: Yale University Press, 1994); James Tumer, *The Politics of Landscape* (Oxford: Basil Blackwell, 1979); Lois Potter, *Secret Rites and Secret Writing: Royalist Literature, 1641-1660* (Cambridge: CUP, 1989).

³³⁴ A few authors did argue the middle ground in this argument, for example, Markham and Platt. See Bushnell, "Experience, Truth, and Natural History," pp. 200-201.

Other authors argued that plants could be changed and nature could be altered because they sought to provide knowledge to the general reader to allow the opportunity for selfadvancement.³³⁵ In essence, the argument relates to the plant's essence or spirit. Gentlemanly authors, not surprisingly, did not respond well to claims about changing status.

What is a polemical text? Metaphorical and highly coded, polemical texts were a literary genre that overlay existing categories of texts. Underscored by political or religious beliefs, these texts present an argument about society. The analysis of *The Compleat Angler* presented by Zwicker is a key starting point for this genre. This text is a dialogue of instruction on angling set in an idyllic countryside. A text of sequestered royalism, this book has roots in both the georgic and pastoral traditions. The works of Ralph Austen and James Howell are two examples of polemical gardening texts.

Raiph Austen

Austen's *The Spirituall Use of an Orchard* is an instructional treatise that blends horticulture, puritanism and politics. Austen was devoutly religious man and a friend of Hartlib who shared similar ideas with Hartlib about gardening knowledge.³³⁶ Believing old books were full of dangerous instructions, Austen was disappointed because these texts did not provide a rational and experimental basis for his practices.³³⁷ One of several authors who sought improvements that could be verified by experimental methods and related to theories, Austen attempted to have legislation imposed to control husbandry.³³⁸

³³⁵ Bushnell, "Experience, Truth, and Natural History," p. 204.

³³⁶ For biographical information on Ralph Austen see James Turner, "Ralph Austen, an Oxford horticulturist of the 17th century," *Garden History* 6/2 (1978), p. 40; Anthony Wood, *Fasti Oxoniensis* i 453, ii 174.

³³⁷ Austen lists errors he perceived in *The Countryman's Recreation* (1640), Thomas Hyll's *The Gardener's Labrynith* (1577). Austen based his advice on "the widest possible firsthand experience of current practice, assisted by personal trial whenever possible." Webster, *The Great Instauration*, p. 470.

³³⁸ Austin asked Hartlib to distribute approximately 250 copies of his treatise on fruit trees to Members of Padiament. He wanted his activities supported by the state in the context of a national program for to replanting. He presented Cromwell with copies of his two Treatise and a petition addressed the Council of State outlining the advantages of the national economy of planting trees. Webster, *The Great Instauration*, p. 477. Austen also sought to establish a "massive nationalised programme of fruit-tree plantations, supplied by his nurseries and guided by his text-books." Turner, "Ralph Austen," p. 40.

The text was first published with A Treatise of Fruit-trees in 1653.339 On the surface, this appears as a treatise on fruit tree cultivation; however, every stage in cultivation is compared to a stage in a Christian's life. Horticultural discoveries were discussed with the intention of converting the reader to puritan Christianity.340 Structurally it contains twenty "Propositions Shadowed out unto us by Observations in nature and cleared by Scripture and Experience."341 According to Austen, the garden was fundamental to righteous living. Following his puritan ideal, he sought to hasten the Millennium of Christ's kingdom on earth by making the earth bear fruit. For Austen, the garden and the orchard were synonymous.342

His second work is a dialogue of instruction. Only one edition of A dialogue (or familiar discourse) and conference betweene the husbandman and fruit-trees was printed. The copy that has survived is battered and damaged. The text is simple; there are no decorative ornaments and no fancy title-page. Dialogues were a standard format, but this one is unique because it is the only gardening text wherein plants take part in a dialogue.343 In the epistle to the reader, Austen outlines God's intentions for instructing man through nature.

Every created being, instructs us concerning our Creator, of his wisdom, and goodnesse, and of our duty, and thankfulnesse we owe unto him; so that as many Creatures as are in the world: Therefore none shall be excused at the last day, for their ignorance of God; seeing we have not only the word of God, but all the Creatures of God to instruct us; concerning God and our duty to him. So then; with these briefe instructions concerning discourse with Fruittrees, I commit the Ensuing Dialogue to thy use, for thy profit.344

³³⁹ Austen debated over printing A Treatise of Fruit-trees and The Spiritual Use of an Orthand together. In a letter to Hartlib in 1652, he discussed the matter. Hartlib suggests separately printing the texts on commercial grounds. While Austen initially published the two works together (appeared in 1653), the two works were published as separate editions. A treatise of fruit-trees appeared in 1657 and 1665; a second edition of The Spiritual Use of an Orchard was published in 1657. Leslic, "The Spiritual husbandry of John Beale," p. 157. Anthony Wood complained that the inclusion of The Spinitual Use of an Orchard made A Treatise of Fruit-trees less popular. "This book was much commended for a good and rational piece by the honorable Mr Rab. Boyle, who, if I mistake not, did make use of it in a book or books which he afterwards published: And it is very probable that the said book might have been printed more than twice had not he, the author, added to, and bound with, it another treatise as big as the former entit. The Spiritual use of an Orchard, or garden of Fruit-Trees, ere, which being all divinity and nothing therein of the practick part of Gardening, many therefore did refuse to buy it." Anthony Wood, Fasti Oxoniensis, 780. R.T. Gunther dedicated his book Oxford Gardens to "the memory of a namesake of a member of my own college Ralph Austen who wrote A Treatise on Fruit Trees in 1635, which many refused to buy, believing it similar to his other book on the Spiritual use of an Orchard, described as all divinity, and nothing therein of the practice part of Gardening."

³⁴⁰ Turner, "Ralph Austen," p. 43.

³⁴¹ Austen, The Spiritual Use of an Orchard (1653). The original publication of Austen's A Spiritual Use of an Orchard included twenty propositions; the second edition (1658) was expanded to include one hundred propositions. 342 Orchards were surround by allegory. See Prest, The Garden of Eden, p. 70; Rohde, Garden-Craft in the Bible, Batey, Oxford

Gardens, pp. 37-38.

³⁴³ Rohde, The Old English Gardening Books, p. 81.

³⁴⁴ Austen, A dialogue (or familiar discourse) (1676), epistle to reader.

In the discourse, the Husbandman converses with the Fruit-trees seeking to learn from them. Austen instructs the reader using the simple format of a conversation – however; the text is interspersed with Latin tags and biblical quotes.

James Howell

The first edition of *Dendrologia* appeared in 1640. Published as a folio, the book contained an engraved title-page by Matthaeus Merian. Decorations adorn the pages; it was carefully printed; this book was intended for a wealthier audience. When the second edition was published in 1644, the book appeared as a quarto and the title-page was changed to a simpler format containing several trees.³⁴⁵ What is most striking in this edition is a 'clavis' of the trees correlated to their metaphorical meanings.

Similar to Austen, Howell makes reference to talking trees but the context is completely different.³⁴⁶ Howell uses trees to illustrate his view of politics from 1603-1640. Trees are Stuart allegories, embodiments of individuals.³⁴⁷ As outlined in the clavis: the 'Oke' is the King of England, poplars are the "Commons generally; particularly the Commons in the House of Parliament", and the nobility are elms.³⁴⁸ In the conclusion, Howell justifies his text "...that the high Majesty which is here meant by the Oke, may in vigor, and strength of constitution (if it bee within the possibility of nature) attaine unto the age of the Oke, which is observ'd to exceed all other terrestriall creatures in longevity."³⁴⁹

³⁴⁵ See Plate Twenty and Plate Twenty-One.

³⁴⁶ "It fortun'd not long since, that Trees did speake, and locally move, and meet one another, Their ayrie whistlings, and soft hollowe whispers became Articulate sounds, mutually intelligible, as if to the soule of vegetation, the sensitive faculties and powers of the intellect also, had been co-infus'd into therm." Howell, *Dendrologia* (1640), p. 1.

³⁴⁷ Chambers indicates the wrong associations for these trees in his "Wild Pastorall Encounter," p. 190.

³⁴⁸ The author also refers to himself as a tree: "At that time, when this parley of Trees began, I my selfe was but a little, little Plant newly sprung up above ground; And passing through the terrible Birch to Boetia, where I tooke in my best Sap, and cam by degrees to a consistent growth...I was transplanted from Boetia to Tamisond..." Howell, Dendrologia (1640), p. 2. ³⁴⁹ Howell, Dendrologia (1640), p. 218.

Chapter Three:

The Display of Gardens

A. Gentlemanly Behaviour

Gardens were a central component on the estates of the monarchy and aristocracy. The manipulation of nature that was undertaken on these estates was a form of conspicuous display. As with other facets of a gentleman's life, gardens were intended to display the wealth, status and authority of the lord. The prevalence of elaborate gardens and complicated estate layouts that existed at any one point in time suggest that gardens were one of the components of a proper gentleman's life.

In a recent book, Anna Bryson examined the courtesy and conduct books that served as manuals of instruction for the seventeenth-century gentry.³⁵⁰ These texts outline the values of 'courtesy' and 'civility' and codify the correct social practices of the period. The key concepts in elite mentality and definitions of behaviour contained in these manuals provide historians an insight into the particular worldviews or mentalities of the English social elites. Yet, courtesy and conduct books do not contain specific chapters or sections that focus on gardens or estate planning.³⁵¹ While a gentleman was expected to cultivate and beautify his surroundings, there are few if any printed texts that elaborate upon the manner in which to proceed or the justification behind their creation.

The very nature and form of these gardens explains why their existence is assumed. Seventeenth-century gardens were influenced and dictated by cultural and political ideas about property and land ownership. Land was the basis of a gentleman's status, power, authority, and wealth. Land was meant to be cultivated; English ideas on private property were based on the usage of land.³⁵² While it was hard to define what was distinctly English about gardening in England, it was possible to observe it overseas. How and why gardens were established in the New World reflects English ideas on how land should be used and on what principles ownership is attributed.³⁵³ The contrast

³⁵⁰ Anna Bryson, From Courtesy to Civility (Oxford: Clarendon Press, 1998). See also John Mason, Gentlefolk in the Making (New York: Octagon Books, 1971); Gertrude Noyes, Bibliography of Courtesy and Conduct Books in Seventeenth Century England (New Haven: Tuttle, Morehouse & Taylor Company, 1937); Virgil Heltzel, A Check List of Courtesy Books in the Newberry Library (Chicago: The Newberry Library, 1942). For another analysis that relies on courtesy manuals see Shapin, A Social History of Truth. See also Norbert Elias, Civilizing Process (Oxford: Blackwell, 1994).

³⁵¹ There is reference in the secondary literature to these manuals; however, there are little in the way of primary examples and scholars frequently basing their argument on previous work. There is a small discussion contained with the text of Nourse's *Campania Foelix* (1700) but his book is not a courtesy manual.

³⁵² The theories of John Locke offer insight into these ideas. Lockean theory suggests that initially all land was common. This common land was improved by the hand of man and thence became private property. John Locke, *Of Property*, Book 2, Ch. 5, p. 49. "[As] much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property." John Locke, *Of Property*, Book 2, Ch. 5, p. 32.

³⁵³ For more on American gardens see Ludgate, Gardens of the Colonists, Leighton, Early American Gardens.

between English ideas and other European ideas illustrates the particularities of English gardens.³⁵⁴ There were three ways in which settlers established land ownership: building a house, erecting boundaries (fences and hedges), and planting gardens.³⁵⁵ Using the land either through grazing or planting was a further indicator of ownership. Among English gentlemen, gardens were aesthetic aspects of the control associated with private property.

Despite the paucity of gardening references in the courtesy manuals, there is literary codification of the principles of gardening. Advice and practical knowledge was contained in herbals, husbandry manuals, and even polemics of the period. Illustrations and paintings provided visual indication and examples of how an estate should appear. As well, through letters and conversations, gentlemen and gentlewoman discussed ideas about the natural world.³⁵⁶ Assumptions of what a garden should contain or represent are built into textual descriptions. For example, the essay 'Of a Country House' attached to *Campania Foelix* describes the location and construction of country houses.³⁵⁷ In discussing location, Nourse suggests that while it provides a delightful prospect to place a house atop a rock or eminence, they 'rarely enjoy such a temper'd Earth, or Soil, as is required for a Garden; nor can they well be beautified by Fountains, which Circumstances conduce very much, and are in a manner essential to a Noble House.³³⁸ Nourse's argument assumes of course, that there will be a garden.³⁵⁹

B. Flower Culture

Flowers enter into several discourses in seventeenth-century England. Flowers were religious and political symbols; they were consumer commodities; they filled the gardens

³⁵⁴ In the settlements of the New World, Englishmen and women used rituals, gestures, ceremonies and symbolic acts of possession based on familiar ideas as understood by themselves and their countryman. Seed, *Ceremonies of Possession*, pp. 3, 11. "No other country used the garden in the same way, because in no other European country was the garden a symbol of possession." Seed, *Ceremonies of Possession*, p. 29.

³⁵⁵ Seed, *Ceremonies of Possession*, p. 18. Thomas discusses a similar idea: cutting down trees and cultivating the land was a sign of civilization. Thomas, *Man and the Natural World*, p. 194.

³⁵⁶ There are several examples of correspondence of this type. Samuel Hartlib and his circle, the correspondence between Dorothy Osborne and William Temple, and Mary Capel Somerset and her communication with a large circle of botanical friends. See Chambers, "Story's of Plants'," pp. 49-60; G. C. Moore Smith (ed.), *The Letters of Dorothy Osborne to William Temple* (Oxford: The Clarendon Press, 1928); Kingsley Hart (ed.), *The Letters of Dorothy Osborne to Sir William Temple* (London: Folio Society, 1968).

³⁵⁷ A country house is part of "a greater Fabrick, fit to lodge a Nobleman endu'd with ample Fortunes and a virtuous Mind, where he may sweeten the Travels of a Vextatious Life, and pass away his Days admist the solid and serene Enjoyments of the Country." *Campania Foelix*, p. 297.

³⁵⁸ Campania Foelix, p. 298.

³⁵⁹ The inclusion of the fountain is an interesting side note, indicating the prevalence of the use of this garden ornament. Indeed, in the discussions of her travels, Celia Fiennes, includes mention of fountains in the various gardens she describes.

of large estate and small country homes; and they served as decorations in paintings and houses. The use of flowers as symbols has a very long history.³⁶⁰ The Catholic Church embodied flowers with religious symbolism and meaning and the portrayal of flowers was stylistically and allegorically standardized.³⁶¹ For example, on the coloured title-page of Gerard, the flowers, in comparison to reality, appear unrealistically coloured, but to a seventeenth-century audience, flowers were present in their symbolic colours.³⁶² Truth to nature was sacrificed to the truth of symbolic essence; irises were coloured blue, the Madonna lily is painted mauve, blending to orange.³⁶³ Weeds and wild plants were also potent symbols; particularly in religious context, weeds symbolized unsavoury people.³⁶⁴

The use of flowers in gardens fluctuates. Initially, the scarcity of species of flowering plants in England made these plants a rare commodity. Gardens with flowers and exotic plants were initially the purview of the elite who had the wealth and leisure to cultivate gardens. As the availability and variety of plants increased, flowers became less an elite preoccupation and more a consumer commodity. An amazing variety of flowering plants was available for the seventeenth-century garden. The herbals and plant lists produced in the century attempt both to list plants and inform the readers how to grow them.³⁶⁵ Much emphasis is placed as well on how to arrange flowers in garden beds.³⁶⁶ John Rea and Sir Thomas Hanmer offer us an example of the variety of plants contained in gardens along with the particular arrangements that were standard in the period.³⁶⁷

³⁶⁰ For more information on flower symbolism see Goody, The Culture of Flowers, H. Friend, Flowers & Flower-Lore (London: W. Swan Sonnenschien, 1884); Ernst Lehner, Folklore and Symbolism of Flowers, Plants, and Trees (New York: Tudor Pub., 1960); Charles Skinner, Myths and Legends of Flowers, Trees, Fruits and Plants (London: J.B. Lippincott Company, 1911); Alice Coats, Flowers and their Histories (London: Hutton Press, 1956); Stuart and Sutherland, Plants from the Past, Hobhouse, Plants in Garden History, John Fisher, The Origin of Garden Plants (London: Constable, 1982); Thomas, Man and the Natural World.
³⁶¹ In the standard argument of protestants versus Catholic ideas, scholars argue that puritans and revolutionaries sought to remove the old symbolism of flowers and the support of the superior of the superior of the support of the support of the superior of the support of the support of th

remove the old symbolism of flowers and the supposed pagan traditions of their use in religion. Iconoclasm and rejection changed flower symbolism. Puritans feared that images distracted from worship. Goody argues that the return of flowers as a consumer luxury led to a reaction against display, especially in the church. Goody, *The Culture of Flowers*, p. 190. ³⁶² Corbett, "The Engraved Title-Page to John Gerarde's *Herball*," p. 226.

³⁶³ See Plate Twelve: Title-Page to John Gerard from Gerard's The herball (1597).

³⁶⁴ The term 'weed' could also be applied to people. For example, Nourse described people 'being of levelling Principles, and refractory to Government, insolent and tumultuous' as 'trashy Weeds or Nettles, growing usually upon Dunghills'. *Campania Foelix* (1700), pp. 15-16. Austen uses wild plants as a metaphor for non-elect members of his religion. "The Husbandman makes choice of what wild Plants he pleaseth, to bring into his Orchard there to Graft, and order to fruit-bearing from yeare to yeare. He leaves other plants in the Woods and waste grounds, he lets them alone, and meddles not with them, but takes and leaves these, or those, as pleaseth himselfe." *The Spiritual Use of an Orchard* (1653), p. 1.

³⁶⁵ Parkinson's Long Acre garden is an example of how gardeners tried to grow new plants. See Riddle, "John Parkinson's Long Acre Garden".

³⁶⁶ See Ruth Duthie, "The Planting Plans of Some Seventeenth Century Flower Gardens," J of Garden History 18 (1990), p. 77-102.

³⁶⁷ Rea, Flora, Ceres et Pomona (1665); Rohde, The Garden Book of Sir Thomas Hanmer.

Another major theme is the use of flowers, real or painted, in decorating houses. This trend, first established in the Low Countries, spread with the immigrants who settled in England fleeing the religious persecutions of the sixteenth century. Fragrant flowers were used inside the house both as decoration and as air purifiers. The decorative floral motives on eastern cloth were highly sought after. Brought back by explorers, this material sparked local industry to imitate the cloth and design.³⁴⁸

B.1 Influx of New Plants

The voyages of exploration in the fifteenth and sixteenth centuries opened new sections of the world to Europeans.369 Gentlemen sought to build collections of exotic and rare flora and fauna. Plant gardens became popular as gentlemen attempted to cultivate and display their collections.370 Herbals of this period reflect the increasing number of plants, as authors tried to include descriptions of all possible plants.371 The sheer number of plants described in Parkinson's Theatrum Botanicum - over 3,800 testifies to the vast number of new plants being introduced into England during the period. The increased number of plants available ultimately made this genre too cumbersome. Books were massive and too encyclopaedic: they became unappealing to readers. Plant knowledge was no longer seen as finite. Parkinson's Theatrum Botanicum is the last great herbal published in England. Plant hunting expeditions were organized to study and collect specimens, the most celebrated English example being the voyages of the John Tradescants.372 London had vast trading links with distant and newly discovered parts of the world, which facilitated the collection of new and rare plants.³⁷³ Later in the century, London became an important centre for the establishment of nurseries. Yet, ultimately the efforts of these wealthy patrons flooded the market; exotics became

³⁶⁸ Goody, The Culture of Flowers, pp. 209-213.

³⁶⁹ For a wider discussion on the interaction between Old World and New World flora and fauna see Crosby, *Ecological Imperialism* and Alfred Crosby, *The Columbian Exchange* (Westport, Connecticut Greenwood Press, 1972).

³⁷⁰ The first 'wave' of plant introductions came from Turkey and Southern Europe during Elizabeth I's reign. The second 'wave' came from the Americas and the East (Persia, Turkey, China, and India). John Harvey, *Early Horticultural Catalogues* (Bath: University of Bath Library, 1981), pp. 2, 24, 25.

³⁷¹ William Turner's New Herball (1551) included over 200 species; Parkinson's Paradisi in Sole (1629) contains 780 plants; the second edition of John Gerard's Herball (1597) contained roughly 3000, and there are over 3,800 plants in Theatrum Botaniaum (1640).

[&]quot;Gerard who is last, hath no doubt given vs the knowledge of as many as he attained vnto in his time, but since his dates we haue had many more varieities, then he or they ever heard of, as may be perceived by the store I haue here produced." Parkinson, Paradisi in sole (1629).

³⁷² Thomas, Man and the Natural World, pp. 207, 226-227, 271. For more information on John Tradescant and his son see Arthur MacGregor, Tradescant Rarities (Oxford: Clarendon Press, 1983); Prudence Leith-Ross, The John Tradescants: Gardeners to the Rose and Lip Queen (London: Owen, 1984); Mea Allen, The Tradescants (London: M. Joseph, 1964).

³⁷³ For a small example of some of the new plants to reach England, see Gunther, Early British Botanists, pp. 358-371.

common and pleasure gardens of flowers sprung up in even the most common gardens.374

While collectors scrambled to include all these new plants in their collections, natural philosophers and gardeners alike were baffled; many of these plants had no biblical names. Theories soon emerged that incorporated these new territories. The New World was interpreted as a missing piece of the puzzle: God had revealed to man a new section of his knowledge.³⁷⁵ For English protestants, the new world was proof that they were one step closer to restoring man's dominion over nature; the second coming of Christ was that much closer.

No longer was it possible to imagine a garden that contained all the plants of the world. Reconstructing the Garden of Eden became a lost aspiration. While the increased number of plants signalled the end for the early forms of botanic garden, plants became consumer commodities and a new emphasis in gardening emerged, namely flowers.³⁷⁶ Following this trend, gardens of the elites began to focus less on individual plants and more on overall effect. French elite gardens of the period focused less on flowers and plant varieties and more on image.³⁷⁷ The pleasure gardens discussed by several authors are intended primarily to contain flowers. By the end of the century, flowers were used mainly in small gardens while the nobility and gentry focused on creating a landscape.

B.2 Consumerism

Discussions of consumerism in this period are overshadowed by the eighteenth century. When there is attention to the seventeenth century, the argument is usually about the 'origins' of the eighteenth-century phenomenon.³⁷⁸ A common theme in the secondary literature is that increasing wealth and increasing secularization initiated this consumerism.³⁷⁹ While numerous authors attest to the importance of the rise of the

³⁷⁴ Prest, *The Garden of Eden*, p. 91. Nourse remarked that "As for Curiosities of Plants, Fruit-Trees, Flowers, and other Rarities of the Gardens, brought over from Foreign Countries, we have certainly as a great a Collection as any Nation under Heaven, there being none to be found which is so universally stor'd with all Provisions of this kind as is *England* and possibly some parts of the *Low Countries*, which Benefit we have from the great Trade we drive in all Parts of the World; so that, whatsoever is rare, is brought over, and naturaliz'd amongst us, being made free of our Soil," *Campania Foelix* (1700), pp. 19-20. ³⁷⁵ Prest, *The Garden of Eden*, pp. 33, 39.

³⁷⁶ Berrall, The Garden, p. 240; Thomas, Man and the Natural World, pp. 226-229; Goody, The Culture of Flowers, pp. 183, 213. ³⁷⁷ Cunningham, "The Culture of Gardens," p. 52.

³⁷⁸ For a more complete description of the eighteenth-century phenomena see Neil McKendrick, John Brewer and J. H. Plumb, *The Birth of a Consumer Society* (London: Europe Publications Limited, 1982). ³⁷⁹ Goody, *The Culture of Flowers*, p. 204

consumerism of plants, there is little elaboration or exploration of the actual phenomenon. Empirical data about consumption fills the pages, but analysis is strikingly absent. We find that nature became part of a nascent consumer culture; that patrons could display their accumulated wealth through possession of natural objects; and that the trade of nurseryman emerged in the seventeenth century and became a booming industry by the eighteenth century.³⁸⁰ If people made a living selling plants then there was a market of people buying them. Why did plants and gardens become so popular? Part of the problem lies in the nature of the consumerism argument.

Many narratives equate the rise of consumerism with the rise of modern society.³⁸¹ Arguably, there is a noticeable increase of interest in plants in the seventeenth century, but there are several other trends that lie underneath: the increase in available plants, the creation of more detailed and accurate illustrations, increased leisure time, and gentlemanly envy. Once the interest in a commodity spread through the social levels, 'consumerism' began (by definition). Elite groups had always consumed. The novelty in the 'consumer revolution' is the inclusion of more and more people in the spending spree.³⁸² Thus, consumer activity in the seventeenth century is seen as a prelude to eighteenth-century developments. Arguing that elites were motivated to emulate the activities of elites is valid, but is it the complete answer to the increased interest in plants?³⁸³

No one knows why people want goods.³⁸⁴ Many of the narratives on consumerism developed out of economic theories. From an economic point of view, consumerism is demand. Indeed, one deterministic argument describes the eighteenth-century developments as the 'consumer revolution' that initiated the industrial revolution. Yet, is consumption an end in itself or a means to an end?³⁸⁵ Key to the discussion on

³⁸⁰ Findlen, "Courting Nature," p. 66; Harvey, *Early Nurserymen*, Thick, "Garden seeds in England before the late eighteenth century: I. Seed Growing," pp. 58-71; Thick, "Garden seeds in England before the late eighteenth century: II. The Trade in Seeds," pp. 105-116; Gorer, *The Flower Garden in England*, p. 2.

³⁸¹ For example, Appleby asks why consumption, "the linchpin of our modern social system" is not the linchpin of our theories explaining modernity. Joyce Appleby, "Consumption in Early Modern Social Thought," *Consumption and the World of Goods* (New York: Routledge, 1993), p. 162.

³⁸² Appleby, "Consumption in Early Modern Social Thought," pp. 163, 172.

³⁸³ Loma Weatherill, "The Meaning of Consumer Behaviour in Late Seventeenth and Early Eighteenth Century England," Consumption and the World of Goods, p. 208.

³⁸⁴ Mary Douglas, The World of Goods (New York: Basic Books, 1979), p. 15.

³⁸⁵ Douglas, The World of Goods, p. 21.

consumption is why people spend.³⁸⁶ For this period, there are several factors which affect spending and consumption and these vary between social classes.

There is no single theory of consumption relating a consumer's activities and tastes in one conceptual scheme. There are three aspects to historical narratives on consumption. The first is that the consumer revolution provided the demand that started the Industrial Revolution. Second is the enumeration of commercialization or the quantitative treatment of ownership. The third aspect is the fallout of the first two.³⁸⁷ The main problem is the lack of attention to the consumers and their motivations for consumption.³⁸⁸ Historians need to differentiate activities captured by terms such as consumerism, consumption, and consuming.³⁸⁹ Goods make the categories of culture visible and stable and we need to place the goods back into their social environment. Consumption is more social and cultural than economic; goods are read by those who know the codes.³⁹⁰

C. Estate Planning

Aristocratic power, wealth, and honour rested on land.³⁹¹ Land was the primary source of income for society as well as the paramount source of social rank. The manor house and its surroundings were part of the living complex that made up a lord's personal environment.³⁹² During this period, the elite readjusted their values to lay more emphasis on privacy, luxury, and aesthetic quality: hence, the new importance of gardens.³⁹³ In the aftermath of the civil war, the elite realized the fragility of their cultural claims to superiority and sought to fortify their social position. Gardens were a key component in an estate; they demonstrated the lord's power over nature. Gardens were constructed both as displays and as cultural claims to superiority. Man-made areas of

390 Douglas, The World of Goods, p. 5, 75; Pennell, "Consumption and Consumerism," p. 557.

³⁸⁶ In many historical arguments, social judgements on spending were related to Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (London: Allen & Unwin, 1930). The hard working ethic promoted in protestantism created excess wealth, which allowed for the purchasing of more luxury items. Yet, there are several problems with this theory, see Douglas, *The World of Goods*, p. 27.

³⁸⁷ Sara Pennell, "Consumption and Consumerism in Early Modern England," *Historical Journal* 42/2 (1999), p. 550. ³⁸⁸ Pennell, "Consumption and Consumerism," p. 549.

³⁸⁹ This is especially true for the seventeenth century; the definitions of the terms as they pertain to eighteenth-century activities may not be as applicable. Pennell, "Consumption and Consumerism," p. 552.

³⁹¹ See Lawrence Stone, Crisis of the Aristocracy (Oxford: Clarendon Press, 1965), pp. 273-334; Girouard, Life in the English Country House, p. 2.

³⁹² John Steegman, The Artists and the Country House (New York: Charles Scribner Sons, 1949), p. 10.

³⁹³ Stone, Crisis of the Aristocracy, p. 584; Girouard, Life in the English Country House, p. 11.

nature such as the pleasure garden were considered to be beautiful as untouched areas, if not more so.394

The planning and management of an estate was essential to a gentleman's image. If he could not control his immediate environment, then how could he control his tenants? Gardeners were key to the development of a lord's garden. There were several gardeners, as well as planters and weeders, employed in the gardens who acted under the supervision of a head gardener.³⁹⁵ While most of the work was seasonal, jobs such as weeding required constant attention. Often, the head gardener assumed a position of complete authority over the estate, particularly when the lord was either not interested in horticultural matters or more often occupied elsewhere. Head gardeners were in a lucrative position, and often used their authority and experience in other areas. For example, the founders of the Brampton Park nursery gardens had started out as gardeners on gentry estates. The manner of advice and the practical knowledge that was contained in gardening literature of the later part of the century suggests that these manuals were aimed at instructing these gardeners.

By the mid-century, there was a well-established tradition of gardening treatises and husbandry manuals that offered practical advice for the management of gardens and farms. These discussions articulate what the typical Englishman should be concerned with on his land. This typicality was based on existing ideas and beliefs that were assumed among more established and authoritative lords. The early manuals of the sixteenth century were targeted at the manorial lords. In the sixteenth century and the start of the seventeenth, the manorial estate was the basic gentry unit. Within this structure, everyone had duties and responsibilities based on a code of moral imperatives and Christian doctrine.³⁹⁶ Written largely in Latin, the intended audience for these manuals were manorial lords. During the seventeenth century, authors of agrarian texts purposefully broadened their audience.³⁹⁷ Instead of the primary emphasis on the manorial lords, authors wrote for a wider audience through a discussion of thrift and profit. By the later half of the century, this genre had grown to include agrarian projects.

³⁹⁴ Rosenheim, The Emergence of a Ruling Order, p. 2; Steegman, The Artist and the Country House, p. 13.

³⁹⁵ See Plate Twenty-Eight.

^{3%} Andrew McRae, "Husbandry Manuals and the Language of Agrarian Improvement," Culture and Cultivation, p. 35.

³⁹⁷ McRae, "Husbandry Manuals," pp. 37, 45-47; Fussell and Fussell, The English Countryman, p. 66

By the end of the century, these manuals were written in the vernacular and contained a wealth of information for the country gentleman.

One example is Timothy Nourse's Campania Foelix.398 Covering a wide range of topics, this book discusses the improvements of the country by husbandry. Nourse included advice on trees, herbs, the art of husbandry, the country house, and the means to preserve husbandry, i.e. county affairs. Nourse clearly states that he did not rely on 'the Reports and Methods of other Authors' but relied on his own observations.399 In the first section, 'Of Country Affairs in General,' Nourse outlines the natural history of husbandry. His advice is practical: he warns against using straw for the roofs of barns as it looks 'mean and beggerly', easily blown away by wind and disturbed by snow, wind, rain, mice, and birds.400 In the text, there is discussion of important issues such as enclosures, common lands, tree-planting, and agricultural improvements. Nourse also discusses contemporary problems and political issues.401 There is as well a small trace of Nourse's popish beliefs.402 In the attached essay, 'Of a Country House,' Nourse details a general scheme that will "answer our Expectation as to the Innocent Pleasures and Delights which the Country can afford."403 Nourse's description includes the house's location, the planting of trees, the layout of the house (including the rooms, entrance, pillars), the inward court, the pleasure garden, the kitchen garden, outdoor buildings & stable, the grand avenue by which the house is approached, orchards and the town or village beyond the estate.444

In the country, the manor house was placed in the centre of the estate. Land was not useful without the manor house; it was the headquarters, the focal point of the

³⁹⁸ The first publication was in 1700, printed for Thomas Bennet. A second edition was produced in 1706. There is a reprint by Garland Publishing Inc, 1982.

³⁹⁹ Nourse, Campania Foelix (1700), p. 25.

⁴⁰⁰ Campania Foelix, p. 43.

⁴⁰¹ In his chapters on the means to reserve husbandry (inns and alehouses, servants and labourers, the poor, and justices of the peace) he gives a small history and outlines contemporary problems. In the conclusion, he discusses the problems in the lower house of Parliament and the courts of justice.

⁴⁰² He converted to Roman Catholicism in 1673. In the conclusion he remarks "These, and many other the like Considerations, which flow incessantly upon Thinking Men, may, peradvanture, some time or other enter into the Thoughts of some Publick Spirits, whom Authorty may influence, who, doubtless, from their own Observations and penetrating Reason, may meet with Things of greater Importance than what can be suggested by a Person altogether insufficient, and living in Privacy and Obscurity, whose Endeavours, tho' every way discountenanc'd, yet in one thing he will never be restrain'd *viz*. In pursuing his own Inclination and Duty, in praying to Almighty God for the Safety, Honour, and Settlement of this Kingdom." *Campania Foelicx*, p. 296.

⁴⁰³ Campania Foelix, p. 339.

⁴⁰⁴ He remarks that the walks consist of gravel or 'Grass-Plats' instead of earth to prevent the problems of mud. *Campania Foelix*, p. 314. Celia Fiennes makes a particular effort to indicate whether gardens contained gravel walks and grass squares. *Campania Foelix*, pp. 297-344.

surrounding land.⁴⁰⁵ The lord's house and estate were visible and powerful landmarks in the county, reflecting their owner's status and power in the community. Even pictorial representations of estates and houses were carefully sculpted. The long sweeping views demonstrate the lord's power through his adept control of nature nearest the house. Aerial views displayed the magnitude of the design and the spread of the lord's power across the land. Tree-lined avenues dramatically changed estate layouts; almost every estate depicted in *Britannia Illustrata* contains a variation on this idea.

Considerable money and time were invested in the planning and regulation of all estates. Most lords had estates and land in several different geographical locations, urban and rural, and there were differences in how these areas were managed.⁴⁰⁶ London homes and gardens also contain strong messages about order and power. In towns, most especially in London, gardens were spaces of control and stability and escape. Their purpose and use differed significantly from country gardens. London houses opened onto the street with the garden located behind the house. Enclosed, it was only accessible through the house. In contrast, the manor house on a country estate was situated in the centre of the property. Both arrangements allowed the house-owner to control the land he owned. The close quarters of the city made these gardens quasipublic, yet, by design and nature they were intensely private areas.

Johannes Kip and Leonard Knyff portrayed the house, immediate gardens, and surrounding estate as a constitutive whole – similar to the English state. Their depictions were strong visual instructions for their audience on how to plan an estate. Common structural elements found in the majority of the illustrations standardized the layout of an estate. The ideas that underlie these estates influence ideas in the eighteenth century as these pictures solidified English views on how nature should be controlled, structured, and assisted.

D. Paintings

Paintings offer historians insight into cultural values and social ideas. What the owner or artist chose to include in a painting reflected contemporary ideas and values. There are two types of paintings that need discussion in this section – portraits and

⁴⁰⁵ Girouard, Life in the English Country House, p. 3; Cliffe, The World of the Country House, p. 1.

⁴⁰⁶ For more information on estates see Cliffe, The World of the Country House, Matthew Johnson, Housing Culture (Washington: Smithsonian Institution Press, 1993).

landscapes.⁴⁰⁷ Both of these forms were in the process of development during this period. By the end of the century, landscape paintings and drawings were increasing in popularity. These paintings reveal English perceptions and ideals concerning nature and landscape. Painted depictions of landscape offer historians an insight into the design and content of gardens in the seventeenth century.

What motivations and or ideologies influenced the character of English portraiture? Portraits of the period benefited from the immigration of several artists.⁴⁸⁸ Eighteenthcentury portraits frequently contain a garden or landscape setting. Scholars seek to trace the origins of this trend in the seventeenth century, yet, examples of gardens in paintings are rare in the seventeenth century.⁴⁹⁹ Portraits from the period contained more than just representations of individuals. Portraits commemorated; they provided a record. Family portraits were part of a system of self-assertion that included new or rebuilt mansions and elaborate gardens; they stressed dynastic importance and the lord's status in local affairs.⁴¹⁰ The owner of a painting often chose what he wanted to include in the foreground and background. Lord Capel commissioned a painting of his family by Cornelius Johnson.⁴¹¹ In the background, there is an image of the family's garden at Little Hadham. While this is a singular example of the inclusion of a garden in a portrait, it demonstrates the significance this garden held in the mind of the Capel family. That is not to say that portraits did not include landscape scenes in the background. Artists usually included idealized depictions of nature in portraits.

D.1 Landscapes

Utilized as primary sources, landscape paintings and drawings provide much of the material upon which modern accounts of garden styles are based. Rarely are these

⁴⁰⁷ For a discussion of the genre of conversation pieces – paintings that depict one or more people in attitudes implying they are conversing or communicating informally against an informal background - see Mario Praz, *Conversation Pieces* (London: Pensylvannia State University Press, 1971), p. 22.

⁴⁰⁸ See John Hayes, The Portrait in British Art (London: National Portrait Gallery Publications, 1991).

⁴⁰⁹ See Steegman, The Artists and the Country House.

⁴¹⁰ Hayes, The Portrait in British Art, p. 17.

⁴¹¹ See **Plate Twenty-Two**. Hayes suggests the garden depicted in the painting is an accurate representation, *The Portnait in British Art*, p. 44. For information on Johnson see Alexander Findberg, "A Chronological List of Portraits by Cornelius Johnson," *Walpole Society* 10/94 (1922), pp. 1-37. Arthur Capel was a royalist general who was beheaded a few short months after Chades I. His wife, Lady Capel, was a talented botanical artist and presumably a gardener. Her daughter Mary, who became the Duchess of Beaufort, inherited this talent. The Duchess is most famous for the garden at Badminton and her collection of exotic plants, of which several catalogues survive in her manuscripts. Their son Henry established a garden at Kew, which formed the basis of the eighteenth-century Kew Gardens. For more information see: Duthie, "The Planting Plans"; Chambers, "Storys of Plants"; Chambers, *Planters of the English Landscape Garden*, Rohde, *The Story of the Garden*.

historical artefacts analysed or problematized. Were this paintings true representations?⁴¹² What purpose did they serve? Why were they commissioned?

There are very few landscape paintings produced in this period, and even fewer that depicted English landscapes.⁴¹³ Frequently, the nature scenes that occupy the backgrounds of paintings are idealized or generalized.⁴¹⁴ In the later part of the period, painted depictions of estates and their surroundings became popular.⁴¹⁵ Why? The mansion or country house was a visible symbol of a gentleman's power and place in society - a symbol of permanence. It was the home of the family, the centre of local activity, and the point from which social influence spread throughout the neighbourhood.⁴¹⁶ To further demonstrate his importance, a gentleman had his house's portrait painted! House-portraiture offers details of the typical settings and surroundings that were found with these houses and its also indicates how these Englishmen felt about the world around them. The layout of house and farm expresses changing social and cultural relations.⁴¹⁷

One of the most popular historical sources for the house portraiture is *Britannia Illustrata*, a collection of engravings by Johannes Kip based on paintings by Leonhard Knyff. These images are large, sweeping aerial views of various noble and gentle estates.⁴¹⁸ Designed as a picture book, undoubtedly a bookseller's project, the first edition was sold by subscription.⁴¹⁹ This book influenced ideas and perceptions of what a typical estate should look like. An amazing resource for estate designs, these engravings demonstrate the important elements in garden designs and how they can be modulated and accommodated to particular locations. These 'snapshots' offer us a glimpse of how these estates appeared in the seventeenth century. The high perspective

⁴¹² Landscape painting depicts a particular conception of nature. Clark suggests that during the seventeenth century, the genre of landscape painting developed in an evolution from painting objects to painting an impression. Landscapes were not intended to be accurate but to present an accurate impression of nature. Kenneth Clark, *Landscape into Art* (London: John Murray, 1976), pp. 1, 229.

⁴¹³ Foreign artists supplied much of the work done in this period. See Henry Ogden and Margaret Ogden, English Taste in Landscape (Ann Arbor: U of Michigan Press, 1955). The majority of landscapes are from the later part of the period, mostly from post-1660. Michael Rosenthal, British Landscape Painting (Ithaca, NY: Cornell University Press, 1982), p. 18.
⁴¹⁴ Usually they were mythical or allegorical. Rosenthal, British Landscape Painting, p. 18.

⁴¹⁵ Cliffe, The World of the Country House, p. 60.

⁴¹⁶ Steegman, The Artists and the Country House, pp. 9-11.

⁴¹⁷ Johnson, Housing Culture, p. x.

⁴¹⁸ The book has been reprinted. John Harris and Gervase Jackson-Stops, *Britannia Illustrata* (Bungay: Paradigm Press, 1984). The bird's-eye view style of these engravings was a short-lived phenomenon. A few later examples exist, but they are rare. A unique type of book in England, there were continental precedents. Harris and Jackson-Stops, *Britannia Illustrata*, p. 6. ⁴¹⁹ The advertisement is reproduced in Harris and Jackson-Stops, *Britannia Illustrata*, p. 6.

of the illustrations allows the eye to travel across the hierarchy of nature.⁴²⁰ Nearest the house, there is strict control of nature in the formal gardens and less formalized spaces (wilderness, groves, or farmlands) exist on the perimeter of the estate.⁴²¹ Often, this hierarchy was depicted through colour. Areas closest to the house were bright green, whereas the less formalized spaces far from the house were more yellow – indicating they needed the help of improvement.⁴²² Houses and pleasure gardens were proclamations of orderliness. A mixture of topography and cartography, the landscape paintings & house portraits of the seventeenth century were intended to demonstrate the contribution the house made to the beauty of the county as well as recording the lord's estate for posterity.⁴²³

There are a few problems with accepting these images at face value. Firstly, the images carry strong political messages. As with gardens, perspective is important. The engravings are aerial views of the estates, illustrating the sweeping layout of the estate and the power the lord had over the land. The lines and avenues of trees that connect the house to the land beyond demonstrate the dominance of the building on the land. The house, gardens, and natural scenery were an artistic whole mirroring the unity that the lord expected in his domain.⁴²⁴ Secondly, Knyff did not aim for realism, but illustrated a vision of the estate - the owner's vision. Occasionally he was required to include buildings that never existed, to reproduce unfinished estates or gardens. Undoubtedly, the gardens and rows of trees were idealized to heighten the regularity of the layout.⁴²⁵ Thirdly, the choice of estates was random and based on Knyff's personal decision; several owners approached Knyff to have their estates included in the book.⁴²⁰ The engravings do not present a representative sampling of the various estates of the period. The similarity of design elements that persist through the book testifies to the underlying theme; these illustrations were ideals.

⁴²⁰ In an illustration of Isaac de Caus' garden at Wilton House, the reverse perspective is used. The foreground of the image depicts a hilltop with trees from which the viewer can see the layout of the gardens below. See **Plate Twenty-Three**.
⁴²¹ John Dixon Hunt, "Gard'ning Can Speak Proper ENGLISH"," *Culture and Cultivation*, p. 205.

⁴²² Rosenthal, British Landscape Painting, p. 22.

⁴²³ Steegman, The Artists and the Country House, pp. 11, 16-17.

⁴²⁴ Ogden and Ogden, English Taste in Landscape, p. 160.

⁴²⁵ Harris and Jackson-Stops, Britannia Illustrata, p. 7; Ogden and Ogden, English Taste in Landscape, p. 160; Rosenthal, British Landscape Painting, p. 22.

⁴²⁶ Harris and Jackson-Stops, Britannia Illustrata, p. 8.

Conclusion

Gentlemen took a close personal interest in horticultural matters. It was assumed that gentlemen should have gardens, controlled areas of nature that could be tamed, shaped, and cultivated to suit human needs. Whether they were pleasure grounds in which to socialize and exercise, areas designed to demonstrate the power and authority of the owner, or a collection of plants grown for aesthetic and utilitarian purposes, gardens served several needs during this period. Gardens were built into estates, both urban and rural, as demonstrations of power and authority. The designs that began in gentlemanly estates filtered through the levels of English society producing a dynamic variety of garden designs in any one area. Gardens served different purposes in different contexts. Indeed gardens offer us a window into common perceptions of man and nature. As a form of conspicuous displays, gardens reflect the changing ideals of the upper levels of English society. The political and religious turmoil of the period are reflected in the changing designs and layouts that are manifest in seventeenth-century gardens.

Gardens were a popular cultural act. Gardens are a unique source of information for historians as windows into human perceptions of nature. Whether it is a simple cottage flower garden or an elaborate estate landscape, these gardens reflect how the gardener believes nature should be organized and controlled. Gardens are cultural objects and gardening is a cultural act. In the seventeenth century, gardens were a form of conspicuous display; they demonstrate the power, status, and authority of their owner.

Besides the physical objects, there existed a vast compendium of literature on the topic: picture books that illustrated designs, practical manuals for gardeners, philosophical essays with religious overtones, and encyclopaedias of plants. Gentlemen were collectors, and among the objects collected were books, plants, animals, and novelties because gentleman collected books on plants and gardens, the advice in these texts allow us to see how gardens were structured and the various plants included in them.⁴²⁷ Printed texts on gardening had existed before this period, but the uses to which they were put and the larger audiences they were intended for in the seventeenth century changed the nature of the genre. Husbandry manuals evolved from books of advice for

⁴²⁷ Cliffe, The World of the Country House, p. 55.

gentleman and manorial lords to become treatises of practical knowledge for a wider public, while herbals eventually became too cumbersome as the number of plants increased dramatically. These printed texts, and the illustrations contained in them, are the most important historical objects available for us to study. The knowledge provides hints at contemporary practice, and the language reflects standards of authority and knowledge production.

Gardens are controlled areas of nature where the environment is shaped in particular ways to benefit man. The layout and design of gardens in this period reflect the social, cultural, religious, and political views of English society as attitudes to nature are linked to wider social transformations.⁴²⁸ Ideas such as the doctrine of signatures, the Garden of Eden, classification, and conspicuous display are the underlying context behind the structure and design of seventeenth-century gardens. Gardens reflect the contemporary ideas; differences in interpretation and representation reflect changes in the minds of Englishmen and women of the time. A garden constructed at the beginning of the century would suggest very different ideas than one created following Charles II's restoration.

Gardens functioned as symbols of status and authority. The more power an individual demonstrated over nature, the more authoritative his control of his subjects. In both building and gardening, the aristocracy was caught up in the spirit of emulation and embarked on extravagant expenditure attempting to modify their environment. Aesthetic factors and other philosophical considerations guided the landed classes in planning or building their gardens. The numerous houses and estates that were built or remodelled during this period are a key source of information regarding contemporary gardening practice. There is a striking uniformity in designs. Gardens did change in content and layout during the seventeenth century, but they did not change dramatically with changes in politics and they were not mere imitations of trends on the continent. The gardens analysed in this study are English, an important point to remember.

Considering the scope of my argument, there are several areas where further research is needed. Most important, a more complete understanding of how gardens functioned as displays – conspicuous indicators of status and authority. The purpose and structure

⁴²⁸ Goody, Culture of Flowers, p. 2.

of the gardens found on the estates of the landed classes provides another context for understanding how display signified status and authority in this century. Understanding how a gentleman sought to control his environment reflects his personal perception of his status and authority. How gardens changed (or if they did change at all) as a result of the religious and political turmoil would provide insight into social and cultural behaviour as the activity of the gentry and nobility during the civil war and interregnum varied from family to family, region to region.

The changing styles and design of the various gardens in this period need to be classified and understood in their English context. Instead of focusing on foreign and continental influences, scholars should assess the English adaptations. Unfortunately, seventeenth-century English garden history is overshadowed by the picturesque landscape movement of the eighteenth century, largely a preserve of art historians whose histories of aesthetic movements dominate the standard narratives. Changing fashions in gardens and plants make gardens very ephemeral and temporary. Often one garden changed several times during this century alone. How and why reflects contemporary ideas on the control and shaping of nature. Scholars who seek to understand early modern perceptions of nature have long realized the importance of gardens for historical research. But the context of these gardens is missing for their accounts. Gardens have much deeper significance for everyday life than suggested in contemporary scholarship.

The majority of gardens analysed from this period are from the great estates of the nobility and the gentry. But there were gardens in cities, towns, outside cottages, inside town houses, and on terraces. The plants and layouts of gardens reinforce many of the underlying themes of larger, estate gardens. But the adaptations and variations are key. Why were gardens found in these places? How were they adapted to fit particular environments? These are questions that need further research.

Kitchen gardens are a relatively unexplored species. Largely subsumed into accounts of households and Englishwomen's lives of the times, these gardens are analysed and researched in an entirely different context. Botanic gardens are normally relegated to origin stories about botany or science. The Oxford Botanic garden is analysed in the context of continental botanic gardens. Did this garden function in the same manner as did its continental counterparts? How is this garden related to the proliferation of physick gardens throughout the country? Pleasure gardens and urban parks normally fall into eighteenth-century discussions. In what context were these gardens developed in the seventeenth century? How do they relate to or explain town planning of the period? The contrast in London before and after the fire of 1666 offers a window into garden planning in an urban environment.

There is a vast wealth of early modern texts that relate to this topic. Integration and analysis of these texts will deepen the context and elaborate more of the story of gardens in this period. At the same time, a deeper analysis and problematization of early modern printed texts should be attempted. How were these texts understood by contemporary readers? In which context was the knowledge created? Who are the authors? Why were they popular? Even more important, further research on the use of imagery in these texts is needed. There are still lots of unanswered questions about woodblocks and engravings. Why were blocks reused? Were they purchased from other printers? Was there a black market of images? Were copies produced from original blocks or from printed images?

With further research, the story as I have sketched may change. Ideas on gentlemanly behaviour and conspicuous display, the role of printed texts in the creation of knowledge, the economic aspects of gardening, and even the classification of garden styles during this period all need further research and exploration. The basic methodologies exist to conduct this research and gardening history would benefit from removing its blinders. Studies of the kind I have proposed would reintegrate garden history into the mosaic of seventeenth-century history. The ideas and themes that underscore gardens and gardening offer insight into the thoughts and perceptions of Englishmen and women of the period in a unique and uncharted area.

Bibliography

Early Modern Texts	
Modern Scholarship	

Early Modern Texts

This is by no means an exhaustive listing of available printed material from the period, rather it is a more detailed listing of the texts I refer to. I have truncated the full title of multiple editions when it is identical to the previous edition. Reference to multiple editions has been included where applicable. In most cases, I have only listed the first edition as a reference, information on subsequent editions can be found in the ESTC indices.

For a fuller bibliography see Henrey, British Botanical and Horticultural Literature Before 1800, Vol. I. More specific bibliographic information on Gervase Markham can be found in F.N.L. Poynter, A Bibliography of Gervase Markham. For Samuel Hartlib, see Culture and Cultivation (1992).

Anonymous

- A booke of Flowers fruicts beastes birds and flies exactly drawne. (London: and are to bee sold by P. Stent at the White hors in Guiltspur street without Newgate, 1661). Wing: B3706, ESTCR213196.
- Flora flowers fruicts beastes birds and flies exactly drawne. With their true colours lively described. (London: Printed and sould by Peter Stent at the White Horse in Guiltspur street nere Newgate, 1660-1665?). Wing: F1365A, ESTCR215441.
- The second booke of flowers fruicts beastes birds and flies exactly drawne. (London: And are to bee sold by George Humble at ye white hourse in Popes head Ally, 1635). STC: 3305.5, ESTCS116290.
- The country-mans recreation, or the art of planting, graffing, and gardening, in three bookes. The first declaring divers wayes of planting, and graffing ... also how to cleanse your grafts and cions, how to helpe barren and sicke trees, how to kill wormes and vermin and to preserve and keepe fruit, how to plant and proyne your vines, and to gather and presse your grape ... how to make your cider and perry ... The second treateth of the hop-garden, with necessary instructions for the making and the maintenance thereof ... Whereunto is added, the expert gardener, containing divers necessary and rare secrets belonging to that art. (London: Printed by B. Allsop and T. Favvcet for Michael Young, and are to be sold at his shop in Bedford-street in Coven-garden neere the New Exchange, 1640). STC: 5874, ESTCS108874.

Austen, Ralph:

- A dialogue (or familiar discourse) and conference betweene the husbandman and fruit-trees in his nurseries, orchards, and gardens wherein are discovered many usefull and profitable observations and experiments [sic] in nature, in the ordering fruit-trees for temporall profitt... (Oxford: Printed by Hen. Hall for Thomas Bowman, 1676). Wing: A4233, ESTCR5888.
- A treatise of fruit-trees shewing the manner of grafting, setting, pruning, and ordering of them in all respects: according to divers new and easy rules of experience; gathered in ye space of twenty yeares. Whereby the value of lands may be much improved, in a shorttime [sic], by small cost, and little labour. Also discovering some dangerous errors, both in ye theory and practise of ye art of planting fruit-trees. With the alimentall and physicall vse of fruits. Togeather with the spirituall vse of an orchard: held-forth [sic] in divers similitudes betweene naturall & spirituall fruit-trees: according to Scripture & experie[n]ce. By Ra: Austen. Practiser in ye art of planting. (Oxford: printed [by Leonard Lichfield] for Tho: Robinson, 1653). Wing: A4238, ESTCR12161.

- A treatise of fruit-trees, shewing the manner of grafting, planting, pruning, and ordering of them in all respects, according to new and easy rules of experience... To which may be annexed the second part, viz. The spirituall use of an orchard, or garden: in divers similitudes between naturall and spirituall fruit-trees, according to Scripture, and experience. (Oxford: printed by Henry Hall, for Tho Robinson, 1657). Wing: A4239, ESTCR207480.
- A treatise of fruit-trees, shewing the manner of planting, grafting, pruning, and ordering of them in all respects, according to rules of experience. Gathered in the space of thirty seven years. Whereunto is annexed, observations upon Sr. Fran. Bacons natural history, as it concerns fruit-trees, fruits, and flowers. Also, directions for planting of wood for building, fuel, and other uses; whereby the value of lands may be much improved in a short time, with small cost and little labour. The third impression, revised, with additions, by Ra. Austen, practiser in the art of planting. (Oxford: printed by William Hall for Amos Curteyne, 1665). Wing: A4240, ESTCR29129.
- The spirituall use of an orchard, or garden of fruit-trees. Set forth in divers similitudes betweene naturall and spirituall fruit-trees, in their natures, and ordering, according to Scripture and experience. The second impression; with the addition of many similitudes. (Oxford: printed by Hen: Hall for Tho. Robinson, 1657). Wing: A4236, ESTCR208885.

Blake, Stephen

The compleat gardeners practice, directing the exact way of gardening. In three parts. The garden of pleasure, physical garden, kitchin garden. How they are to be ordered for their best situation and improvement, with variety of artifical knots for the beautifying of a garden (all engraven in copper) the choiset way for the raising, governing and maintaining of all plants cultivated in gardens now in Engand. Being a plain discourse how herbs, flowers and trees, according to art and nature may be propagated by sowing, setting, planting, replating, prining; also experience of alteration of sent [sic], colour and taste, clearly reconciling as it treateth of each herb and flower in particular. By Stephen Blake gardener. (London: printed by Thomas Pierrepoint, and are to be sold at the signe of the sunne in St Pauls Church-yard, 1664). Wing: B3139, ESTCR18838.

Bobart, Jacob (1600-1680):

Catalogus plantarum horti medici Oxoniensis sc. Latino-Anglicus, & Anglico-Latinus. Eas alphabetico ordine accurat. Adici Oxoniensis sc. Latino-Anglicus, & Anglico-Latinus. Eas alphabetico ordine accurat. Are exhibens. (Oxford: Excudebat Henricus Hall typographus., 1648). Wing: B3376, ESTCR11408.

Coles, William:

- Adam in Eden: or, Natures paradise. The history of plants, fruits, herbs and flowers. With their several names, whether Greek, Latin or English; the places where they grow; their descriptions and kinds; their times of flourishing and decreasing; as also their several signatures, anatomical appropriations, and particular physical vertues; ... and gathering of our English simples with directions how to preserve them iu [sic] their compositions or otherwise. A work of such a refined and useful method, ... that apothecaries, chirurgions, and all other ingenuous practitioners, ... compleatly furnish themselves with cheap, easie, and wholsome cures for any part of the body that is ill-affected. For the herbarists greater benefit, there is annexed a Latin and English table ... (London: printed by J. Streater, for Nathaniel Brooke, 1657). Wing: C5087, ESTCR8275.
- The art of simpling. An introduction to the knowledge and gathering of plants. VV herein the definitions, divisions, places, descriptions, differences, names, vertues, times of flourishing and gathering, uses, temperatures, signatures and appropriations of plants, are methodically laid down. Whereunto is added, a

discovery of the lesser world. (London: Printed by J.G. for Nath: Brook, 1656). Wing: C5089, ESTCR209440.

The art of simpling An introduction to the knowledge and gathering of plants. VV herein the definitions, divisions, places, descriptions, differences, names, vertues, times of flourishing and gathering, uses, temperatures, signatures and appropriations of plants, are methodically laid down. Whereunto is added, a discovery of the lesser world. (London: J.G. for Nath. Brook, 1657). Wing: C5089A, ESTCR224126.

Cook, Moses:

- The manner of raising, ordering, and improving forrest-trees: also, how to plant, make and keep woods, walks, avenues, lawns, hedges, &c. With several figures proper for avenues and walks to end in, and convenient figures for lawns. Also rules and tables shewing how the ingenious planter may measure superficial figures, with rules how to divide woods or land, and how to measure timber and other solid bodies, either by arithmetick or geometry, shewing the use of that most excellent line, the line of numbers, by severall new examples; with many other rules, usefull for most men. By M. Cook. (London: printed for Peter Parker at the Leg and Star over against the Royal Exchange in Cornhill, 1676). Wing: C6032, ESTCR20593.
- The manner of raising, ordering, and improving forest and fruit-trees: also, how to plant, make and keep woods, walks, avenues, lawns, hedges, &c. With several figures in copper-plates, proper for the same. Also rules and tables shewing how the ingenious planter may measure superficial figures, with rules how to divide woods or land, and how to measure timber and other solid bodies, either by arithmetick or geometry, shewing the use of that most excellent line, the line of numbers, by several new examples; with many other rules, useful for most men. By Moses Cook, gardiner to that great encourager of planting, the Right Honourable, the Earl of Essex. Whereunto is now added, that ingenious treatise of Mr. Gabriel Plattes, viz. A discovery of subterranean treasure. (London: printed for Peter Parker at the Leg and Star over against the Royal Exchange in Cornhill, 1679). Wing: C6033, ESTCR2565.

Cotton, Charles

The planters manual: being instructions for the raising, planting, and cultivating all sorts of fruit-trees, whether stone-fruits or pepin-fruits, with their natures and seasons. Very useful for such as are curious in planting and grafting. By Charles Cotton Esq; (London: printed for Henry Brome, at the Gun in St. Pauls Church-yard, 1675). Wing: C6388, ESTCR18563.

Cowley, Abraham:

A. Covleii plantarum [microform] : libri duo. (Londini: Typis J. Flesher, & prostant apud Nath. Brooks, 1662). Wing: C6678, ESTCR38828.

Culpeper, Nicholas:

- Pharmacopoeia Londinensis. A physicall directory, or, A translation of the London dispensatory made by the Colledge of Physicians in London. Being that book by which all apothicaries are strictly commanded to make all their physick with many hundred additions which the reader may find in every page marked with this letter A. Also there is added the use of all the simples beginning at the first page and ending at the 78 page. By Nich. Culpeper Gent. (London: Printed for Peter Cole and are to be sold at his shop at the sign of the Printing-presse near to the Royall Exchange, 1649). Wing: C7540, ESTCR2883.
- The English physician or an astrologo-physical discourse of the vulgar herbs of this nation. Being a compleat method of physick, whereby a man may preserve his body in health; or cure himself, being sick, for three

pence charge, with such things onely as grow in England, they being most fit for English bodžes. Herein is also shewed, 1. The way of making plaisters, oyntments, oyls, pultisses, syrups, decoctions, julips, or waters of all sorts of physical herbs, that you may have them ready for your use at all times of the yecar. 2. What planet governeth every herb or tree (used in physick) that groweth in England. 3. The time of gathering all herbs, but [sic] vulgarly, and astrologically. 4. The way of drying and keeping the herbs all the year. 5. The way of keeping the juyces ready for use at all times. 6. The way of making and keeping all kzinde of usefull compounds made of herbs. 7. The way of mixing medicines according to cause and mixture of the disease, and part of the body afficted. By N. Culpeper, student in physick and astrology. (London: printed by William Bentley, 1652). Wing: C7501A, ESTCR232058.

- The English physitian: or An astrologo-physical discourse of the vulgar herbs of this nation. Being a compleat method of physick, whereby a man may preserve his body in health; or cure himself, being sicke, for three pence charge, with such things only as grow in England, they being most fit for English bodie_s... (London: Printed for the benefit of the Commonwealth of England, 1652). Wing: C7500, ESTCR9417.
- The English physitian: or An astrologo-physical discourse of the vulgar herbs of this nation. Being a compleat method of physick, whereby a man may preserve his body in health; or cure himself, being sick, for three pence charge, with such things only as grow in England, they being most fit for English bodies... (London: printed by Peter Cole, at the sign of the Printing-Press in Cornhil, near the Royal Exchange, 1652). Wing: C7501, ESTCR24897.
- The English physitian enlarged: with three hundred, sixty, and nine medicines made of English herbs that were not in any impression until this: ... Being an astrologo-physical discourse of the vulgar herbs of this nation: containing a compleat method of physick, whereby a man may preserve his body in health; or sure himself, being sick, for three pence charge, with such things only as grow in England, they being most fit for English bodies. Herein is also shewed these seven things, viz. 1 The way of making plaisters, oyntments, oyls, pultisses, syrups, decortions, julips, or waters, of al sorts of physical herbs ... 7 The way of mixing medicines according to cause and mixture of the disease, and part of the body afflicted. By Nich. Culpeper, Gent. student in physick and astrologie: living in Spittle Fields. (London: printed by Peter Cole in Leaden-Hall, and are to be sold at his shop at the sign of the Printing-press in Cornhil, neer the Roy, 1653). Wing: C7502, ESTCR19808.
- The English physitian enlarged: with three hundred, sixty, and nine medicines, made of English herbs that were not in any impre[ss]ion until this: the epistle will inform you how to know this impre[ss]ion from any other... (London: printed by Peter Cole in Leaden-Hall, and at the sign of the Printingpre[ss] in Cornhil, neer the Royal Exchange, 1655). Wing: C7502A, ESTCR23-1724.

Dodoens, Rembert

Cruydenboeck. A niewe herball, or historie of plantes: wherin is contayned the whole discourse and perfect description of all sortes of herbes and plantes: their diuers [and] sundry kindes: their straunge figures, fashions, and shapes: their names, natures, operations, and vertues: and that not onely of those= whiche are here growyng in this our countrie of Englande, but of all others also of forrayne realmes, commonly used in physicke. First set foorth in the Doutche or Almaigne tongue, by that learned D. Rembert Doudoens, physition to the Emperour: and nowe first translated out of French into English, by Henry Loyte Esquyer. (At London [i.e. Antwerp : printed by Henry Loë, sold] by my Gerard Dewes, clwelling in Pawles Churchyarde at the signe of the Swanne, 1578). STC: 6984, ESTCS107_363.

Estienne, Charles:

- Maison rustique, or The countrie farme. Compiled in the French tongue by Charles Steuens and Iohn Liebault doctors of physicke. And translated into English by Richard Surflet practitioner in physicke. Also a short collection of the hunting of the hart, wilde bore, hare, foxe, gray, conie; of birds and faulconrie. The contents whereof are to be seene in the page following. (London: printed at London By Edm. Bollifant, for Bonham Norton, 1600). STC: 10547, ESTCS101733.
- Maison rustique, or The countrey farme: compiled in the French tongue by Charles Steuens and Iohn Liebault doctors of physicke: and translated into English by Richard Surflet practitioner in physicke. Also a short collection of the hunting of the hart, wilde bore, hare, foxe, gray, cony; of birds and faulconrie. The contents whereof are to be seene in the page following. (London: Printed by Arnold Hatfield for Iohn Norton and Iohn Bill, 1606). STC: 10548, ESTCS101747.
- Maison rustique, or The countrey farme Compyled in the French tongue by Charles Steuens, and Iohn Liebault, Doctors of Physicke. And translated into English by Richard Surflet, practitioner in physicke. Now newly reviewed, corrected, and augmented, with divers large additions, out of the works of Serres his Agriculture, Vinet his Maison champestre, French. Albyterio in Spanish, Grilli in Italian; and other authors. And the husbandrie of France, Italie, and Spaine, reconciled and made to agree with ours here in England: by Geruase Markham. The whole contents are in the page following. (London: printed by Adam Islip for Iohn Bill, 1616). STC: 10549, ESTCS121357.

Evelyn, John

- Acetaria. A discourse of sallets. By J.E. S.R.S. Author of the Kalendarium. (London: printed for B. Tooke at the Middle-Temple Gate in Fleetstreet, 1699). Wing: E3480, ESTCR8610.
- The French gardiner: instructing how to cultivate all sorts of fruit-trees, and herbs for the garden: together with directions to dry and conserve them in their natural; three times printed in France, and once in Holland. An accomplished piece, first written by R.D.C.D.W.B.D.N. and now transplanted into English by Phiocepos. (London: printed by J.C. for John Crooke at the Ship in St. Pauls Church-yard, 1658). Wing: B3597, ESTCR28517.
- Of gardens four books first written in Latine verse by Renatus Rapinus; and now made English by J.E. (London: Printed by T.R. & N.T. for Thomas Collins and John Ford, 1672.) Wing: R268, ESTCR22720.
- Pomona, or, An appendix concerning fruit-trees in relation to cider the making and several ways of ordering it. (London: printed by John Martyn and James Allestry, printers to the Royal Society, 1670). Wing: E3509, ESTCR23741.
- Sylva, or a discourse of forest-trees, and the propagation of timber in His Majesties dominions. By J.E. Esq; as it was deliver'd in the Royal Society the XV th of October, MDCLXII. upon occasion of certain quæries propounded to that illustrious assembly, by the honorable the principal officers, and commissioners of the Navy. To which is annexed Pomona, or an appendix concerning fruit-trees in relation to cider; the making and several ways of ordering it. Published by express order of the Royal Society. Also Kalendarium hortense; or, Gard'ners almanac; directing what he is to do monethly throughout the year. (London: printed by Jo. Martyn, and Ja. Allestry, printers to the Royal Society, and are to be sold at their shop at the Bell in S. Paul, 1664). Wing: E3516, ESTCR12326.

Fitzherbert, John:

Book of surveying. Here begynneth a ryght frutefull mater: and hath to name the boke of surveyinge and improve [n]tes. (Imprinted at London : In fletestrete by Rycharde Pynson, printer to the

kynges noble grace, The yere of our lorde god. M.D.xxiii. the. xv. day of Iuly, 1523). STC: 11005, ESTCS112253.

Gardiner, Richard

- Profitable instructions for the manuring, sowing, and planting of kitchin gardens. Very profitable for the commonwealth and greatly for the helpe and comfort of poore people. Gathered by Richard Gardner of Shrewsburie. (Impinrted [sic] at London : By Edward Allde for Edward White, dwelling at the little north doore of Paules at the signe of the Gunne, 1599). STC: 11570.5, ESTCS105694.
- Profitable instructions [sic] for the manuring, sowing, and planting of kitchin gardens. Very profitable for the common wealth and greatly for the helpe and comfort of poore people. Gathered by Richard Gardiner of Shrewsberie. (Imprinted at London : By Edward Allde for Edward White dwelling at the little North doore of Paules at the signe of the Gunne, 1603). STC: 11571, ESTCS114902.

Gerard, John:

- Catalogus arborum [fructium ac plantarum tam indigenarum, quam exoticarum, in horto Iohannis Gerardi nascentium]. (Londini: Ex officina Roberti Robinsoni, 1596). STC: 11748 ESTCS113886.
- Catalogus arborum, fruticum ac plantarum tam indigenarum, quam exoticarum, in horto Iohannis Gerardi ciuis & chirurgi Londinensis nascentium. (Londini: Arnoldi Hatfield, 1599). STC: 11749, ESTCS121105.
- The herball or Generall historie of plantes. Gathered by Iohn Gerarde of London Master in Chirurgerie. (London: Edm. Bollifant for Bonham Norton and Iohn Norton, 1597). STC: 11750, ESTCS122353.

Googe, Barnaby

- Rei rusticae libri quatuor. Foure bookes of husbandry, collected by M. Conradus Heresbachius, counseller to the bygh and mighty prince, the Duke of Cleue: conteyning the whole arte and trade of husbandry, with the antiquitie, and commendation thereof. Nevvely Englished, and increased, by Barnabe Googe, Esquire. (At London: Printed by Richard Watkins, 1577). STC: 13196, ESTCS103974.
- Rei rusticae libri quatuor. The vvhole art and trade of husbandry. Contained in foure bookes. Viz: I. Of earable-ground, tillage, and pasture. II. Of gardens, orchards, and vvoods. III. Of feeding, breeding, and curing of all manner of cattell. IIII. Of poultrie, fowle, fish, and bees. Enlarged by Barnaby Googe, Esquire. (London: Printed by T[homas] S[nodham] for Richard More, and are to be sould at his shop in S. Dunstanes Church yard in Fleetstreet, 1614). STC: 13201, ESTCS104025.

Hyll, Thomas:

- A most briefe and pleasaunt treatyse, teachynge howe to dress, sowe, and set a garden, and what propertyes also these few herbes heare spoken of, haue to our comodytie: with the remedyes that may be vsed against such beasts, wormes, flies and such lyke, that commonly noy garde[n]s, gathered out of the principallest authors in this act by Thomas Hyll Londyner. (Imprynted at London: In Fletestrete neare to Saincte Dunstans Church by Thomas Marshe, 1563). STC: 13490, ESTCS115202.
- The gardeners labyrinth: containing a discourse of the gardeners life, in the yearly trauels to be bestovved on his plot of earth, for the vse of a garden: with instructions for the choise of seedes, apte times for sowing, setting, planting, [and] watering, and the vessels and instruments serving to that vse and purpose: wherein are set

forth diuers herbers, knottes and mazes, cunningly handled for the beautifying of gardens. Also the physike benefit of eche herbe, plant, and floure, with the vertues of the distilled waters of euery of them, as by the sequele may further appeare. Gathered out of the best approved writers of gardening, husbandrie, and physicke: by Dydymus Mountaine. (Printed at London: By Henry Bynneman, Anno. 1577). STC: 13485, ESTCS118782.

Howe, William:

- Phytologia britannica, natales exchibens indigenarum stirpium sponte emergentium. (Londini: Ric. Cotes, 1650). Wing: H2956, ESTCR14016.
- Matthiae de L'Obel Stirpium Illustrationes; plurimas elaborantes inauditas plantas subreptitiis Joh: Parkinsoni rapsodiis, ex codice MS. Insalutato, sparsim gravatae. Ejusdem adjecta sunt ad calcem Theatri Botanici [of John Parkinson], {greek} Accurante Guil: How. (London: Typis Tho: Warren, impensis Jos. Kirton, 1655). Wing: L2732, ESTCR202795.

Howell, James

- Dendrologia. Dodona's grove, or the vocall forrest. By I.H. Esqr. (London: Printed by T[homas]: B[adger]: for H. Mosley at the Princes Armes in St Paules Church-yard, 1640). STC: 13872, ESTCS119170.
- Dendrologia Dodna's grove, or The vocall forrest. The second edition more exact and perfect then the former; with an addition of two other tracts: viz. Parables, reflecting upon the times. And England's teares for the present vvarres. By J.H. Esquire. (Oxford: by H. Hall, Printed in the yeare, 1644). Wing: H3059, ESTCR4062.

Johnson, Thomas:

- The herball or Generall historie of plantes. Gathered by Iohn Gerarde of London Master in Chirurgerie very much enlarged and amended by Thomas Iohnson citizen and apothecarye of London. (London: Printed by Adam Islip Ioice Norton and Richard Whitakers, 1633). STC: 11751, ESTCS122165.
- The herball or Generall historie of plantes. Gathered by Iohn Gerarde of London Master in Chirurgerie very much enlarged and amended by Thomas Iohnson citizen and apothecarye of London. (London: Printed by Adam Islip Ioice Norton and Richard Whitakers, 1636). STC: 11752, ESTCS122175.
- Iter plantarum investigationis ergo susceptum a decem socijs, in agrum cantianum, anno. Dom. 1629. Iulii. 13. Ericetum Hamstedianum sive Plantarum ibi crescentium observatio habita, anno eodem I. Augusti. Descripta studio, & opera Thomæ Iohnsoni. (London?: A. Mathewes, 1629). STC: 14703, ESTCS107453.
- Descriptio itineris plantarum investigationis ergô suscepti, in agrum cantianum anno Dom. 1632. Et enumeratio plantarum in Ericeto Hampstediano locisq[ue] vicinis crescentium. (London?: Excudebat Tho. Cotes, 1632). STC: 14702, ESTCS107452.

Kip, Johannes:

Britannia illustrata or views of several of the Queens palaces as also of the principal seats of the nobility and gentry of Great Britain curiously engraven on 80 copper plates. (London: sold by David Mortier, 1707). ESTCN62528.

Lawrence, Anthony:

Nurseries, orchards, profitable gardens, and vineyards encouraged, the present obstructions removed, and probable expedients for the better progress proposed; for the general benefit of his Majesties dominions, and more particularly of Cambridge, and the Champain-countries, and northern parts of England. In several

letters out of the country, directed to Henry Oldenburg, Esq; Secretary to the Royal Society. The first letter from Anthony Lawrence; all the rest from John Beale, D.D. and Fellow of the Royal Society. (London: printed for Henry Brome, 1677). Wing: L651, ESTCR11301.

Lawson, William:

A new orchard and garden. Or The best way for planting, grafting, and to make the ground good, for a rich orchard: particularly in the north parts of England: generally for the whole kingdome, as in nature, reason, scituation, and all probability, may and doth appeare. With the country housewifes garden for hearbes of common vse, their vertues, seasons, profites, ornaments, variety of knots, models for trees, and plots for the best ordering of grounds and walkes. As also the husbandry of bees, with their seuerall vses and annoyances, all grounded on the principles of art, and precepts of experience, being the labours of forty eight yeares of William Lawson. (Printed at London : By Bar: Alsop for Roger Iackson, and are to be sold at his shop neere Fleet-street Conduit, 1618.). STC: 15329, ESTCS106785.

Loggan, David:

- Cantabrigia illustrata sive, Omnium celeberrimæ istius universitatis collegiorum, aularum, bibliothecæ academicæ scholarum publicarum sacelli coll: regalis nec non totius oppidi ichnographia deliniatore & sculptore Dav. Loggan utriusque academiæ caleographo. (Cantabrigiae: quam proprys sumptibus typis mandavit & impressit, 1690). Wing: L2837, ESTCR9256.
- Oxonia illustrata, sive, Omnium celeberrimæ istius universitatis collegiorum, aularum, bibliothecæ Bodleianæ, scholarum publicarum, Theatri Sheldoniani, nec non urbis totius scenographia delineavit & sculpsit Dav: Loggan ... (Oxonia: e Theatro Sheldoniano, 1675). Wing: L2838, ESTCR5725.

Lovell, Robert:

- Pambotanologia. Sive Enchiridion botanicum. Or a compleat herball containing the summe of what hath hitherto been published either by ancient or moderne authors both Galenicall and chymicall, touching trees, shrubs, plants, fruits, flowers, &c. In an alphabeticall order: wherein all that are not in the physick garden in Oxford are noted with asterisks. Shewing their place, time, names, kindes, temperature, vertues, use, dose, danger and antidotes. Together with an introduction to herbarisme, &c. appendix of exoticks. Universall index of plants: shewing what grow wild in England. By Robert Lovell St. C.C. Ox. (Oxford: printed by William Hall for Ric. Davis, 1659). Wing: L3243, ESTCR202783.
- Pambotanologia. Sive, Enchiridion botanicum. Or, A compleat herball, containing the summe of ancient and moderne authors, both galenical and chymical, touching trees, shrubs, plants, fruits, flowers, &c. In an alphabetical order: wherein all that are not in the physick garden in Oxford, are noted with asterisks. Shewing their place, time, names, kinds, temperature, vertues, use, dose, danger and antidotes. Together with an introduction to herbarisme, &c. Appendix of exoticks. Universal index of plants: shewing what grow wild in England. The second edition, with many additions mentioned at the end of the preface. By Robert Lovell, philotheologiatronomos. (Oxford: William Hall for Ric. Davis, 1665). Wing: L3244, ESTCR24436.

Markham, Gervase:

The English husbandman. The first part: contayning the knowledge of the true nature of euery soyle within this kingdome: how to plow it; and the manner of the plough, and other instruments belonging thereto. Together with the art of planting, grafting, and gardening after our latest and rarest fashion. A worke neuer written before by any author: and now newly compiled for the benefit of this kingdome. By Garuis Markham. (London : Printed by T[homas] S[nodham] for Iohn Browne, and are to be sould at his shop in Saint Dunstanes Church-yard, 1613). STC: 17355, ESTCS112063.

Countrey contentments, in two bookes: the first, containing the whole art of riding great horses in very short time, with the breeding, breaking, dyeting and ordring of them, and of running, hunting and ambling horses, with the manner how to vse them in their trauell. Likewise in two newe treatises the arts of hunting, hawking, coursing of grey-hounds with the lawes of the leash, shooting, bowling, tennis, baloone & C. By G.M. The second intituled, The English huswife: containing the inward and outward vertues which ought to be in a compleate woman: as her phisicke, cookery, banqueting-stuffe, distillation, perfumes, wooll, hemp, flaxe, dairies, brewing, baking, and all other things belonging to an houshold. A worke very profitable and necessary for the generall good of this kingdome. (Printed at London : By I[ohn] B[eale] for R. Iackson, and are to be sold at his shop neere Fleet-street Conduit, 1615). STC: 17342, ESTCS112047.

Meager, Leonard:

The English gardener: or, A sure guide to young planters and gardeners in three parts. The first, shewing the way and order of planting and raising all sorts of stocks, fruit-trees, and shruhs, with the divers ways and manners of ingrafting and inoculating them in their several seasons, ordering, and preservation. The second, how to order the kitchin-garden, for all sorts of herbs, roots, and sallads. The third, the ordering of the garden of pleasure, with variety of knots, and wilderness-work after the best fashion, all cut in copper plates; also the choicest and most approved ways for the raising all sorts of flowers and their seasons, with directions concerning arbors, and hedges in gardens; ... Fitted for the use of all such as delight in gardening, whereby the meanest capacity need not doubt of success (observing the rules herein directed) in their undertakings. By Leonard Meager above thirty years a practioner in the art of gardening. (London: printed for P. Parker, 1670). Wing: M1568, ESTCR14900.

Mollet, Andre:

The garden of pleasure, containing several draughts of gardens both in embroyder'd-ground-works, knot-works of grass, as likewise in wildernesses, and others. With their cuts in copper, by Andrew Mollet, master of His Majesty of Englands gardens in his park of St. James's. Dedicated to the King. (London: by Thomas Newcomb for John Martyn, 1670). Wing: M2392, ESTCR7156.

Nourse, Timothy

- Campania foelix. Or, A discourse of the benefits and improvements of husbandry: containing directions for all manner of tillage, pasturage, and plantation; as also for the making of cyder and perry. With some considerations upon I. Justices of the peace, and inferior officers. II. On inns and alebourses. III. On servants and labourers. IV. On the poor. To which are added, two essays: I. Of a country-house. II. Of the fuel of London. By Tim. Nourse, gent. (London: printed for Tho. Bennet, at the Half-Moon in St. Paul's Church-yard, 1700). Wing: N1416, ESTCR30752.
- Campania Foelix. Or, a discourse of the benefits and improvements of husbandry: containing directions for all manner of tillage, pasturage, and plantation; ... To which are added, two essays: I. Of a country-house. II. Of the fuel of London. By Tim. Nourse, Gent. (London: printed for Tho. Bennet, 1706). ESTCT133719.

Parkinson, John:

Paradisi in sole paradisus terrestris. or A garden of all sorts of pleasant flowers which our English ayre will permitt to be noursed vp: with a kitchen garden of all manner of herbes, rootes, & fruites, for meate or sause vsed with vs, and an orchard of all sorte of fruitbearing trees and shrubbes fit for our land together with the right orderinge planting & preserving of them and their vses & vertues collected by Iohn Parkinson apothecary of London 1629. (London: Humfrey Lownes and Robert Young, 1629). STC: 19300, ESTCS115360.
- Paradisi in sole paradisus terrestris, or, A choise garden of all sorts of rarest flowers with their nature, place of birth, time of flowring, names, and vertues to each plant, useful in physic or admired for beauty : to which is annext a kitchin-garden furnished with all manner of herbs, roots, and fruits, for meat or sauce used with us, with the art of planting an orchard ... all unmentioned in former herbals / collected by John Parkinson. (London: by R.N. and are to be sold by Richard Thrale, 1656). Wing: P495, ESTCR29251.
- Theatrum botanicum: The theater of plants. Or, An herball of a large extent: containing therein a more ample and exact history and declaration of the physicall herbs and plants that are in other authours, encreased by the accesse of many hundreds of new, rare, and strange plants from all the parts of the world, with sundry gummes, and other physicall materials, than hath beene hitherto published by any before; and a most large demonstration of their natures and vertues. Shewing withall the many errors, differences, and oversights of sundry authors that have formerly written of them; and a certaine confidence, or most probable conjecture of the true and genuine herbes and plants. Distributed into sundry classes or tribes, for the more easie knowledge of the many herbes of one nature and property, with the chiefe notes of Dr. Lobel, Dr. Bonham, and others inserted therein. Collected by the many yeares travaile, industry, and experience in this subject, by Iohn Parkinson apothecary of London, and the Kings herbarist. And published by the Kings Majestyes especiall priviledge. (London: Tho. Cotes, 1640). STC: 19302, ESTCS121875.

Pechet, John:

The compleat herbal of physical plants. Containing all such English and foreign herbs, shrubs and trees, as are used in physick and surgery. And to the virtues of those that are now in use, is added one receipt, or more, of some learned physician. The doses or quantities of such as are prescribed by the London-physicians, and others, are proportioned. Also directions for making compound-waters, syrups simple and compound, electuaries, pills, powders, and other sorts of medicines. Moreover, the gums, balsams, oyls, juices, and the like, which are sold by apothecaries and druggists, are added to this herbal; and their virtues and uses are fully described. (London: printed for Henry Bonwicke, 1694). Wing: P1021, ESTCR19033.

Pena, Pierre:

Stirpium aduersaria noua, perfacilis vestigatio, luculentaqne [sic] accessio ad priscorum, pr[a]esertim Dioscoridis & recentiorum, materiam medicam. Quibus prope diem accedet altera pars. Qua coniectaneorum de plantis appendix, de succis medicatis et metallicis sectio, antiquæ & nouatæ medicin[a]e lectiorum remedioru[m] thesaurus opulentissimus, de succedaneis libellus continentur. Authoribus Petro Pena. & Mathia de Lobel, medicis. (Londini: Thomas Purfoot, 1570). STC: 19595, ESTCS115759.

Platt, Hugh:

- Delightes for ladies, to adorne their persons, tables, closets, and distillatories. VVith bewties, banquets, perfumes and waters. Read, practise, and censure. (London: printed by Peter Short, 1600). STC: 19977.7, ESTCS125836.
- [Garden of Eden. Part 1] Floraes paradise, beautified and adorned with sundry sorts of delicate fruites and flowers, by the industrious labour of H.P. Knight: with an offer of an English antidote, (beeing a present, easie, and pleasing remedy in violent feavers, and intermitting agues) as also of some other rare inventions, fitting the times. (London: by H L[ownes] for William Leake, 1608). STC: 19990, ESTCS120798.

Rea, John:

Flora: seu, De florum cultura. Or, A complete florilege, furnished with all requisites belonging to a florist. In III. books. By John Rea, Gent. (London: printed by John Grismond for Richard Marriott, 1665). Wing: R421, ESTCR6376.

- Flora: seu, De florum cultura. Or, A complete florilege, furnished with all requisites belonging to a florist. The second impression corrected, with many additions, and several new plates. In III. books. By John Rea, Gent. (London: printed for Thomas Newcomb for George Marriott, 1676). Wing: R422, ESTCR15778.
- Flora: seu, De florum cultura. Or, A complete florilege, furnished with all requisites belonging to a florist. In III. books. By John Rea, Gent. (London: printed by J.G. for Thomas Clarke, 1665). ESTCR213911.

Sharrock, Robert:

The history of the propagation & improvement of vegetables by the concurrence of art and nature: shewing the several ways for the propagation of plants usually cultivated in England, as they are increased by seed, offsets, suckers, truncheons, cuttings, slips, laying, circumposition, the several ways of graftings and inoculations; as likewise the methods for improvement and best culture of field, orchard, and garden plants, the means used for remedy of annoyances incident to them; with the effect of nature, and her manner of working upon the several endeavors and operations of the artist. Written according to observations made from experience and practice: by Robert Sharrock, Fellow of New Colledge. (Oxford: printed by A. Lichfield for Thomas Robinson, 1659). Wing: S3010, ESTCR200918.

Smith, John:

- England's improvement reviv'd digested into six books / by Captain John Smith. (In the Savoy: printed by Tho. Newcomb for the author, 1670). Wing: S4092, ESTCR22597.
- England's improvement reviv'd: in a treatise of all manner of husbandry & trade by land and sea. Plainly discovering the several ways of improveing all sorts of waste and barren grounds, and enriching all earths; with the natural quality of all lands, and the several seeds and plants which most naturally thrive therein. Together with the manner of planting all sorts of timber-trees, and under-woods, with two several chains to plaint seeds or sets by; with several directions to make walks, groves, orchards, gardens, planting of hops and good fences; with the vertue of trees, plants, and herbs, and their physical use; with an alphabet of all herbs growing in the kitchin, and physick-gardens; and physical directions. Also, the way of ordering cattel, with several observations about sheep, and choice of cows for the dairy, ... with many other remarks never before extant. Experienced in thirty years practise, and digested into six books, by John Smith, gent. Published for the common good. (London: printed by Tho. Newcomb for Benjamin Southwood, at the Star next to Sergeants-Inn in Chancery-lane; and Israel Harrison near Li, 1673). Wing: S4093, ESTCR12577.

Stephens, Phillip:

Catalogus horti botanici oxoniensis microform : alphabetice digestus, duas, præterpropter, plantarum chiliadas complicters, priore duplo auctior idemque elimiator : nec non etymologiis qua graecis quà latinis, hinc inde petitis, enucleatior : in quo nomina latina pariter & græca vernaculis & in ejus sequiore parte, vernacula latinis, præponuntur ... / cura & opera socia Philippi Stephani et Gulielmi Brovnei ... adhibitis etiam in consilium D. Boberto patre ... (Oxonii: Typis Gulielmi Hall, 1658). Wing: S5454 (also identified as B3375A), ESTCR29896.

Surflet, Richard

Maison rustique, or The countrie farme. Compiled in the French tongue by Charles Steuens and Iohn Liebault doctors of physicke. And translated into English by Richard Surflet practitioner in physicke. Also a short collection of the hunting of the hart, wilde bore, hare, foxe, gray, conie; of birds and faulconrie. The contents whereof are to be seene in the page following. (Printed at London : By Edm. Bollifant, for Bonham Norton, 1600). STC: 10547, ESTCS101733.

Tradsecant, John

Musæum Tradescantianum: or, A collection of rarities. Preserved at South-Lambeth neer London by John Tradescant. (London : printed by John Grismond, and are to be sold by Nathanael Brooke at the Angel in Cornhill, 1656). Wing: T2005, ESTCR203792.

Turner, Robert:

- Botanolo'gia. The Brittish physician: or, The nature and vertues of English plants. Exactly describing such plants as grow naturally in our land, with their several names, Greek, Latine, or English, natures, places where they grow, times when they flourish, and are most proper to be gathered; their degrees of temperature, applications and vertues, physical and astrological uses, treated of; each plant appropriated to the several diseases they cure, and directions for their medicinal uses, throughout the whole body of man; being most special helps for sudden accidents, acute and chronick distempers. By means whereof people may gather their own physick under every hedge, or in their own gardens, ... For what climate soever is subject to any particular disease, ... With two exact tables, the one of the English and Latine names of the plants; the other of the diseases, and names of each plant appropriated to their diseases, with their cures. By Robert Turner, botanolog. stud. (London: R. Wood for Nath. Brook., 1664). Wing: T3328; ESTCR232320.
- Botanologia, the British physician, or, The nature and vertues of English plants exactly describing such plants as grow naturally in our land with their several names, Greek, Latine or English, places where they grow ... each plant appropriated to the several diseases they cure and directions for their medicinal uses ... by means whereof people may gather their own physick ... with two exact tables, the one of the English and Latine names of the plants, the other of the diseases and names of each plant appropriated to their diseases with their cures / by Robert Turner, botanolog. stud. (London: for Obadiah Blagrave, 1687). Wing: T3329, ESTCR30175.

Turner, William:

- Libellus de re herbaria novus, in quo herbarum aliquot nomina greca, latina, & Anglica habes, vna cum nominibus officinarum, in gratiam studios[qu]e iuuentutis nunc primum in lucem æditus (Londini: published apud Ioannem Byddellum, 1538) STC: 24538, ESTCS104966.
- The names of herbes in Greke, Latin, Englishe, Duche [and] Frenche with the commune names that herbaries and apotecaries vse. G. (London: [S. Mierdman for] John Day and Wyllyam Seres, dwellynge in Sepulchres Parish at the signe of the Resurrection a litle aboue Hol, 1548). STC: 24359, ESTCS104970.
- A new herball, wherein are conteyned the names of herbes in Greke, Latin, Englysh, Duch [sic] Frenche, and in the potecaries and herbaries Latin, with the properties degrees and naturall places of the same, gathered and made by Wylliam Turner, physicion unto the Duke of Somersettes Grace. (London: By Steven Mierdman and they are to be solde [by Iohn Gybken] in Paules churchyarde, 1551). STC 24365 ESTCS102021.
- The seconde part of Vuilliam Turners herball, wherein are conteyned the names of herbes in Greke, Latin, Duche, Frenche, and in the apothecaries Latin, and somtyme in Italiane, wyth the vertues of the same herbes wyth diverse confutationes of no small errours, that men of no small learning have committed in the intreatinge of herbes of late yeares. Here vnto is ioyned also a booke of the bath of Baeth in Englande, and of the vertues of the same wyth diverse other bathes moste holsum and effectuall, both in Almany and Englande, set furth by William Turner Doctor of Physik. (Collen (Cologne): Arnold Birckman, 1562). STC 24366, ESTCS102019.

The first and seconde partes of the herbal of William Turner Doctor in Phisick, lately ouersene, corrected and enlarged with the thirde parte, lately gathered, and nowe set oute with the names of the herbes, in Greke Latin, English, Duche, Frenche, and in the apothecaries and herbaries Latin, with the properties, degrees, and naturall places of the same. Here vnto is ioyned also a booke of the bath of Baeth in England, and of the vertues of the same with diuerse other bathes, moste holsom and effectuall, both in Almanye and England, set furth by William Turner Doctor in Phisick. God saue the Quene. (Collen (Cologne): by [the heirs of] Arnold Birckman, 1568). STC 24367, ESTCS117784.

van de Passe, Crispijn:

A garden of flowers, wherein very liuely is contained a true and perfect discription of al the flowers contained in these foure followinge bookes. As also the perfect true manner of colouringe the same with theire naturall coloures ... All which to the great charges, and almost incredible laboure and paine, the diligent authore by foure yeares experience, hath very laboriously compiled, and most excellently performed, both in theire perfect lineaments in representing them in theire coper plates: as also after a most exquisite manner and methode in teachinge the practisioner te [sic] painte them even to the liffe. Faithfully and truely translated out of the Netherlandish originall into English for the comon benifite of those that vnderstand no other languages, and also for the benifite of others nevvly printed both in the Latine and French tongues all at the charges of the author. (Vtrecht Salomon de Roy, 1615). STC: 19459, ESTCS110319.

Woolley, Hannah

The accomplish'd ladies delight in preserving, physick, beautifying, and cookery. Containing, I. The art of preserving, and candying fruits and flowers, and the making of all sorts of conserves, syrups, and jellies. II. The physical cabinet, or excellent receipts in physick and chirurgery, together with some rare beautifying waters, to adorn and add loveliness to the face and body: and also some new and excellent secrets and experiments in the art of angling. III. The compleat cooks guide, or, directions for dressing all sorts of flesh, fowl, and fish, both in the English and French mode, with all sauces and sallets; and the making pyes, pasties, tarts, and custards, with the forms and shapes of many of them. (London : printed for Benjamin Harris, at the Stationers Arms and Anchor, in the Piazza, at the Royal-Exchange in Cornhill, 1684). Wing: W3271, ESTCR230915.

Worlidge, John:

Systema agriculturæ, the mystery of husbandry discovered; wherein is treated of the several new and most advantagious ways of tilling planting sowing manuring ordering improving all sorts of gardens, orchards, meadows, pastures, corn-lands, woods, & coppices. And of all sorts of fruits, corn, grain, pulse, new hays, cattel, fowl, beasts, bees, silk-worms, & With an account of the several instruments and engines useful in this profession. To which is added, Kalendarium rusticum; or, The husbandmans monethly directions. Also the prognosticks of dearth, scarcity, plenty, sickness, heat, cold, frost, snow, windes, rain, hail, thunder, & C. And Dictionarium rusticum: or, The interpretation of rustick terms. Published for the common good, by J. W. Gent. The whole work being of great use and advantage to all that delight in that most noble practice. (London: printed by T. Johnson for Samuel Speed, 1669). Wing: W3598, ESTCR12813.

Modern Scholarship

- Allen, Mea. The Tradescants: their Plants, Gardens and Museum, 1570-1662. London: M. Joseph, 1964.
- Amherst, Alicia. Historic Gardens of England. London: London Country Life, 1938.
- Anderson, Frank. An Illustrated History of the Herbals. New York: Columbia University Press, 1977.
- Arber, Agnes. Herbals: Their Origin and Evolution. Darien, Conn.: Hafner Publishing Co, 1970.
- Austen, Ralph. A Treatise of Fruit-Trees. New York: Garland Publishing, Inc., 1982.
- Baigrie, Brian. Picturing Knowledge: Historical and Philosophical Problems Concerning the Use of Art in Science. Toronto: University of Toronto Press, 1996.
- Baridon, Michel. "The Scientific Imagination and the Baroque Garden," Studies in the History of Gardens & Designed Lands. 18/1 (1998), pp. 5-19.

Barker, Felix. London: 2000 Years of a City and its People. London: Cassell, 1974.

- Batey, Mavis. Oxford Gardens. Amersham: Avebury Publishing Company, 1982.
- Berrall, Julia. The Garden; an Illustrated History from Ancient Egypt to the Present Day. London: Thames & Hudson, 1966.

Bisgrove, Richard. The National Trust Book of the English Garden. London: Viking, 1990.

Bland, David. A History of Book Illustration. London: Faber and Faber, 1969.

Bliss, Douglas. A History of Wood-Engraving. London: Spring Books, 1964.

- Blomfield, Reginald. The Formal Garden in England. London: Macmillan, 1901.
- Bloor, David. Knowledge and Social Imagery. Chicago: University of Chicago Press, 1976.
- Bloy, Colin H. History of Printing Ink, Balls, and Rollers. London: Adams and MacKay, 1967.
- Blunt, Wilfrid and Sandra Raphael. The Illustrated Herbal. Great Britain: Thames and Hudson, Inc, 1979.
- Bradley, Rose. The English Housewife in the Seventeenth and Eighteenth Centuries. London: Edward Arnold, 1912.
- Brewer, John and Roy Porter (ed.). Consumption and the World of Goods. New York: Routledge, 1993.
- Bridson, Gavin, Plant, Animal & Anatomical Illustration in Art & Science: a Bibliographical Guide from the Sixteenth Century to the Present Day. Winchester: St Paul's Bibliographies, 1990.
- Bridson, Gavin. History of Natural History: An Annotated Bibliography. New York: Garland Publishing, Inc., 1994.
- Bryson, Anna. From Courtesy to Civility. Oxford: Clarendon Press, 1998.
- Bush-Brown, Louise Carter. Men with Green Pens. Philadelphia: Dorrance, 1964.
- Butterfield, Herbert. The Whig Interpretation of History. New York: W. W. Norton & Company, 1965.

- Cardinal, Roger and John Elsner. *Cultures of Collecting*. Cambridge, MA: Harvard University Press, 1994.
- Carruthers, of Inverness, Miss. Flower Lore. Detroit: Singing Tree Press, 1972.
- Chambers, Douglas. "Storys of plants': the assembling of Mary Capel Somerset's botanical collection at Badminton," *Journal of the History of Collections*. 9/1 (1997), pp. 49-60.
- Chambers, Douglas. Planters of the English Landscape Garden: Botany, Trees, and the Georgics. New Haven: Yale University Press, 1993.
- Chartres, John (ed.). English Rural Society, 1500-1800. Cambridge: Cambridge University Press, 1990.
- Clark, Kenneth. Landscape into Art. London: John Murray, 1976.
- Clarkson, Rosetta. The Golden Age of Herbals and Herbalists. New York: Dover Publications Inc, 1972.
- Cliffe, J. T. The Puritan Gentry. London: Routledge & Kegan Paul, 1984.
- Cliffe, J. T. Puritans in Conflict. London: Routledge, 1988.
- Cliffe, J. T. The Puritan Gentry Beseiged. New York: Routledge, 1993.
- Cliffe, J. T. The World of the Country House in Seventeenth-Century England. London: Yale University Press, 1999.
- Clifford, Derek Plint. A History of Garden Design. London: Faber and Faber, 1962.
- Coats, Alice. Flowers and their Histories. London: Hutton Press, 1956.
- Coats, Alice. The Book of Flowers. New York: McGraw-Hill Book Company, 1973.
- Collingwood, R. G.. An Autobiography. Oxford: Clarendon Press, 1939.
- Collinson, Patrick. The Elizabethan Puritan Movement. Oxford: Clarendon Press, 1967.
- Colvin, H.M. The History of the King's Works. London: Her Majesty's Stationery Office, 1975.
- Conan, Michel (ed.). Le Jardin de Plaisir. Paris: du Moniteur, 1981.
- Corbett, Margery. The Comely Frontispiece: the Emblematic Title-Page in England, 1550-1660. London: Routledge and K. Paul, 1979.
- Corbett, Margery. "The Engraved Title-Page to John Gerarde's Herball, or Generall historie of plantes, 1597," Journal of the Society for Bibliography of Natural History. 8/3 (1977), pp. 223 -30.
- Couch, Sarah. "The Practise of Avenue Planting in the 17th and 18th Centuries," Journal of Garden History. 20 (1992), pp. 173-200.
- Cowell, F.R. The Garden as Fine Art. Boston: Houghton Mifflin Company, 1978.
- Cressy, David. Literacy and the Social Order. Cambridge: Cambridge University Press, 1980.
- Crosby, Alfred. Ecological Imperialism. Cambridge: Cambridge University Press, 1986.
- Crosby, Alfred, The Columbian Exchange. Westport, Connecticut: Greenwood Press, 1972.
- Crowe, Sylvia. Garden Design. London: Packard Publishing Limited, 1981.

- Cunningham, Andrew. "Getting the Game Right: Some Plain Words on the Identity and Invention of Science," Studies in the History & Philosophy of Science. 19/3 (1988), pp. 365 -389.
- Curl, James Stevens. "The design of historical gardens: Cultural, magical, medical and scientific gardens in Europe," Interdisciplinary Science Reviews. 13 (1988), pp. 264-281.
- Currie, Christopher. "The Archaeology of the Flowerpot in England and Wales, circa 1650-1950," Garden History. 21 (1993), pp. 227 -46.
- Cuthbertson, Yvonne. Women Gardeners: A History. Denver, Co.: Arden Press, Inc, 1998.
- Daston, Lorraine. "The Nature of Nature in Early Modern Europe," Configurations. 6/2 (1998), pp. 149 -172.
- de Bray, Lys. The Art of Botanical Illustration. Bromley, England: Helm, 1989.
- Delaporte, Francois. Nature's Second Kingdom. Cambridge, MA: MIT Press, 1982.
- Desmond, Ray. Dictionary of British and Irish Botanists and Horticulturists Including Plant Collectors and Botanical Artists. London: Taylor & Francis, 1977.
- Dickenson, Victoria. Drawn from Life. Toronto: University of Toronto Press, 1998.
- Douglas, Mary. The World of Goods. New York: Basic Books, Inc, Publishers, 1979.
- Drewitt, F. Dawtrey. The Romance of the Apothecaries' Garden at Chelsea. London: Chapman and Dodd, Limited, 1924.
- Durston, Christopher (ed.). The Culture of English Puritanism: 1560-1700. New York: St Martin's Press, 1996.
- Duthie, Ruth. "The Planting Plans of Some Seventeenth Century Gardens," Journal of Garden History. 18 (1990), pp. 77-102.
- Dyer, T.F. Thiselton. The Folk-lore of Plants. New York: D. Appleton and Company, 1989.
- Eamon, William. "Science and Popular Culture in Sixteenth Century Italy: The "Professors of Secrets" and Their Books," *The Sixteenth Century Journal.* 16/4 (1985), pp. 471-485.
- Eamon, William. Science and the Secrets of Nature. Princeton: Princeton University Press, 1994.
- Eisenberg, Evan. The Ecology of Eden. Toronto: Random House of Canada, 1998.
- Eisenstein, Elizabeth. The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early Modern Europe. Cambridge: Cambridge University Press, 1979.
- Elias, Norbert. Civilzing Process. Oxford: Blackwell, 1994.

Evelyn, John. Silva. London: Clarke, Doble & Brendon Ltd, 1979.

- Eyler, Ellen. Early English Gardens and Garden Books. Charlottesville: University Press of Virginia, 1963.
- Fairbrother, Nan. Men and Gardens. New York: Lyons & Burford, 1997.
- Fincham, Kenneth. The Early Stuart Church. Stanford: Stanford University Press, 1993.
- Findberg, Alexander. "A Chronological List of Portraits by Cornelius Johnson," Walpole Society. 10/94 (1922), p. 1-37.

- Findlen, Paula. Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy. Berkeley: University of California Press, 1994.
- Fisher, John. The Origins of Garden Plants. London: Constable, 1982.
- Fleming, Laurence. The English Garden. London: Michael Joseph, 1979.
- Fletcher, Anthony (ed.). Religion, Culture, and Society in Early Modern Britain. Cambridge: Cambridge University Press, 1994.
- Foucault, Michel. The Order of Things. New York: Vintage Books, 1970.
- Fowler, Alastair. Kinds of Literature. Cambridge, MA: Harvard University Press, 1982.
- Friend, H. Flowers & Flower-Lore. London: W. Swan Sonnenschien, 1884.
- Fussell, G. E. The Old English Farming Books. London: Crosby Lockwood & Son, Ltd, 1947.
- Galinou, Mireille. London's Pride: The Glorious History of the Capital's Gardens. London: Anaya Publishers Ltd, 1990.
- Gardiner, Dorothy. The Oxinden, 1607-1642; Being the Correspondence of Henry Oxinden of Barham and his Circle. London: The Sheldon Press, 1933.
- Gardiner, Dorothy. The Oxinden and Peyton Letters, 1642-1670; being the correspondence of Henry Oxinden of Barham, Sir Thomas Peyton of Knowlton and their Circle. London: The Sheldon Press, 1937.
- Gaskell, Philip. A New Introduction to Bibliography. Oxford: Clarendon Press, 1972.
- Gaukroger, Stephen. Soft Underbelly of Reason: the Passions in the Seventeenth Century. London: Routledge, 1998.
- Girouard, Mark. Historic Houses of Britain. New York: Wm. Morrow, 1979.
- Glacken, Clarence. Traces on the Rhodian Shore; Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century. Berkeley: University of California Press, 1967.
- Gombrich, E.H. Art and Illusion. London: Phaidon Press, 1977.
- Goodchild, Peter. "No Phantasticall Utopia, But a Reall Place'. John Evelyn, John Beale and Backbury Hill, Herefordshire," Journal of Garden History 19/2 (1991), pp. 105-127.
- Goodchild, Peter. "John Smith's paradise and theatre of nature," Journal of Garden History. 24 (1996), pp. 19-23.
- Goode, Patrick. Oxford Companion to Gardens. Oxford: Oxford University Press, 1986.
- Goody, Jack. Culture of Flowers. Cambridge: Cambridge University Press, 1993.
- Gore, Alan and Laurence Fleming. English Garden. London: Michael Joseph, 1979.
- Gorer, Richard. The Growth of Gardens. London: Faber and Faber, 1978.

Gorer, Richard. The Flower Garden in England. London: B.T. Batsford, 1975.

Gotch, J. Alfred. The Growth of the English House. London: B.T. Batsford, 1909.

Gouk, Penelope. Wellsprings of Achievement. Great Britain: Variorum, 1995.

- Grant, Maurice Harold. A Dictionary of British Landscape Painters. England: F. Lewis, Publishers, Limited, 1976.
- Green, David Bronte. Gardener to Queen Anne; Henry Wise (1653-1738) and the formal garden. Oxford University Press: London, 1956.
- Green, Joseph Reynolds. A History of Botany. Toronto: J. M. Dent & Sons Limited, 1914.
- Greengrass, Michael, Michael Leslie and Timothy Raylor, Samuel Hartlib and Universal Reformation. Cambridge: Cambridge University Press, 1994.
- Grove, Richard. Green Imperialism. Cambridge: Cambridge University Press, 1995.
- Gunther, Robert Theodore. Early Science in Oxford. London: Dawsons of Pall Mall, 1967. 3 Volumes.
- Gunther, Robert Theodore. Oxford Gardens. Oxford: Parker, 1912.
- Hadfield, Miles. English Landscape Garden. Aylesbury: Shire Publications, 1977.
- Hardacre, Paul. The Royalists During the Puritan Revolution. The Hague: Martinus Nijhoff, 1956.
- Harding, D.W., "Good-By Man," New York Review of Books. 17 (Aug 12, 1971), pp. 21-22.
- Harris, John and Gervase Jacson-Stops. Britannia Illustrata. Bungay: Paradigm Press, 1984.
- Harris, Jonathan Gil. Foreign Bodies and the Body Politic: Discourses of Social Pathology in Early Modern England. Cambridge: Cambridge University Press, 1998.
- Harris, Tim. "What's New About the Restoration?," Albion. 29/2 (1997), pp. 187 -222.
- Harrison, Peter. The Bible, Protestantism, and The Rise of Natural Science. Cambridge: Cambridge University Press, 1998.
- Hart, Kingsley (ed.). The Letters of Dorothy Osborne to Sir William Temple. London: Folio Society, 1968.
- Hart, Vaughan. Art & Magic in the Court of the Stuarts. London: Routledge, 1994.
- Hartwick, H. A. The Garden. New York: Simon and Schuster, 1968.
- Harvey, John. Early Nurserymen. London: Phillimore & Co., 1974.
- Harvey, John. Early Horticultural Catalogues. (Bath: University of Bath Library, 1981).
- Harvey, John. "William Lawson and His Orchard," Country Life. (Oct 28, 1982), pp. 1338-40.
- Haskell, Francis. History and Its Images: Art and the Interpretation of the Past. New Haven: Yale University Press, 1993.
- Hayes, John. The Portrait in British Art. London: National Portrait Gallery Publications, 1991.
- Hazlitt, William. Gleanings in Old Garden Literature. Detroit: Gale Research Co, 1968.
- Healy, Thomas. Literature and the English Civil War. Cambridge: Cambridge University Press, 1990.
- Heltzel, Virgil. A Check List of Courtesy Books in the Newberry Library. Chicago: The Newberry Library, 1942.

- Henrey, Blanche. British Botanical and Horticultural Literature before 1800. Toronto: Oxford University Press, 1975, Vol I.
- Hey, David (ed.). English Rural Society, 1500-1800. Cambridge: Cambridge University Press, 1990.
- Hill, Christopher. The English Bible and the Seventeenth Century Revolution. Toronto: Allen Lane, 1993.
- Hill, Ordelle. The Manor, the Plowman, and the Shepherd. Toronto: Susquehanna University Press, 1993.
- Hind, Arthur. Engraving in England in the Sixteenth and Seventeenth Centuries. Cambridge: Cambridge University Press, 1955.
- Hobhouse, Penelope. Plants in Garden History. London: Pavilion Books, 1992.
- Hobsbawm, Eric. The Invention of Tradition. Cambridge: Cambridge University Press, 1983.
- Hole, Christina. The English Housewife in the Seventeenth Century. London: Chatto & Windus, 1953.
- Hopper, Florence, "The Dutch classical garden and André Mollet," Journal of Garden History 2/1 (1982), pp. 25-40.
- Hoyle, Richard. The Estates of the English Crown, 1558-1640. Cambridge: Cambridge University Press, 1992.
- Hoyles, Martin. Gardeners Deligh: Gardening books from 1560 to 1960. Volume One. London: Pluto Press, 1994.
- Hoyles, Martin. Bread and Roses: Gardening books from 1560 to 1960. Volume Two. London: Pluto Press, 1995.
- Hunt, John Dixon and Peter Willis, The Genius of the Place: the English Landscape Garden, 1620-1820. London: Paul Elek, 1975.
- Hunt, John Dixon. Oxford Book of Garden Verse. Oxford: Oxford University Press, 1994.
- Hunt, William. The Puritan Moment: The Coming of Revolution in an English County. Cambridge, MA: Cambridge University Press, 1983.
- Hussey, Christopher. English Gardens and Landscapes, 1700-1750. London: Country Life, 1967.
- Hutton, Ronald. The Rise and Fall of Merry England. Oxford: Oxford University Press, 1994.
- Huxley, Anthony Julian. An Illustrated History of Gardening. New York: Paddington Press, 1978.
- Hyams, Edward. Great Botanical Gardens of the World. Italy: The Macmilliam Company, 1969.
- Illiffe, Robert. "Foreign Bodies: Travel, Empire and the Early Royal Society of London. Part 1 Englishmen on Tour," *Canadian Journal of History.* 33/3 (1998), pp. 357-385.
- Ivins, William. Prints and Visual Communication. Cambridge, MA: Harvard University Press, 1953.
- Jackson, Benjamin. Guide to the Literature of Botany. London: Hafner Publishing Company, 1964.

- Jacques, David and Arend Van der Hort, The Gardens of William and Mary. (London: C. Helm, 1988).
- Jardine, Nick, J. A. Secord and E. C. Spary (eds.). *Cultures of Natural History*. Cambridge: Cambridge University Press, 1996.
- Jarrett, David. English Landscape Garden. London: Academy Editions, 1978.
- Jeffers, R. H.. The Friends of John Gerard (1545-1612) Surgeon and Botanist. Connecticut, US: Herb Grower Press, 1967.
- Johns, Adrian. "Science and the Book in Modern Cultural Historiography," Studies in the History and Philosophy of Science. 29/2 (1998), pp. 167-194.
- Johns, Adrian. The Nature of the Book. Chicago: University of Chicago Press, 1998.
- Johnson, A.F. A Catalogue of Engraved And Etched English Title-Pages Down to the Death of William Faithorne. London: Bibliographical Society at the OUP, 1934.
- Johnson, Hugh. Principles of Gardening. New York: Simon and Schuster, 1979.
- Johnson, Matthew. Housing Culture. Washington: Smithsonian Institution Press, 1993.
- Jones, Rex. Geneaology of a Classic: The English Physitian of Nicholas Culpeper. San Fransisco: University of California, 1984.
- Kaden, Vera. The Illustration of Plants and Animals. London: Victoria and Albert Museum, 1982.
- Kelly, R. Donald. The Historical Imagination in Early Modern Britain. Cambridge: Cambridge University Press, 1997.
- Kemp, Martin. "Taking it on Trust: Form and Meaning in Naturalistic Representation," Archives of Natural History. 17 (1990), pp. 127-188.
- Keynes, Geoffrey. John Evelyn: A Study in Bibliophily with a Bibliography of his Writings. Oxford: Clarendon Press, 1968.
- Knowles, Clive. Landscape History. London: The Historical Association.
- Knowlson, James. Universal Language Schemes in England and France. Toronto: University of Toronto Press, 1975.
- Kusukawa, Sachiko. "Leonhart Fuchs on the Importance of Pictures," Journal of the History of Ideas. 58/3 (1997), pp. 403-427.
- Lasky, Joseph. Proofreading and Copy-Preparation. New York: Mentor Press, 1949.
- Latour, Bruno. Science in Action. Cambridge, MA: Harvard University Press, 1987.
- Lees-Milne, Alvilde. Englishwoman's Garden. London: Chatto & Windus, 1980.
- Lefebvre, Henri. Production of Space. Cambridge, MA: Blackwell, 1991.
- Lehner, Ernst. Folklore and Symbolism of Flowers, Plants, and Trees. New York: Tudor Pub. Co., 1960.
- Leighton, Ann. Early American Gardens. Amherst: University of Massachusetts Press, 1986.

- Leith-Ross, Prudence. The John Tradescants: Gardeners to the Rose and Lily Queen. London: Owen, 1984.
- Leslie, Michael. "An English Landscape Garden before 'The English Landscape Garden'," Journal of Garden History. 13/1 (1993), pp. 3-15.
- Leslie, Michael and Timothy Raylor (eds.). Culture and Cultivation in Early Modern England. London: Leicester University Press, 1992.
- Lewis, C. S.. The Allegory of Love. Oxford: Clarendon Press, 1936.
- Locke, John. Of Civil Government. London: J.M. Dent & Sons Ltd, 1925.
- Looper, Matthew. "Political Messages in the Medici Palace Garden," Journal of Garden History. 12/4 (1992), pp. 255 -268.
- Ludgate, V.R. Gardens of the Colonists. Washington, DC: US Department of the Interior, 1941.
- MacDougall, Elisabeth. The French Formal Garden. Washington: Dumbarton Oaks Trustees for Harvard University, 1974.
- MacGregor, Arthur. Tradescant Rarities. Oxford: Clarendon Press, 1983.
- MacGregor, Arthur. The Late King's Goods: Collections, Possessions, and Patronage of Charles I in the Light of the Commonwealth Sale Inventories. Oxford: Oxford University Press, 1989.
- MacGregor, William B. "The Authority of Prints: an Early Modern Perspective," Art History. 22/3 (1999), pp. 389 -420.
- Mader, Gunter and Neubert-Mader, Laila. The English Formal Garden. London: Aurum Press, 1992.
- Malins, Edward. English Landscaping and Literature: 1660-1840. Toronto: Oxford University Press, 1966.
- Mann, William A. Landscape Architecture. Toronto: John Wiley and Sons Ltd, 1993.
- Markham, Gervase. The English Housewife. Montreal: McGill-Queen's University Press, 1994.
- Mason, John E. Gentlefolk in the Making. New York: Octagon Books, 1971.
- Massingham, Betty. A Century of Gardeners. London: Faber & Faber, 1982.
- McDayter, Mark. "Poetic Gardens And Political Myths: The Renewal Of St. James's Park In The Restoration," *Journal of Garden History*. 15/3 (1995), pp. 135-148.
- McKendrick, Neil, John Brewer and J. H. Plumb. The Birth of a Consumer Society. London: Europe Publications Limited, 1982.
- McKenzie, Donald Francis. The Cambridge University Press, 1696-1712. Cambridge: Cambridge University Press, 1966.
- McKerrow, R. B. An Introduction to Bibliography for Literary Students. Oxford: Clarendon Press, 1927.
- McKerrow, R. B. and F.S. Ferrow. Title-Page Borders Used in England & Scotland 1485-1640. London: CUP, 1932.
- McLuhan, Marshall. Gutenberg Galaxy: the Making of Typographic Man. Toronto: University of Toronto Press, 1962.

- McLuh:an, Marshall. Understanding Media: the Extensions of Man. New York: McGraw-Hill, 19664.
- McNaughton, Harry. Proofreading and Copyediting. New York: Hastings House Publishers, 19773.
- Michel, Emile. Great Masters of Landscape Painting. Londo: W. Heinemann, 1910.
- Miller, David and Peter Hanns Reill (eds.). Visions of Empire. Cambridge: Cambridge Unitversity Press, 1996.
- Morris, Christopher. Illustrated Journeys of Celia Fiennes, 1685-c.1712. London: Macdonald, 1982.
- Morris, Paul. A Walk in the Garden: Biblical, Iconographical and Literary Images of Eden. England: Shetffield Academic Press, 1992.
- Morton, A. G. History of Botanical Science. Toronto: Academic Press, 1981.
- Mosser, Monique. The History of Garden Design. London: Thames & Hudson, 1991.
- Mowl, Timothy. "New Science, Old Order: the Gardens of the Great Rebellion," Journal of Garcelen History. 13/1 (1993), pp. 16-35.
- Mukerji, Chandra. "Reading and Writing with Nature: Social Claims and the French Formal Garcelen," Theory and Society. 19 (1990), pp. 651-679.
- Mumby, Frank. Publishing and Bookselling. London: Jonathan Cape, 1949.
- Munby, Julian. "Signor Verrio and Monsieur Beaumont, Gardeners to King James II," Journal of Brzitish Archaeological Association. 14/9 (1996), pp. 55 -71.
- Neal, Bill. Gardener's Latin. New York: Algonquin Books of Chapel Hill, 1992.
- Newby, Howard. Country Life. London: Weidenfeld and Nicolson, 1987.
- Nourse, Timothy. Campania Foelix. New York: Garland Publishing, Inc., 1982.
- Noyes, Gertrude. Bibliography of Courtesy and Conduct Books in 17th c England. New Haven: Tuttlee, Morehouse & Taylor Company, 1937.
- Ogden, Henry and Margaret Ogden. English Taste in Landscape in the Seventeenth Century. Ann Arboer: University of Michigan Press, 1955.
- Oresko, Robert. "London's Pride: The History of the Capital's Gardens Exhibition held at the Museum of London 1 May to 12 August 1990," *London Journal*. 15/2 (1990), pp. 155 -159.
- Osborn, T.G. B., "The Oxford Botanic Garden," Endeavour. 10 (1951), pp. 70-77.
- Pattacini, Laurence. "André Mollet, Royal Gardener in St. James's Park, London," Journal of Gardenn History. 26 (1998), pp. 3-18.
- Pennell, Sara. "Consumption and Consumerism in Early Modern England," The Historical Journael. 42/2 (1999), pp. 549 -564.
- Picard, Lizza. Restoration London. New York: St Martin's Press, 1997.
- Plowden, C. Chicheley. A Manual of Plant Names. London: George Allen and Unwin Ltd, 1968.

- Pollan, Michael. Second Nature: a Gardener's Education. New York: Delta Trade Paperbacks, 1991.
- Porter, Roy. Consumption and the World of Goods. New York: Routledge, 1993.
- Potter, Lois. Secret Rites and Secret Writing: Royalist Literature, 1641-1660. Cambridge: Cambridge University Press, 1989.
- Poynter, F.N.L. "Nicholas Culpeper and his Books," Journal of the History of Medicine. 17 (1962), pp. 152 -167.
- Poynter, F.N.L. A Bibliography of Gervase Markham. Oxford: Oxford Bibliographical Society, 1962.
- Pratt, Vernon. "Foucault and the History of Classification Theory," Studies in the History and Philosophy of Science. 8/2 (1977), pp. 163-171.
- Praz, Mario. Conversation Pieces; a Survey of the Informal Group Portrait in Europe and America.. University Park: Pennsylvania State University Press, 1971.
- Prest, John. Garden of Eden: the Botanic Garden and the Re-Creation of Paradise. London: Yale University Press, 1981.
- Raven, Charles Earle. English Naturalists from Neckam to Ray: a Study of the Making of the Modern World. Cambridge: Cambridge University Press, 1947.
- Reeds, Karen. Botany in Medieval and Renaissance Universities. Garland: New York, 1991.
- Reiner, Imre. Woodcut/Wood Engraving. Switzerland: Zollikofer and Company, 1947.
- Riddle, John. "John Parkinson's Long Acre Garden 1600-1650," Journal of Garden History. 6/2 (1986), pp. 112-124.
- Rix, Martyn. The Art of the Botanist. Guildford: Lutterworth Press, 1981.
- Robinson, Jenny. "New Light on Sir Thomas Hanmer," Garden History. 16/1 (1988), pp. 1-7.
- Rogers, Alan. Landscapes and Documents. London: Bedford Square Press, 1974.
- Rohde, Eleanour Sinclair. The Garden Book of Sir Thomas Hanmer. London: G. Howe, 1933.
- Rohde, Eleanour Sinclair. The Story of the Garden. Boston: Hale, Cushman & Flint, 1936.
- Rose, Mark. Authors and Owners: The Invention of Copyright. Cambridge, MA: Harvard University Press, 1993.
- Rosenheim, James. Emergence of A Ruling Order. London: Longman, 1997.
- Rosenthal, Michael. British Landscape Painting. Ithaca, New York: Cornell University Press, 1982.
- Ross, Stephanie. What Gardens Mean. Chicago: University of Chicago Press, 1998.
- Saunders, Gill. Picturing Plants. United Kingdom: Zwemmer, 1995.
- Savage, Spencer. "The Hortus floridus of Crispijn vande Pas the Younger," The Library Series IV. 4 (1924), pp. 181-206.
- Schama, Simon. Landscape and Memory. Toronto: Random House of Canada, 1995.

- Scott-James, Anne. The Pleasure Garden: an Illustrated History of British Gardening. London: John Murrary, 1977.
- Seed, Patricia. Ceremonies of Possession in Europe's Conquest of the New World. Cambridge: Cambridge University Press, 1995.
- Shapin, Steven. A Social History of Truth. Chicago: University of Chicago Press, 1994.
- Sharpe, Kevin. Refiguring Revolutions: Aesthetics and Politics from the English Revolution to the Romantic Revolution. Berkeley: University of California Press, 1998.
- Simpson, Percy. Proof-Reading in the Sixteenth, Seventeenth and Eighteenth Centuries. London: Oxford University Press, 1935.
- Siraisi, Nancy. Mediaeval and Early Renaissance Medicine. Chicago: University of Chicago Press, 1990.
- Skinner, Charles. Myths and Legends of Flowers, Trees, Fruits, and Plants. London: J. B. Lippincott Company, 1911.
- Smith, David. A History of the Modern British Isles, 1603-1714: the Double Crown. Oxford: Blackwell Publishers, 1998.
- Smith, G. C. Moore (ed.). The Letters of Dorothy Osborne to William Temple. Oxford: The Clarendon Press, 1928.
- Smith, Nigel. Literature and Revolution in England 1640-1660. New Haven: Yale University Press, 1994.
- Spufford, Margaret. Small Books and Pleasant Histories. London: Metheun & Co. Ltd, 1981.
- Spurr, John. The Restoration Church of England. New Haven: Yale University Press, 1991.
- Stafford, Barbara. Artful Science: Enlightenment, Entertainment, and the Eclipse of Visual Education. Cambridge, MA: MIT Press, 1994.
- Stearn, William. "The Garden History Society's Tenth Anniversary and Some Historians of Garden History," Garden History. 5 (1977), pp. 42-52.
- Stearn, William. Botanical Latin. London: Thomas Nelson and Sons Ltd, 1966.
- Steegman, John. The Artist and the Country House. New York: Charles Scribners Sons, 1949.
- Stone, Lawrence. Crisis of the Aristocracy. Oxford: Clarendon Press, 1965.
- Strang, David. The Printing of Etchings and Engravings. London: Ernest Benn Limited, 1930.
- Strong, Roy. Renaissance Garden in England. London: Thames and Hudson, 1979.
- Stuart, David. Plants from the Past: Old Flowers for New Gardens. Toronto: Penguin Books, 1989.
- Taboroff, June. "Wife, unto thy garden': the First Gardening Books for Women," Garden History. 11/1 (1983), pp. 1-5.
- Tanselle, G. Thomas. "A Rationale of Collecting," Studies in Bibliography. 51 (1998), pp. 1-25.
- Thacker, Christopher. The History of Gardens. Berkeley: University of California Press, 1979.
- Thick, Malcolm. "Garden Seeds in England Before the Late Eighteenth Century: I. Seed Growing," Agricultural History Review. 38/1 (1990), pp. 58 -71.

- Thick, Malcolm. "Garden seeds in England before the late eighteenth century: II. The Trade in Seeds," Agricultural History Review. 38/11 (1990), pp. 105-116.
- Thick, Malcolm. The Neat House Gardens: Early Market Gardening Around London. Totnes: Prospect Books, 1998.
- Thirsk, Joan. Agrarian History of England and Wales. Cambridge: Cambridge University Press, 1985.
- Thomas, Graham Stuart. Great Gardens of Britain. Great Britain: Mayflower Books, 1979.
- Thomas, Keith. Man and the Natural World. Toronto: Penguin Books, 1983.
- Thorndike, Lynn. A History of Magic and Experimental Science. New York: Columbia University Press, 1958.
- Thulesius, Olav. Nicholas Culpeper. New York: St Martin's Press, 1992.
- Trevelyan, G. M. English Social History. London: The Reprint Society, 1948.
- Trevor-Roper, H. R. Catholics, Anglicans, and Puritans: Seventeenth Century Essays. Chicago: University of Chicago Press, 1988.
- Turnbull, G.H. Hartlib, Dury and Comenius: Gleanings from Hartlib's Papers. London: University Press of Liverpool, 1947.
- Turner, James. "Ralph Austen, an Oxford horticulturist of the 17th century," Garden History. 6/2 (1978), pp. 39-45.
- Turner, James. Politics of Landscape. Oxford: Basil Blackwell, 1979.
- Underdown, David. Revel, Riot, and Rebellion. Oxford: Clarendon Press, 1985.
- Van Den Broek, Gerard. Baleful Weeds and Precious-Juiced Flower. Leiden: Rijksuniversiteit te Leiden, 1986.
- van Deusen, Nancy. Design and Production in Medieaval and Early Modern Europe. Ottawa: Institute of Mediaeval Music, 1998.
- Van Zuylen, Gabrielle. Paradise on Earth: The Gardens of Western Europe (Discoveries). New York: Harry N Abrams, 1995.
- Verey, Rosemary. Englishwoman's Garden. London: Chatto & Windus, 1980.
- Wall, Wendy. "Renaissance National Husbandry: Gervase Markham and the Publication of England," The Sixteenth Century Journal. 27/3 (1996), pp. 767-785.
- Watt, Tessa. Cheap Print and Popular Piety, 1550-1640. Cambridge: Cambridge University Press, 1991.
- Webber, Ronald. The Early Horticulturists. New York: Augustus M. Kelley Publishers, 1968.
- Weber, Max. The Protestant Ethic and the Spirit of Capitalism. London: Allen & Unwin, 1930.
- Webster, Charles. The Great Instauration. New York: Holmes & Meier Publishers, 1975.
- Welcher, Jeanne. John Evelyn. New York: Twayne Publishers, 1970.

Wethered, H. N. A Short History of Gardening. London: Metheun & Co. Ltd, 1933.

Wheeler, David. Penguin Book of Garden Writing. Toronto: Penguin Books, 1996.

Willis, Peter. Furor Hortensis. Edinburgh: Elysium Press, 1974.

- Willy, Margaret. Three Women Diarists: Celia Fiennes, Dorothy Wordsworth, Katherine Mansfield. London: Longmans, Green, 1964.
- Wilmot, John. John Wilmot, Earl of Rochester: The Complete Works. Toronto: Penguin Books, 1994.
- Wilson, C. Anne (ed.). The Country House Kitchen Garden. London: Sutton Pub., 1998.
- Withycombe, Elizabeth. The New Loggan Guide to Oxford Colleges. B. Blackwell: Oxford, 1932.
- Woodberry, George. A History of Wood-Engraving. New York: Harper & Bros, 1883.
- Woodell, S.R.J. English Landscape. Oxford: Oxford University Press, 1985.
- Woodring, Carl. Nature into Art. Cambridge, MA: Harvard University Press, 1989.
- Woolgar, Steve. Representations in Scientific Practice. Cambridge, MA: MIT Press, 1990.
- Wright, Richardson. The Story of Gardening. New York: Dodd, Mead & Company, 1934.
- Wright, Walter. A History of Garden Art. New York: Hacker Art Books, 1966.
- Wroth, Warwick. London Pleasure Gardens of the Eighteenth Century. New York: Macmillan and Co., Ltd, 1896.
- Zwicker, Stephen. Lines of Authority: Politics and English Literary Culture. London: Cornell University Press, 1993.

Illustrations

Illustrations

Plate One

Still-room as illustrated in John Evelyn, The French gardiner (1658). Source: Henrey, British Botanical and Horticultural Literature, p. 188.

Plate Two

Location of the still-room as illustrated by William Lawson, A New Orchard and Garden (1618).

Plate Three

The Oxford Botanic Gardens. Engraved by David Logaan. Source: Oxonia Illustrata (1675).

Plate Four

Map of London. Source: London's Pride, p. 9.

Plate Five

Badminton. Engraved by Johannes Kip. Source: Britannia Illustrata.

Plate Six

St. James's Park. Engraved by Johannes Kip. Source: Britannia Illustrata.

Plate Seven

Canal at Hampton Court x. 1665-67. Source: Strong, Royal Gardens, p. 15.

Plate Eight

Painting of Hampton Court by Leonard Knyff (1699). Source: Fleming and Gore, The English Garden, plate twenty-seven.

Plate Nine

Handwritten list of treatises bound with Andrew Mollet's Garden of Pleasure (1670).

Plate Ten

Woodcut image from Brunfels' Herbarum Vivae Eicones (1530). Source: Rix, The Art of the Botanist, p. 30.

Plate Eleven

Title-page to William Turner's Herball (1538). Source: Henrey, British Botanical and Horticultural Literature, p. 23.

Plate Twelve

Title-Page to John Gerard from Gerard's *The herbal*, 1597. Designed and engraved by William Rogers. Source: Blunt and Raphael, *The Illustrated Herbal*, p. 151.

Plate Thirteen

Title-page to Parkinson's Paradisi in sole paradises terrestris (1629). Engraved by Thomas Cross. Source: Henrey, British Botanical and Horticultural Literature, p. 162.

Plate Fourteen

Title-page to Parkinson's Theatrum Botanicum (1640). Engraved by William Marshall. Source: Henrey, British Botanical and Horticultural Literature, p. 81.

Plate Fifteen

Frontispiece portrait of Nicholas Culpeper. Culpeper, The English Physitian (1652). Engraved by Thomas Cross. Source: Henrey, British Botanical and Horticultural Literature, p. 86.

Plate Sixteen

Title-page for John Rea, Flora, Ceres & Pomona (London: R. Marriott, 1665). Engraved by David Loggan. Source: Johnson, A Catalogue of Engraved and Etched English Title-Pages.

Plate Seventeen

Title-page for Flora Flowers Fruicts Beastes Birds and Flies (London: printed by Peter Stent, n.d.). Engraved by John Payne. Source: Johnson, A Catalogue of Engraved and Etched English Title-Pages.

Plate Eighteen

Trinity College gardens. Engraved by David Logan. Source: Oxonia Illustrata.

Plate Nineteen

Comparison of book sizes. Source: Olav Thulesius, Nicholas Culpeper (New York: St. Martin's Press, 1992).

Plate Twenty

Title-page to James Howell, *Dendrologia* (London: Printed by T.B. for H. Mosley, 1640). Engraved by Matthaeus Merian.

Plate Twenty-One

Title-page to James Howell, Dendrologia (Oxford: printed by H. Hall, 1644). Engraved by Robert Vaughan.

Plate Twenty-Two

Cornelius Johnson, Arthur Capel, 1st Baron Capel, and his Family. National Portrait Gallery, London (4759). Source: John Hayes, The Portrait in British Art (London: National Portrait Gallery, 1991). Provenance: Painted for Arthur, 1st Baron Capel; by descent to Algernon, 8th Earl of Essex, Cassiobury Park sale, Knight, Frank and Rutley, 12-23 June 1922, 4th day, lot724, bt. Law; Sir Westrow Hulse; anon. Sale, Sotheby's, 7 June 1950, lot 131, bt. Gronau; Seymour, 7th Earl of Wilton; anon. Sale, Christie's, 13 March 1970, lot 99, bt. Leggatt on behalf of the National Portrait Gallery.

Plate Twenty-Three

Engraving from *A Garden of Flowers* (1615). Engraved by Crispin de Passe. Source: Martyn Rix, *The Art of the Botanist* (Guildford: Lutterworth Press, 1981), p. 54.

Plate Twenty-Four

Title-page to Rich: Tomlinson (trans.), Renodaeus: His Dispensatory (London: Printed by J. Streater and J. Cottrell, 1657). Engraved by Thomas Cross.

Plate Twenty-Five

Portrait of John Gerard from Gerard's *The herbal*, 1597. Engraved by William Rogers. Source: Blunt and Raphael, *The Illustrated Herbal*, p. 152.

Plate Twenty-Six

Portrait of John Parkinson from Paradisi in sole paradises terrestris (1629). Engraved by Switzer. Source: Henrey, British Botanical and Horticultural Literature, p. 163.

Plate Twenty-Seven

Title-page to The Herball or Generall Historie of Plantes (London: printed by Adam Islip, Joice Norton and Richard Witakers, 1633). Engraved by John Payne. Source: Henrey, British Botanical and Horticultural Literature, p. 52.

Plate Twenty-Eight

Gardening Activity. Engraved by Jan Drapentier. Source: J.T. Cliffe, The World of the Country House in the Seventeenth-century England, p. 56.



Plate 1:

Still-room as illustrated in John Evelyn, The French gardiner (1658).



Plate 2:

Location of the still-rooms in a garden (N) as illustrated by William Lawson. A New Orchard and Garden (1618).



Plate 3:

The Oxford Botanic Garden. Engraved by David Loggan.



STATERN AVENUE

Alexander Pope's Grotto

Roco Carde

ر*

Bushey P

The Greening of London -

Historic Gardens and Open Spaces



Darshalten Furk

WAY WAY

Ĵ,

Nonsuch Parp

¹⁵¹ **1**010

Addington Park ;











Plate 7:

Canal at Hampton Court, c. 1665-7.



Plate 8:

Hampton Court (1699). Painting by Leonard Knyff.

P The contens of this bol 1 Project Gordon of Pleasure vie _ 1670 2 Affinitates museum Princip: Maaislaty um Francisco (hiscus Elrance Suce a R:P: Stephano Doct. Par. 1897 3 Project d'an porelle thethode pour drefsor le Cala loque de Actiotheque _____ Paris 1898 * Paule Bandon Syntagme It and er: Frageched Rh. ozob 5 fro Bright Hiligin In light Thence Tabulac II 6 Enjenchion of Hon VIII to The Sige thin 188 and og Arti of 31 Aften. VIII concerning Joget Jeneaky "Tomaka in Common remound april 1862. H.B. i Tenanty in Common " & Injunction quer to the largy by Edmand Bloffe. Tosin In Culerice Insticance Rolatic in Tab. 8xcm. 16911 Servita 10 Glordon Jables Matyors Genethliacon te Lond. 11 8 who use Ininaction wohided from 153 Ĺ. h. 8 must have been some of term that volume by Mr Puch and given to to the to this quee, in whese contatopue of the 1955. it is pesculot as 1915, no. 2. 1 fort: 8.0ct 1561 H

Plate 9:

Handwritten list of treatises bound with Andrew Mollet's Garden of Pleasure (1670).



Plate 10:

Woodcut image from Brunfels' Herbarum Vivae Eicones (1530).



Plate 11:

Title-page to William Turner's Herball (1538).



Plate 12:

Title-Page from Gerard's *The herball*, 1597. Designed and engraved by William Rogers.



Plate 13:

Title-Page from Parkinson's *Paradisi in Sole* (1629). Engraved by Thomas Cross.



Plate 14:

Title-page to Parkinson's *Theatrum Botanicum* (1640). Engraved by William Marshall.



Plate 15:

Frontispiece portrait of Nicholas Culpeper. The English Physitian (1652).


Plate 16:

Title-page for John Rea's *Flora, Ceres & Pomona* (1665). Engraved by David Loggan.



Plate 17:

Title-page to Flora Flowers Fruicts Beastes Birds and Flies (1660-1665?).



Plate 18:

Trinity College. Engraved by David Loggan, Oxonia Illustrata



Plate 19:

Comparison of book sizes: Gerard's Herball (1633), Parkinson's Theatrum Botanicum (1640), and Culpeper's English Physitian (1652).



Plate 20:

Title-Page from Howell's *Dendrologia* (1640). Engraved by Matthaeus Merian.



Plate 21:

Title-Page from Howell's *Dendrologia* (1644). Engraved by Robert Vaughan.



Plate 22:

Arthur Capel, 1st Baron Capel, and his Family (1665). Painted by Cornelius Johnson.



Plate 23:

Engraving from *A Garden of Flowers* (1615). Engraved by Crispin van de Passe.



Plate 24:

Title-Page from Tomlinson's translation of Renodaeus: His Dispensatory (1657). Engraved by Thomas Cross.



Plate 25:

Portrait of Gerard from *The herbal* (1597). Engraved by William Rogers.



Plate 26:

Portrait of John Parkinson from *Pardisi in Sole* (1629). Engraved by Switzer.



Plate 27:

Title-page to *The Herball of Generall Historie of Plantes* (1633). Engraved by John Payne.



Plate 28:

Gardening Activity. Engraved by Jan Drapentier.