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UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

"SEVERALL COLOURED RIBBONS": MARGARET CAVENDISH'S THEORY OF FEMALE CREATIVITY

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Doctor of Philosophy

By

WHITLEY COOKE
Norman, Oklahoma
2000

UMI Number: 9962973



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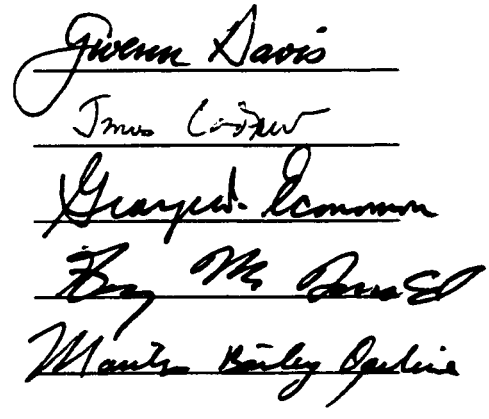
"SEVERALL COLOURED RIBBONS":
MARGARET CAVENDISH'S
THEORY OF FEMALE CREATIVITY

A Dissertation APPROVED FOR THE
DEPARTMENT OF ENGLISH

BY



Acknowledgments

I would like to thank my dissertation advisor Gwenn Davis for her support, encouragement, and scholarship on this project. Without her guidance through every rough spot and major hurdle during my years at Oklahoma, I would not have accomplished this. To my committee members, George Economou, Henry McDonald, Hunter Cadzow and Mariyln Ogilvie for all of their support and patience during the last year. I would like to thank Susan Green Donahue for introducing me to Margaret Cavendish. I would like to thank the Huntington Museum and Library and the British Library for allowing me access to their collections. To Bob and Brenda in California for giving me a place to stay and feeding me every spring break and on those surprise visits during the summer. To my dissertation support group, Susan Kendrick, Susan Cosby, and Amie Doughty who provided support, encouragement, and deadlines. Especially to Susan Kendrick for being my travel companion to London and pulling me away from the books to explore the sights of England, and for all of her work in helping me accomplish this task long distance, without Susan and email this task would have never been accomplished on time. To Natalie and Hilburn Cooke, my parents, for their support and encouragement. Last to my husband Ben, for his love, support, encouragement, patience, and letting me take over his desk.

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Margaret Cavendish, Duchess of Newcastle
1623-1673
Chronology

1623 Born at St. John's Abbey, the youngest of eight children to Thomas Lucas and Elizabeth Leighton, the largest landholding family of Colchester, Essex.

1625 Death of Thomas Lucas, Earl of Colchester.
Accession of Charles I.

1626 Death of Bacon.

1631 Descartes, *Discourse of Method.*

1642 Outbreak of Civil War, family home is plundered and mother is attacked by the anti-royalist mob, family moves to Oxford.

1643 Margaret becomes Maid of Honor to Queen Henrietta Maria.
William Cavendish's first wife, Elizabeth Basset, widow of Henry Howard dies after bearing William ten children.

1644 Queen Henrietta Maria escapes to Paris with her Court, Margaret travel with her.
July–William Cavendish defeated at Marston Moor and goes to Paris.
Milton's *Areopagitica.*

1645 Marries William Cavendish, Marquis of Newcastle (b. 1593)
Foundation of Philosophical Society.

1646 End of First Civil War, Margaret and William move to Rotterdam for six months, then on to Antwerp.

1647 Margaret's sister Mary Lucas Killigrew and mother Elizabeth Leighton Lucas die of natural causes; brother Sir Charles Lucas executed (with Sir George Lisle) and the family tomb is broken open.

1648 May 24/Sir Theodore Mayerne diagnose Margaret with Hypochondry.

1651 November/returns to England with Brother-in-Law Charles to petition for Williams' property.
December/Margaret makes her claim before the Committee for Compounding, hoping to claim for herself some subsistence out of her husbands sequestrated estate. She is rejected on the grounds that she was not his wife when he was made a delinquent.
Composes *Poems and Fancies* while lodging in Convent Garden.
Hobbes' *Leviathan*.

1653 February/Council of State issues a pass for Margaret, her four men and four maids to return to Flanders.
March/Returns to Antwerp to re-join her husband where he had been living in Rubens' mansion.

Poems and Fancies Published March.
Philosophical Fancies published May.

1654 February/Charles Cavendish dies and is buried in Bolsover.

1655 *The Worlds Olio* published.
The Philosophical and Physical Opinions published.
Pierre Gassendi dies.

1656 *Natures Pictures Drawn by Fancies Pencil to the Life* published–this contains a section called "A True Relation of my Birth, Breeding and Life."
John Evelyn published translation of *Lucretius*.

1657 William publishes his *Methode et Invention Nouvelle de Dresser Les Chavaux* at a cost of £1,300 with engravings.
DuVerger's *Reflections on The Worlds Olio....*

1660 Charles II to the throne (1661 crowned).
William returns to England and Margaret remains in Antwerp as surety for his vast debts.
William and Margaret retire to Welbeck Abbey in Nottinghamshire.

1661 Boyle's *The Sceptical Chymist.*

1662 *Orations of Divers Sorts, Accommodated to Divers Places* published.
Plays published.
Royal Society is formed as a reorganization of the Philosophical Society.

1663 *The Philosophical and Physical* Opinions revised 2nd edition published.
Orations of Divers Sorts, Accommodated to Divers Places. 2nd edition.

1664 *Poems and Fancies. The Second Impression, much Altered and Corrected* published.
Philosophical Letters published.
CCXI Sociable Letters published.

1665 William made Duke.
The Duchess of York accepts an invitation to Welbeck.
Hooke published *Micrographia.*

1666 *Observations upon Experimental Philosophy to which is added, the Description of a New Blazing World* published.
Boyle's *The Origin of Forms and Qualities.*

1667 William and Margaret visit London
April 11/Pepys mentions in diary that he hopes to see Margaret.
April 18/John Evelyn visit the Cavendishs at their house in Clarkenwell and records the visit in his diary.
April 22/A newsletter describes Margaret's visit to court.
April24/Margaret visits the Duchess of York (Anne Hyde)
April 26/Pepys sees Margaret in a London Street.
April 27/Evelyn record another visit. His wife, Mary, writes to Dr. Bohun about Margaret.
May1,10/Pepys mentions trying to see Margaret in the park.
May30/Margaret visits the Royal Society.

The Life of the thrice Noble, High and Puissant Prince William Cavendish, Duke, Marquess, and Earl of Newcastle published.

William's *A new Method and Extraordinary Invention to Dress Horses*

published.
Sprat's *History of the Royal Society.*

1668 *Plays, Never Before Printed* published.

Ground of Natural Philosophy published.

Observations upon Experimental Philosophy to which is added, the Description of a New Blazing World 2nd edition published.

Poems, or several fancies in Verse: with the Animal Parliament, in Prose. 3rd edition published.

1669 Digby's *Of Bodies, and of Man's Soule.*

1670 October/Andrew Clayton, John Booth and Francis Liddell conspire to divert William's attention away from Margaret.

1671 *Orations of Divers Sorts, Accommodated to Divers Places.* Re-issue of 2nd edition.

Natures Pictures. 2nd edition.
The Worlds Olio. 2nd edition.

July/Clayton's plot to discredit Margaret is revealed.

1673 December 15/Margaret dies.

1674 January 17/Margaret buried in Westminster Abbey.

1676 William dies and is buried next to Margaret.

LIST OF WORKS

This list only includes first editions and not subsequent re-releases.

1653 *Poem and Fancies (P&F)*
Philosophicall Fancies (PFan)

1655 *The Worlds Olio (WO)*
Philosophical and Physical Opinions (PPO)

1656 *Natures Picture Drawn by Fancies Pencil to the Life (NP)*
Included in this work is
"A True Relation of my Birth, Breeding, and Life." *(TR)*

1662 *Orations of Divers Sorts, Accommodated to Divers Places*
Plays

1664 *Philosophical Letters (PL)*
CCXI Sociable Letters (SL)

1666 *Observations upon Experimental Philosophy to which is added, the Description of a New Blazing World. (OBS)* and *(BW)*

1667 *The Life of the thrice Noble, High and Puissant Prince William Cavnedishe, Duke, Marquess, and Earl of Newcastle.*

1668 *Grounds of Natural Philosophy*
Plays, Never before Printed

Introduction

In the middle of the seventeenth century one voice spoke out against the loss of the feminine creative force in the cosmos, Nature. The seventeenth century has been called an age of revolutions, not only in politics, but also in the scientific community. Experimental science began to merge with philosophical science, and Francis Bacon's *Novum Organum* established a method of observing nature that became the basis of modern scientific method. The new mechanical methods which used instruments were considered objective, establishing findings that were not tainted by personal opinions. By asserting their authority over nature, and turning "her" from an active, creative organism to a passive object of experimentation, scientists gave themselves the control and power over all parts of society—women included.

Once this male view of the exploration of nature was established, most sounded the praises of mechanical science, except one unique voice, that of Margaret Lucas Cavendish, Duchess of Newcastle. As a woman, she dared to enter the exclusive realm of the male and not only write about Natural Philosophy, but publish her observations of nature. Cavendish wrote on other subjects as well, and over a period of fifteen years published thirteen volumes of verses, plays, natural philosophy, a biography of her husband, and a piece of science fiction.

Cavendish, though, does something extraordinary with all of her work, throughout everything she published one can find a common thread, a thread that

can be woven into a theory of creativity. She believes in connections, infinite parts connected to a whole, infinite thoughts connected to the imagination, and an infinite possibility of worlds. These connections all occur in the interior of nature or the interior of the mind. In her natural philosophy she establishes a theory of the creative force of nature that involves matter and motion creating infinite varieties from a prime matter. In her fictions she establishes a theory of creativity that involves the brain and the mind creating infinite variety from thoughts. The connection of the two theories depends on understanding Cavendish's system of natural philosophy, which holds that there is no absolute knowledge of the whole of nature but only partial knowledge of its parts and figures, that all things have self-knowledge, and that the true method of investigating nature is through sense and reason.

In this system everyone and everything begins on a equal footing, there is no hierarchy in nature until the motions of matter begin to build different figures. These figures, though, are just part of a whole and depend on all matter to exist. More important, they depend on a constant movement of that matter. In nature motion allows different figures to form, and in the brain, the constant motion of thoughts is necessary to form wit and fancy, i.e., imagination. Cavendish wishes to show that all humans are connected and equal, that there cannot be absolute knowledge, only the knowledge built by the motions of thought. These motions are interior and can be presented to the world as opinions or they can be used privately for the pure enjoyment of original creation. Cavendish accomplishes

both in her natural philosophy and her fictions.

Writing was a singular pleasure for Cavendish. She tells us that when she was young she wrote volumes, and during her courtship with Newcastle they exchanged many letters and verses. In the first years of her marriage she compiled thoughts and ideas which would later become *The Worlds Olio*,1655. During her trip to England to petition for her husband's property, she would often stay up late writing. This allowed her to avoid dwelling on her situation or worrying about Newcastle who was still on the Continent. When they lived in Antwerp, Newcastle would encourage her to get out in the fresh air for exercise, but she would remain in her room writing, her only exercise pacing as she thought or dictated her thoughts to her secretary. Her writing reflects this restlessness, this need to get her thoughts out in public. As Douglas Grant, her primary biographer, points out, "she was always in such hot pursuit of the idea that to pause was unbearable" (112). For Cavendish, to write was not only to be alive, but was part of her life, part of being a woman.

Margaret Lucas Cavendish, born in 1623 at St. John's Abbey, was the youngest of the eight children of Thomas Lucas and Elizabeth Leighton of Colchester, Essex.[1] In 1597 Thomas had fought a duel and been forced to leave

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1

Douglas Grant. Margaret the First, 1957. Further biographies of Margaret Cavendish include: Perry, Henry Ten Eyck. *The First Duchess of Newcastle and Her Husband as Figures in Literary History*, 1918; Goulding, Richard. *Margaret (Lucas) Duchess of Newcastle*, 1925; Mendelson, Sara Heller. *The Mental World of Stuart Women*, 1987; Jones, Kathleen. *A Glorious Fame: The Life of Margaret Cavendish, Duchess of Newcastle, 1623-1673*, 1988.

the country, leaving Elizabeth behind pregnant and unwed. His petitions to reenter the country were blocked by Lord Cobham, a relative of the man he killed, and it was not until 1604 when Cobham was arrested for complicity in plot to place Arabella Stuart on the throne was Thomas allowed back into the country. Elizabeth had given birth to a son, Thomas, but without the benefit of marriage, the first son was considered illegitimate and could not inherit title or lands. When Thomas returned to England he married Elizabeth and proceed to have seven more children, two boys and five girls (30-31).

Thomas Lucas died in 1625 when Margaret was just two years old, so she was raised primarily by her mother, a formidable women who on the death of her husband used the engagement of her second daughter, Anne, to retain control of the estates. Until her oldest legitimate son reached his majority she was faced with having to deal with The Court of Wards. To avoid an unsuitable guardian she requested that Anne's future husband, Peter Killigrew, be made guardian (33-34). This allowed Elizabeth to handle the estate, the education, and raising of her children with little or no interference. Margaret supplies us with most of the information about her early family life in "A True Relation of my Birth, Breeding, and Life" which can be found in the 1656 edition of *Natures Pictures*.[2]

Margaret idolized her mother, and the portrait she paints in "True Relations" is one of intelligence, honor and a good nature. She states that her

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2 In 1906 it was included in C. H. Firth's work *The Life of William Cavendish*.

mother strove to delight and please her children and did not believe in corporeal punishment or harsh words, but "reason was used to perswade us" (370). Their education was normal for their circumstances but not strictly enforced. The family lived a quiet, orderly life well within their means, and her mother saw to her every comfort. She writes that her mother was

> of a grave Behaviour, and had such Majestick Grandeur, as it were continually hung about her; that it would strike a kind of an awe to the beholder...for she had a well favoured loveliness in her face, a pleasing sweetness in her countenance, and awell temper'd complexion...she was an affectionate Mother, breeding her children with most industrious care, and tender love...she took great pleasure, and some little pride in the governing thereof [the estate]...she was very skilfull in Leases, and letting of Lands, and Court-keeping, ordering of Stewards, and the like affaires. (376-77)

Margaret's admiration for her mother and her love come through in her words. She also had a great respect and love for all of her brothers and sisters and describes them as part of a close knit family. Her brothers were all great men who fought for their King, and her sisters all honorable women who were good wives and wonderful mothers. The family did not indulge in frivolous activities but were quiet and enjoyed the more intellectual aspects of life. Even after marriage the brothers and sisters maintained a close relationship with one another.

Margaret was pulled away from this idyllic life by the Civil War. In

August of 1642, St. John's Abbey was attacked and looted by two thousand people. The mob thought that the family was housing horses and arms for the King. According to Grant, Sir John, his mother, and sister were removed from the house for their own safety but even that did not prevent Elizabeth Lucas from being struck by a sword.[3] The house was looted, the live stock either slaughtered or dispersed and the family vault was desecrated (52). The family was forced to move to Oxford, a Royalist stronghold.

Queen Henrietta Maria arrived in Oxford in the summer of 1643, and on hearing that she was in need of Maids of Honour, Margaret convinced her mother to allow her to join the Court. Margaret mentions that her mother agreed to her request, but her sisters were not happy about the situation. They believed her inexperience and shy nature would be a problem. She writes in "True Relations" that

> by reason I had never been from home, nor seldom out of their sight; for though they knew I would not behave myself to their, or my own dishounour, yet they thought I might to my disadvantage, being unexperienced in the World...that when I was gone from them I was like one that had no Education to stand, or Guide to direct me, which made me afraid lest I should wander with Ignorance out of the ways of Honour.

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3 The historians are not sure if Margaret was present at the attack but since she does not mention it in "True Relations" one can assume that she was in Oxford at the time with her sister.

(373-74)

Margaret won the battle and was allowed to join the Court. She writes that she was so shy and bashful that she "chose to be accounted a Fool, than to be thought rude or wanton," so her family had no need to worry about her losing her honor. (374). Margaret became a fixture in the Court, saying very little but at all times listening. One name caught her attention, William Cavendish, Marquis of Newcastle. She had first heard it from her brother Charles who served under him, and it was repeated at court in numerous dispatches.

In the spring of 1644, the Court moved to Paris. The trip was plagued with one disaster after another. The Queen had just delivered a daughter and suffered complications from the birth. The trip across the English Channel was rough; when they arrived in France, the Queen was too ill to journey to Paris so they were forced to go to Bourbon L'Archambault to recover (Grant 70-71). At the same time, Newcastle lost a major battle at Marston Moor and was forced to flee to Hamburg. When Queen Henrietta Maria finally arrived in Paris and began to set up Court, Newcastle was not far behind.

In the Spring of 1645, Newcastle arrived in Paris to pay homage to the Queen. Whether Margaret had been influenced by the *Précieuses Neoplatonic* practice of fantasying about an ideal love, or she had developed a great admiration for Newcastle from reports of his military accomplishments, it was love at first sight. In "True Relations" she writes that "though I did dread Marriage, and shunn'd Mens companies, as much as I could, yet I could not, nor

had not the power to refuse him, by reason my Affections were fix'd on him, and he was the onely Person I ever was in love with" (375). The courtship was swift, and by December of 1645 they were married. Before the marriage they exchanged a flurry of letters on the problems they encountered from those opposed to their marriage.[4] Margaret's letters, the only ones that survive, give us an insight into how she thinks and her shrewd nature. Margaret is not going to make the same mistakes her mother did.

The first letter addresses the opposition to their marriage. There are those who tell her of his many women and warn that the Queen will be upset that she has not been told of the courtship. For a shy and bashful creature, Margaret has ready answers. She writes, "I asked if I should aquant the qeene with every conplement that was bestod on me, with many other idell descouerses, which would be to long to wright" (121). She reassures him that she doubts he would ever lose favor with the King and Queen, but in the next letter she suggests that he should inform the Queen of his intentions. Apparently he refused and she writes:

> pardon me if I have wright any thing that is not agreable, but if I be carfull in things that may arise to the scandall of my repetaion [reputation] is for fear of a refleckion, becaus I am yours, for though it is imposabll to keep

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4 These letters can be found in the British Library, MS Additional 70499 ff. 259-97, and are reproduced in Anna Battigelli, *Exiles of the Mind* (1998). References are from her reproductions.

> out of the rech of a slandering toung from an enves parson, yet it tis in my power to hender them from the advantag of a good ground to beld [built] ther descoures on, for know, me lord, santiarmanes [St. Germain] is a place of much sencour. (122)

The letters continue on the topic of the gossip surrounding their courtship and her attempts to quell it along with subtle hints of when the Queen will be back at Court. Interspersed in the letters are praises of his verses, she tells him that "as grace drawes the sole to life, so natuer, the pencell of god, has drawen your wit to the birth, as may be seene by your verses" (125). The last interesting aspect that the letters reveal is her confession of love for him. She soothes his jealously, constantly reassures him of her love, and keeps him in line. After she wrote a particularly passionate letter professing her love, he must have written back a provocative letter concerning intimate relations. She answers

> it may be the triall, but it tis not true love that absence or tim can demenesh, and I shall as sone forget all good as forget you; me lord, you are a parson I may very confeedently one [own] unles morell meret be a scandall, but, me lord, ther is a cusstumare law that must be sineed before I may lawfully call you husban; if you are so passhonit as you say, and as I dar not but belefe, yet it may be feared it cannot last long, for no extrem is parmenttary [permanent]. (128)

Margaret is determined to be the proper young lady until her wedding day. She does not scold him, but uses reason and common sense in answering his

advances. Love for Margaret is not a game, but mutual respect and understanding. She does not act the coy seductress with Newcastle and gently reminds him of this fact. In all of the letters she stresses that she is looking out for his best interest. The rumors about her cause her no concern, it is just the ones about him that upset her. Once married the couple moved into rented lodgings but soon found that money would be a major problem. Paris was full of Royalist sympathizers, and a majority of them had a cash flow problem. Back in England their estates had been confiscated, and it became increasingly difficult for relatives to send money to the continent. Like the scores of other British citizens, the newlyweds found they must live on credit. According to Grant, Newcastle had a flair for gaining credit. He lived above his means, maintaining an extravagant life style to impress his creditors. When their patience wore thin he would use his evident self-confidence to convince them that the prospect of return on their investment would be worth the expenditure. Newcastle discovered that displays of extravagance impressed his creditors and soothed their nerves (89-90). This situation continued during their whole stay in Europe, and when it was time to return to England, he had to leave Margaret behind as an surety for his debts.

The couple remained in Paris for two years during which time Margaret Cavendish began her education in natural philosophy. Male scientists surrounded Cavendish. Her marriage gave her access to some of the greatest scientific and mathematical minds of the times including Thomas Hobbes, René Descartes,

Kenelm Digby, William Petty, and Pierre Gassendi. Her husband, an amateur scientist, and her brother-in-law Charles, a noted mathematician, corresponded with this circle of scientists known as "Newcastle Group" and with other members of the Royal Society. Charles Cavendish becomes an important figure in Cavendish's life. He was her brother, friend, and mentor. In "True Relation" she describes him as

> nobly generous, wisely valliant, naturally civill, honestly kind, truly loving, vertuously temperate, his promise was like a fixt decree, his words were destiny...he had a ready wit and a spacious knowledge, a settled judgement, a cleer understanding, a rationall insight, he was learned in all Arts and Sciences, but especially in the Mathematicks, in which study he spent most part of his time. (378)

While Charles was considered a professional in science, Newcastle was more interested in the toys of the scientists. He bought many telescopes and microscopes and dabbled in chemistry (Grant 92-93). Cavendish would listen to Charles and his colleagues discuss natural philosophy and would look through the microscopes and telescopes with Newcastle. Her interest in the discussion surrounding her eventually led her to writing natural philosophy.

In 1647, the King was organizing one last push in England, and in June the Queen asked Newcastle to go with her son to England. He could not leave Paris immediately because of debts, and it was not until August that he, his wife, and his brother went to Rotterdam to meet the fleet. Newcastle was too late to

sail with the future Charles II, and by the time he arranged for a ship and supplies, the uprising was over (98-99). During this time, Margaret's brother, Charles Lucas, surrendered the stronghold he held at Colchester and was executed. St. John's Abbey was destroyed by a mob, who again entered the family vault and cut off the hair of Margaret's mother and sister who had recently died.

The Newcastles then moved to Antwerp where, because of the small amount of Royalists, they hoped to find credit to live. Cavendish loved the local people and found that she enjoyed venturing out into the city (102, 135). They lived a quiet life ensconced in Ruben's mansion. She wrote, Newcastle indulged his passion for horses, and Charles made friends with the chemist François Van Helmont. Cavendish began composing her *Sociable Letters*, which she worked on until 1664. The letters are fictional and appear to be one side of a correspondence, however, they offer a close up view of the city, her neighbors and her life.

Finances once again became perilous, and Charles accompanied Cavendish to England in 1651 to petition for Newcastle's property and his own. Cavendish was unsuccessful, but Charles, after paying a large fine, was granted his estates (109). It was in London in 1653 that Cavendish wrote her first work. *Poems and Fancies* was begun as a diversion from circumstances and her worries about Newcastle, but it was only the start of a long exploration into the creative aspects of nature and women. Three months later she published *Philosophicall Fancies* which outlines in verse and prose her natural philosophy at that time.

She traveled back to Antwerp alone, leaving Charles in London because he was too ill to travel. Charles died less than a year later.

On her return to Antwerp she began pulling together notes, contemplations and thoughts that she had been working on for years. This became *The Worlds Olio*, published in 1655. It is exactly what the title refers to, a hodge-podge of ideas and thoughts that cover everything from poets, poetry, wit, imagination, science, war, and politics. In the same year she also published *Philosophical and Physical Opinions*, a truly scientific treatise that outlines her natural philosophy in more detail. It recaps her atomistic beliefs, but in it one can see her slant towards materialism or a form of vitalism. In 1656 she wrote *Natures Pictures*, a group of fictional tales, verses, and dialogues.

Cavendish returned to England in 1660 and retired to the family seat, Welbeck Abbey. She very rarely ventured to London, as Newcastle had lost favor with Charles II, who preferred to be surrounded by younger advisors. She lived a quiet simple life and concentrated on her writing. She published a book of plays and orations in 1662, but nothing on natural philosophy until 1664 when *Philosophical Letters* came out. By this time, Cavendish had read some of the works of Hobbes, Descartes, Van Helmont, and other prominent philosophers. She constructs a series of fictional letters explaining the difference in her beliefs and those of the male philosophers. In 1666 Cavendish published her definitive work on natural philosophy, *Observations upon Experimental Philosophy to which is added, the Description of a New Blazing World*. Her last work, *Grounds*

of Natural Philosophy, published in 1668 does not add anything new to her theories.

Cavendish's most famous coup in her own time, besides her publications, was the honor of being the first women to be invited to visit the Royal Society. On May 30, 1667, John Evelyn makes a short entry into his diary about the day noting she was received well, and shown some experiments, then that he "conducted her Grace to her coach and return's home" (272). Samuel Pepys' account is much more animated. He states that "The Duchesses hath been a good, comely woman; but her dress so antick, and her deportment so ordinary, that I do not like her at all, nor did I hear her say any thing that was worth hearing" (Pepys, vi. 323). He focuses on one of her attending women who was reputed to be a great beauty, telling us only in passing what occurred in the room that day. Although the Royal Society was worried that much would be written about the day, it passed virtually unnoticed by the general public.

Putting aside the fact that she wrote natural philosophy, writing of any kind was a dangerous arena for women to enter during this time. Sylvia Brown points out that for females to use their voice, either spoken or written, in public was harmful to them and equivalent to losing their virtue.[5] Writing, considered a sexual act, threatened the social order. Brown uses an early conduct book by Francesco Barbaro, who argues that if a woman's speech is made public it is like

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5 "Margaret Cavendish: Strategies Rhetorical and Philosophical Against the Charge of Wantonness, Or her Excuses for Writing So Much." (1991)

her presenting herself to the world naked (22). Brown states

> The speech of a woman cannot be launched into public circulation like a man's. Unlike a man, her speech remains rigidly tied to the body, which is itself enclosed within the private sphere of a household headed by a father or husband. (22)

A woman must remain silent to retain her virtue, honor and chastity. Moreover, not only was female speech dangerous, but also an excess education. Brown quotes Daniel Tuvill's *Asylum Veneris, or A Sanctuary for Ladies*,

> "Learning in the breast of a woman, is likened by their Stoicall adversaries to a sword in the hands of a Mad man....it doth not ballast their Judgements, but only addeth more saile to their ambition; and like the weapon Goliah [sic] an instrument to give the fatal period to their honour's overthrow....The pen must be forbidden them as the tree of good and evil, and upon their blessing they must not handle it. It is a pander to a virgin chastity, and betrayeth it, by venting forth those amorous passions that are incident to hotter bloods." (Qtd 24)

Cavendish was acutely aware of the society's pronouncement on the writing and education of females. Yet she persisted in her pursuit of a "natural" education and writing, all the while anticipating the criticism that would follow.

Cavendish circumvented the criticism, because her goal in writing was not to take a stance, radical or feminist. Throughout her works, readers are reminded that Cavendish is first an aristocrat. She understands her position in society and

strives to uphold her honor and virtue. Second, she is a royalist and her conservative view points are evident in her natural philosophy and her "fancies." Last, Cavendish was a woman. Her goal was to create a place for that aspect of her life; a place that allowed all the aspects to coexist, and still allow her to retain virtue and honor, Cavendish, as Brown points out, "avoids any authoritative moral stance" (27). She presents positions but does not take sides. She writes to show possibilities not to establish any "truth." Cavendish writes because it is her nature; she wished to show that creative activity is inherent in all parts of nature, and that this creative activity is the place where possibilities exist, especially for women.

Cavendish writes about her work when she defends herself in the Prefaces, and in "True Relations" gives selected details of her writing process. She begins by praising her husband's writing and wit. While he "recreats himself with his pen, writing what his Wit dictates to him," she passes her "time rather with scribling than writing, with words than wit" (384). Cavendish, ever apologetic and humble, acknowledges that her work could not surpass his, but she understands that to write is to recreate self. The recreation of self is the crisis affecting Cavendish. On one hand, she is the shy and bashful wife of a wise and intelligent man whom she would not wish to embarrass with her uneducated rambling, yet she writes for the purpose of publication, exhibiting the most private parts of herself for the world to see. According to Anna Battigelli this

paradox is found in her work.[6]

> Far from expounding a particular ideology or ideal, they [her texts] reflect her ambivalence in positioning herself philosophically with regard to her world; unable or unwilling to engage with it or retreat from it, to choose between the active of the contemplative life, she occupies an indeterminate position (33)

Battigelli shows how Cavendish exhibits this struggle in her dialogues, whether in plays or the fictions, which show "tension between multiple voices" (33). She attributes this paradox to Cavendish's exposure to Queen Henrietta Maria and her court. There Cavendish was exposed to the *Précieuses Neoplatonism* which celebrated spiritual love and the contemplation of interior thoughts (15-16). This, along with the Queen's out-spoken religious devotion to Catholicism and powerful presence, showed Cavendish two sides of life that were at odds. First, the contemplative life, the interior of one's mind, showed the "hopelessness of effecting useful change in the real world" (26) and that retreat from the world was the safest route. Second, the imposition of ideas and beliefs on others, and leading a public and active life, often created controversies that caused ridicule and even hatred.

Cavendish does take the indeterminate position in her fiction, because that is her position in her world, and she recognizes it. However, she does not take

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6 *Margaret Cavendish and the Exiles of the Mind.* (1998).

that position in her own life. Cavendish freely advocates contemplation to explore the interior possibilities of the mind yet leads an active life through the publications that bought her ridicule, even hatred. Cavendish wants to connect the two, contemplation and activity, and can only do this through the creativity of the mind.

For Cavendish all creativity requires a degree of contemplation. In the poem "The Motions of Thoughts" she begins with the suggestion of contemplation by walking with her eyes "fixt/upon the ground" as she wanders without direction. However, she then makes a connection between her thoughts and the motion of light. Creation starts with the first motion. Cavendish uses light to depict this first motion because it moves so fast it looks as if it is standing still, like a star in the heavens. This fixed point of light is the prime motion, the beginning of life, and the continuation of life. She shows how all forms and figures are created, and that, like everything in nature, they are not constant but change with time. She defines prime motion as "*Union*, *Knowledge*, *Power*, and *Might;/Wisdome*, *Justice*, *Truth*, *Providence*, all one" (ll. 34-35 p. 41). All things are connected to the prime motion, and it is like a point with several lines moving in and out of it.

> But *this* a Point, from whence all *Lines* do flow,
> Nought can diminish it, or make it grow.
> Tis *its* owne *Center*, and *Circumference* round.
> Yet neither has a *Limit*, or a *Bound*.
> A *fixt Eternity*, and so will last.
> All *present* is, nothing to come, or past.
> A fixt *Perfection* nothing can add more,

All things is *It*, and *It* selfe doth adore. (ll. 39-46 p. 41)

It is the harmony of nature, all things created from it and returned to it. Cavendish sees her thoughts just as that fixed point.

> My *Thoughts* then wondering at what they did see,
> Found at the last* themselves the same to bee;
> Yet was so small a *Branch*, perceive could not,
> From whence they *Sprung*, or which waies were begot. (ll. 47-50 p. 41)
> **All things come from God Almighty*

Not only is she part of the motion of the universe, her thoughts are part of it also, and they, like her, are such a small part of the light. They are part of the interior and exterior world. All things are connected, but the choice of connections must be determined by matter and motion working together. Cavendish likes to show both sides of this issue. In nature you can have matter without motion, but you cannot have motion without matter; in the interior mind, you can have a contemplative life without action, but you cannot have action without a contemplative life.

In *Natures Pictures* she includes a dialogue between a poet and a "contemplating Lady." The poet believes in an active life of discourse and conversation, while the Lady finds pleasure in her solitary thoughts. The Lady explains that without contemplative thoughts the "world" would be dead because "were it not for Contemplation, there would be no Invention; if no Invention, no Conveniency; if no Conveniency, no Ease; if no Ease, no Pleasure; if no Pleasure, no Happiness; and to be unhappy, is worse that Death: but Contemplation is the Mother of Invention" (305-306). The poet counters the Lady's reference to

Contemplation as the mother and refers to language as the midwife and practice as the nurse. Using images of female creation in childbirth, she goes from the incubation to the actual birth of ideas, showing the necessity of contemplation before an active life, or creative thoughts before publishing. The dialogue continues with the poet making a strong case for the activity of discourse and writing. The poet argues that "the mind must be exercised with Discourse, cleansed with Writing, otherwise the Streams of Fancy, which arise in several Springs from the Imagination, may overflow the Mind, causing it to be flatuous and hydropcal; or the several and singular Opinions, which are most commonly tough and hard, may obstruct the Mind" (306-307). The Lady, on the other hand, only counters with her contentment and happiness in the world of her own thoughts. Echoing a conservative view of pleasure, the poet stresses that the body requires some moderate pleasure in life to survive, which the Lady concedes reluctantly.

Cavendish echoes this sentiment in "True Relations" when she declares that she exercises her thoughts through verbal discourse, even if it is in the privacy of her room.

> forc'd many times to express them [thoughts] with the tongue before I can write them with the pen...when some of those thoughts are sent out in words, they give the rest more liberty to place themselves, in a more methodicall order, marching more regularly with my pen, on the ground of white paper...however that little wit I have, it delights me to scribble it out,

> and desperse it about, for I being addicted from my childhood, to contemplation rather than conversation, to solitariness rather than society, to melancholy rather than mirth, to write with the pen than to work with a needle, passing my time with harmeless fancies, their company being pleasing, their conversation innocent, in which I take such pleasure, as I neglect my health, for it is as great a grief to leave their society, as joy to be in their company, my only trouble is, lest my brain should grow barren, or that the root of my fancies should become insipid, withering into a dull stupidity for want of maturing subjects to write on. (384-85)

Like the Lady, Cavendish prefers her solitary thoughts, and like the poet, Cavendish admits that she actively debates with herself before writing helps order her thoughts. Cavendish then concedes to the fact that she must feed her senses new material. Others go out on the town to play cards, dance, or visit house to house, but these activities do not suit her. Cavendish rides about town in her coach to see the sights and take in the different customs of people. When she wanders about, she finds "new materialls for [her] thoughts and fancies to build upon," because she realizes that if she does not work her senses, they will become "like silk-worms that spinns out of their own bowels" (386). Cavendish, contemplative since childhood, finds that reasoning with herself is all the exercise her body requires since she walks two or three hours thinking of the material presented to her senses. She states that her early family life revolved around their intellectual activities, and they entertained themselves with the exchange of well

reasoned opinions. When she married, her new family circle was much like that of her younger years, surrounded by intellectual activity that took precedence over frivolous social encounters.

Cavendish concludes "True Relations" with the paradox that Battigelli finds. Though she treasured her private time with her thoughts and fancies, she was compelled to set them free to the public. She does not consider it a forcing of her opinions and ideas on others rather as the need for something more substantial. In the "Prefaces" she talked of her need for fame, her need to be remembered. In "True Relations" she states

> I fear my Ambition inclines to vain glory, for I am very ambitious, yet 'tis neither for Beauty, Wit, Titles, Wealth or Power, but as they are steps to raise me to Fames Tower, which is to live by remembrance in after-ages...for perceiving the world is given, or apt to honour the outside more than the inside, worshipping show more than substance; and I am so vain, if it be a Vanity, as to endeavour to be worshipt, rather than not to be regarded. (389-90)

Cavendish's outspoken desire for fame caused her problems in her time and in modern times, but the search for fame has many dimensions. Writing is a search for recognition, for pleasure, and for the infinite possibilities. Cavendish understands that she will have detractors who scorn her, but she is a "Lady" and will ignore the comments of others. She states that she writes "for my own sake, not theirs" (391). However, another reason she writes is because of a fear of a

nameless death. Sandra Sherman argues that for Cavendish "to write one's creation is to perpetuate one's name, not merely a (female's) derivative name, but the name that stands for the creative–created–individuated self" (204).[7] It is fear of oblivion, a way to escape death (207). This human reaction to a namelessness is normal, it is simply that few people seek to rectify the situation. The ability, the spirit, and the courage may be lacking, but, Cavendish reasons, if that did not stop a shy under-educated female, it should not stop any one else.

In the first chapter I will look at how Cavendish anticipates and deals with criticism of her work. Cavendish was in the habit of writing a large number of Prefaces and introductory Epistles to her readers. She addresses her comments to a variety of audiences including her brother-in-law, other women, natural philosophers, and eminent scholars at the established Universities. Cavendish follows the example of other writers who humble themselves before their audience apologizing for content and style, but finds she must also defend herself against accusations against her authorship, her intelligence.

Cavendish does this by appealing to male and female readers, actively engaging both but on different levels. She does this through a manipulation of her audiences, disparaging females to the male audience while encouraging women to educate themselves and to write. The problem with this approach is the apparent contradiction found in the appeals. Sylvia Bowerbank in her

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7 "Trembling Texts: Margaret Cavendish and the Dialectic of Authorship." (1994)

insightful article shows that Cavendish tries to appeal to women by playing upon her lack of education, her lack of revision, and her lack of method, but this is only part of what she is doing.[8] Cavendish appears to deny women's ability to learn, to take a patriarchal view of women's nature. However, the inability to learn comes from a masculine scholarship she finds uncongenial. Instead she advocates the "natural" education one can gain from sense and reason. She encourages women to further this type of education and exercise their imagination through writing. She uses herself as an example, a woman, uneducated, yet capable of pulling her ideas together to create finished works for publication.

The second chapter will explore Cavendish's theories of natural philosophy. The main texts I use for this chapter are *Poems and Fancies*, 1653, *Philosophicall Fancies*, 1653, *Philosophical and Physical Opinions*, 1655, and *Observations upon Experimental Philosophy*, 1666. Instead of reading her natural philosophy as work that either agrees or disagrees with her contemporaries, I look at her theories as part of her overall plan to advocate a theory of creativity. Cavendish, as a woman, is not writing as "other," the female imposing herself in the masculine arena, or in opposition to mainstream masculine discourse. Cavendish is not the seventeenth equivalent of a feminist. Rather, she is writing as herself, a female who enters the arena on her terms and uses her own vocabulary of equality. Lisa Sarasohn was one of the first to look at

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8 "The Spider's Delight: Margaret Cavendish and the 'Female' Imagination." (1984)

Cavendish's natural philosophy and examine it.[9] Sarasohn labels Cavendish a skeptic because of her belief that absolute knowledge cannot be attained therefore her speculations might be as correct as anyone else's (292). Cavendish's skepticism is a result of her sex and upbringing, female and uneducated, which closed the traditional path of conventional knowledge to her (292). Even though Sarasohn gives an astute reading of Cavendish's natural philosophy she attempts to bring feminist philosophy into Cavendish's science, which, in the long run does not work.

Sarasohn states that the skeptical approach both attacks male natural philosophy and is used as a tool for female equality. This is true, but Sarasohn then argues out that "Cavendish fused revolutionary scientific ideas and an underlying feminist ideology in her conception of a living universe, infused with motion, and ordered by a female spirit" (290). This may work on the surface, but developing an organic natural philosophy does not make Cavendish a feminist, especially if it is labeled feminist only because it comes from a skeptical perspective. Cavendish's conception of the living universe was as ancient as Aristotle, and he did not advocate a feminist ideology. She fused her science with her concept that creativity that is to both male and female; she simply thought it necessary to encourage females more than males because it had been an area that was not been considered proper for them. Creativity is what counts for

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9 "A Science Turned Upside Down: Feminism and the Natural Philosophy of Margaret Cavendish." (1984)

Cavendish, and all have self-knowledge as well as sense and reason. As infinite varieties are possible, all, both men and women may create. She is not seeking to liberate her own sex but to emphasize a universal attribute.

Cavendish was not a feminist. She was an active participant in the seventeenth-century scientific debates, but not, as Rebecca Merrens believes, a third person who was excluded from the it (425).[10] Merrens compares Cavendish to Hobbes in that they were both used as outsiders to facilitate the communication between those in the Royal Society (425). Merrens sees Cavendish's alternative view of nature as being used by men to uphold their own philosophy. However, Cavendish had no interest in upholding the male philosophy. She went her own way. Again the modern critics try to justify her natural philosophy instead of understanding it.

To understand her philosophy one must read it with the idea that it also is her theory of creativity. I find it necessary to establish her as part of the mainstream of natural philosophy and look at her theories against the backdrop of other natural philosophers. In 1988, Sophia Blaydes investigated Cavendish in relation to other philosophers of the time.[11] Blaydes read all her scientific works and found a progression of thought that developed into a form of natural

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10 "A Nature of 'infintite Sense and Reason': Margaret Cavendish and the 'Noise' of Feminized Nature." (1996)

11 Blaydes, "Nature is Woman: The Duchess of Newcastle and the 17th Century Philosophy." (1988).

philosophy that was mainstream. However, after some slight praise of her development as a natural philosopher, Blaydes states that "Hobbes informs, Digby amuses, and Madge annoys" (55). The statement is important, because it ranks three writers of the time who were working on natural philosophy. Thomas Hobbes and Kenelm Digby, an aristocratic amateur, were famous for attacking the Royal Society. While the first two inform and amuse, Cavendish and her attack on the Royal Society are annoying. This characterization contradicts Blaydes' attempt to establish Cavendish as a mainstream philosopher and condescends to her.

Cavendish's theories changed and matured as she abandoned atomism and adopted a vitalistic or materialistic theory of nature. John Rogers devotes a whole chapter in his book *The Matter of Revolution* to Cavendish and her switch from atomism to vitalism. He believes that her natural philosophy shows the interaction of men and women, but the women Rogers envisions are housewives (187). He points out that her language is feminine, but, again, that is not enough to demonstrate the feminine agency he accusing Cavendish of creating through this language (190). He points out that her matter moves by free will and is at the same time hierarchical, yet he sees her created universe as "marked by an absence of any single regulatory power or absolute center of command" (197). Cavendish has a need for authority and respects it, and, according to Rogers, is much like Milton's Eve, who espouses "liberatory vitalism" but is constrained by "a

patriarchal paradise" (208). Rogers argues that Cavendish's strategy is to shift the focus:

> Cavendish has transposed the analysis of feminine nature from the implicitly 'public' context of the external impact of outward objects to the 'private' context of the household organization within object...the implicit feminism of her science calls for a sweeping liberation from the constraints of patriarchy at the same time it works to confine the exercise of female power to the home. (209).

However, the switch to the private household is part of her strategy. Rogers faults Cavendish for emphasizing the interior of outward objects, and the interior of the mind because it causes seclusion and is not social (210). Cavendish, though, is not striving for the liberation of all women, but for the elevation of the aristocratic and educated woman. She wants to use herself as a model, not for social change, but for women to see their potential. Cavendish's science should be seen as a stepping stone from the interior workings of nature to the interior workings of the mind.

At the end of the chapter, I show how her theories of matter and motion represent a creative spirit that enables all parts of nature to work together. According to Cavendish, everything is connected, and when all is in agreement, a perfect harmony can be created. By the time she published *Observations upon Experimental Philosophy* in 1666, she developed a mature theory of natural philosophy that allows shows the balance necessary for animate and inanimate

matter to work together. I discuss how her theory of creativity comes from her idea of the motion of nature and tie it into her idea of the motion of the mind.

Chapter three examines how she uses her creative theory in her works. I use *Poems and Fancies* in this chapter, because I believe it best represents her ideas of creation in nature and creation in verse. *The Worlds Olio* supplements the discussion on the creative aspects of poets. I establish in chapter two that she stresses connections in nature, and that she believes one must view her work the same way, as an organic whole. Through sense and reason one can discover the infinite varieties of fancy or imagination, and through contemplation, or the "arguing of the mind" one can decide how to present these "fancies" of the mind. Cavendish connects her work to female creativity in *Poems and Fancies*. She develops a language easily understood by women and creates domestic images of creation that show how women too can create.

I will look at her views of poets and poetry and how she denigrates the use of trite, obscure conceits. Cavendish believed that the motion of thoughts in the mind exercised the wit in humans and formed original and fanciful conceits. I will then show how she implements her theory in her verses and look at the creation of domestic images that females can appreciate. In the atomistic verses she deals with the creative process of nature and includes verses that deal with the creative processes of the mind. Cavendish leads the reader from creation by nature to creation by women. Through the use of metaphors of birth, dressing or

clothes, cooking or making wine, Cavendish associates everyday activities and scenes with the creative process of the mind.

Cavendish has the ability to create, from the smallest detail, a world of creative possibilities for women. She uses verse to create a process that goes from the interior workings of the mind, to the development of language, to the act of publishing. In the conclusion I will examine *The Blazing World*, which is Cavendish's ultimate work of fiction. This work has been studied and written about by almost every critic of Cavendish scholarship, but there is disagreement on why she wrote it, and why it is as an addendum to *Observations upon Experimental Philosophy*. Bowerbank believes she retreated into fantasy as a response to her failure as a natural philosopher (402), while Sara Mendelson sees it as part of her experiment to write in "every medium that had been fashionable in the past half-century" (42).[12]

Rachal Trubowitz shows that this utopian piece does not follow the traditional standards of the genre, but produces a society where "women can simultaneously achieve both absolute sovereignty and personal freedom" (238).[13] Trubowitz sees the creation of a world of female friendship and community where what is inside a woman is important. This new community revolves around self-

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Bowerbank "The Spider's Delight: Margaret Cavendish and the 'Female' Imagination." (1984) and Mendelson *The Mental World of Stuart Women.* (1987).

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"The Reenchantment of Utopia and the Female Monarchial Self: Margaret Cavendish's Blazing World." (1992).

sufficient females, but she feels that all of this is "undermined by her aristocratic investment in monarchy or, more precisely, by her adoption of the patriarchal ethos of absolutism that monarchy, both male and female, mystifies and enshrines" (241). According to Trubowtiz, Cavendish just can not escape from the influence of the male monarchy. Again, as with critics before and after her, she tries to cast Cavendish in a feminist role, and fails to take into account that Cavendish was a conservative aristocrat and royalist. To be under the influence of a male monarch, whether king, or husband was part of her social place, and she accepted it. Cavendish is not trying to usurp male authority, instead *Blazing World* is part parody, showing the dangers of the absolute power of the "new science," and the promotion of self-interest for one group.

Eve Keller, Anna Battigelli, and Sandra Sherman see *Blazing World* as an anti-utopian piece of literature showing the continuation of Cavendish's natural philosophy, and as Keller argues "deconstructs the assumptions and claims about nature, knowledge and the self that implicitly or explicitly pervade the new science project" (459).[14] All three critics also argue that Cavendish is developing a place for the creation of a female "self" that is tied to her theories of imagination, which I show is connected to her natural philosophy. In the *Blazing World*, Cavendish not only continues her attack on experimental science, she creates a place where all of her connections between the physical world and the

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[14] Keller, "Producing Petty Gods: Margaret Cavendish's Critique of Experimental Science." (1997).

mental world come together, a place were she can show that natural philosophy is just an extension of the imagination. As Sherman states Cavendish uses imagination to show "an act of creation in which the creations are themselves creators of a perfect mental world" (187). She creates a world where women are free to create, write, and lead an active life, a world located inside oneself, but she also creates a physical reality that is tied to the imagination through publishing. Cavendish creates Cavendish in the hopes that others will find a place for the many colored ribbons of imagination to be set free.

Chapter One
Defending Herself: Cavendish's Prefaces

Margaret Cavendish has been criticized for inconsistency and dismissed as retrograde by some feminist critics. Her work though should be examined in a different light, one other than feminism. Kate Aughterson, in her book *Renaissance Woman*, describes her as a "proto-feminist" (261). Cavendish, like other women of her time, provides "readers with female voices and models of argumentation, which are used by later women in their own right" (261). Women, before and during her time, like Aemilia Lanyer, Lady Mary Wroth, Katherine Philips, and women after her, Anne Finch, Aphra Behn, and Bathsua Makin all developed ways to argue a place for women in society. Each took a different approach, and though not as prolific as Cavendish they engaged in a "literary game" of justifications, using a method that concedes female physical weakness and stresses female mental capacities (261-62). Cavendish, as the other women writers, had no desire to change the traditional God given order. She was an aristocrat first, royalist next, then a woman, seeing women as worthy of the rank they hold, complementary to the men. Cavendish, more conservative in her views because of her position in society and exile, implies that the best in the land were also the brightest. However, she also holds a belief in the creative powers of all people and wants women to get credit for them and use them.

Like many aristocratic women of the time, she chafes at the restrictions placed on her, especially the lack of education. Lacking classical rhetorical skills,

Cavendish must rely on the logic of association rather than oration. This allows her to develop strategies of wit and imagination that she sees as original and hopes other women will copy. However, because of her lack of education she tends to write as she speaks. She works out her thoughts on paper as if she is debating with herself, which has caused many to view her work as chaotic rambling. What contemporary and modern critics often miss in the seemingly disorganization of thought is her irony and a characteristic ability to appeal to several audiences at once. Therefore, because of her originality of thought and style, Cavendish finds that she has to defend, not only her work, but the work of women in general.

Cavendish reveals much to the reader in her prefaces, but they may also cause the modern critic some confusion because of their apparent contradictions. It is often hard to discern whether she is speaking to a male or a female reader. This is most prevalent in the prefaces to the *Olio*, 1655, and continues throughout the text. The preface to the *Olio* is unique. It is not known whether she wrote this Preface before or after her trip to England. In a note to the reader which comes before the Preface she explains that the work was completed around 1650, and she did not make any changes to it. We do know that she added things to the overall book, such as epistles and additional notes to the reader, but we can not be sure if the Preface was edited. For my purposes we will assume that the Preface was original to the work and her collection of thoughts presented in the Preface were completed before the publication of *Poems and Fancies* and *Philosophical Fancies,* 1653. The material covered is touched upon in her other Prefaces but not

to such a scathing extent. The tone of this Preface is the basis for the later Prefaces, Epistles and Notes to the Readers and, in all of them, one must look below the surface of her words to understand her subversive nature.

When it appears that Cavendish is aiming her text at other women, who she hopes will take up the pen, she suddenly begins to sound as if she is writing to men. As we will see, throughout her work she uses her feminine intuition to engage all readers, both male and female. Like the perfect hostess, she shifts her attentions from guest to guest ensuring no one, not even the ladies, are left out of the conversation. Including women in the conversation is a daring act in itself, but at Cavendish's table all are equal and should be treated in a manner that makes them feel as if they are just as important as the next person. She does this by bringing out the best in each of the sexes. When, seemingly, alone with men she caters to their needs, as she would if she were alone with women, but at her table everyone has a voice. This method of engaging the diversity of her readers causes contradictions in what she says. She positions herself as beset by enemies on all sides, but if we continue the metaphor of Cavendish as a hostess at a dinner party, she is surrounded on all sides by those she has invited. Though she encourages others to participate, she must weigh her words very carefully in order not to offend any guest. Cavendish, though, is going beyond polite dinner conversation to broach new territory. She is entering the masculine realm of discourse and understands her need to proceed cautiously.

Cavendish would certainly have been aware of theories of women's

aptitude for learning and how to use them to her advantage. According to Deborah Bazeley, two contemporary feminist traditions, querelle des femmes, and *Précieuses Neoplatonism*, were widely known. Querelle des femmes was a tradition dating from the Middle Ages that held nurture overcomes nature; therefore, women were equal to men, but held back because of lack of education and opportunity (34-35).[1] The movement used pamphlets to critique social practices, to honor women, to directly attack their opposition (35). The main limitation to this movement was that they did not offer any solutions to the problem and their demands for education and equal status offered no real threat to male power (35). Bazeley concedes they were "locked in a spiralling discourse that circled back into the past" (36). Cavendish would have been familiar with the pamphlets of the time since she grew up in a progressive female household, and it may have formed her belief that lack of education was one of the main obstacles facing women. "Females have the ability but are not given the opportunity" was certainly one of her most dominant themes, especially in her Prefaces.

The second tradition, *Précieuses Neoplatonism*, would also have been familiar to Cavendish from her time at the court of Queen Henrietta Maria. It, too, advocated education for women, and viewed aristocratic females "as the proper guardians and inculcators of civic virtue" (36). When the court moved to

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[1] For specific pamphlets see Bazeley's footnote number 6 on page 34. Studies of the querelles des femmes tradition can be found in Hilda Smith (*Reason's Disciples*); Anna Batigelli (*Margaret Cavendish and the Exiles of the Mind*); L.B. Wright (*Middle Class Culture*); Simon Shepard (*The Women's Sharp Revenge).*

Paris, Queen Henrietta Maria adopted the platonic tenets of the French which celebrated female beauty and spirituality (36). David Latt comments that the Queen encouraged pastorals and masques which praised women for their ability to "refine the grosser sensibilities of men. Queen Henrietta Maria made fashionable the idea of the affective powers of feminine virtue" (qtd Bazeley 37). Though Cavendish does not write much of her time at the court, these ideas factor into how she treats the subject of women and men. As Bazeley points out, when Cavendish begins to write for publication she enters a new realm of writing where gender issues are found in all aspects of her work (38).

What is distinctive about Cavendish is her control of the situation. What appear to be unrelated or contradictory statements are in reality deft manipulations of her readers. When necessary she will make a statement that shows her as a humble uneducated female, attempting to convey her musing on subjects she has contemplated. At other times, she rises to defend herself strongly. She caters to her audience, to what they would like to hear, and hides her subtle remarks in faint praise of them.

The World's Olio, though written first, was published in 1655 two years after *Poems and Fancies*. It began as a journal of ideas, what she would later call her "contemplations" on a variety of subjects, and soon became a primer that she used for all of her later works. It is here that she starts to extend the boundaries of female discourse. In the first Preface to the Reader she admits that, "It cannot be expected I should write so wisely or wittily as Men, being of the Effeminate Sex,

whose Brains Nature hath mix'd with the coldest and softest Elements" (A4r). She first incorporates what modern feminists call the establishment of women as "other" through the use of the binary that classifies men as composed of hot and hard elements and women as the opposite, soft and cold. Next she seems to apologize to both genders by stating, "I believe all of my own Sex will be against me out of a partiality to themselves, and all Men will seem to be against me, out of a Complement to Women, or at least for quiet and ease sake, who know Womens Tongues are like Stings of Bees... so I shall be condemned of all sides, but Truth, who helps defend me"(A4r). She fears women will be against her because of what she says, and men against her, because they want to keep the women in their lives happy in order to avoid their tart comments. She mocks both males and females in the statement, making it difficult for those who want her to take a stand to decide what she supports. Cavendish is not going to take sides.

To add further to the confusion, she often espouses equality for both sexes. Nature, according to Cavendish, has created everyone equal. Men have created inequality by giving themselves supremacy and enslaving women by using them

> either like Children, Fools, or Subjects, that is, to flatter or threaten us, to allure or force us to obey, and will not let us divide the World equally with them, as to Govern and Command, to direct and Dispose as they do; which Slavery hath so dejected our spirits, as we are become so stupid, that Beasts are but a Degree below us, and Men use us but a Degree above Beasts; whereas in Nature we have as clear an understanding as Men, if we

were bred in Schools to mature our Brains, and to manure our Understandings, that we might bring forth the Fruits of Knowledge. (A4r)

Here she reasons that men have suppressed women and lowered their status to that of children or worse, unreasoning beasts. This statement easily could be the protest of a modern feminist, but as it comes from Cavendish, one has to be careful of context to ascertain its meaning. Cavendish is trying to get everyone to take her seriously, not to free all of her sex from the bonds of males. Cavendish is first a Royalist, then an aristocrat and last a woman. She knows that being subjected to a higher power is part of the scheme of things, and she is not one who will break the chain of command. This does not, however, stop her from gaining the favor of her readers by flattering men, while, at the same time, writing on a level her female readers will understand. She understands that by their very nature, women can not be equal to men in public life, but when it comes to strength of mind women are equal. Therefore she appeals to their desire for knowledge. She attempts to show how women, through what the querelle des femmes tradition would call nurture, have been denied not only education but support from men when they seek it.

Men are more capable than women, and this is proven by the fact that women do not hold the types of positions or jobs that men hold. Undercutting this is the fact that men do not allow women to hold these positions, and that women are not allowed the education to pursue positions that require reasoning and logic. She states that, "It is true, Education and Custom may adde something to harden

us, yet never make us so strong as the strongest of men...neither have Women such tempered Brains as men, such high Imaginations, such subtill Conceptions, such fine Inventions, such solid Reasons, and such sound Judgement, such prudent Forecast, such constant Resolutions, such quick, sharp, and readi flowing Wits" (A6r). Education can help, but, again, one must be careful in interpreting her derogatory remarks about women. D.C. Muecke states:

> What suggests to us that someone is being ironical is, to speak generally, the awareness of a contradiction between what is ostensibly the writer's or speaker's opinion, line of argument, etc., and the whole context within which the opinion or line of argument is presented. The 'whole context' comprises (a) what we already know (if we know anything) about the writer and the subject, (b) what the writer tells us (if he tells us anything) about himself and the subject over and above his pretended meaning, and (c) what we are told by the way in which he expresses his opinion, presents his case, or conducts his argument. (58).[2]

Given Cavendish's upbringing in a female household, and her connections to a female court, one can see that her method of using contradictions is meant to be intentional and ironic. By employing irony she can praise the men and degrade them at the same time. Her use of irony also has a feminine quality about it that many women would recognize. Through the constant use of flattery to men and

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2 *Irony*. London: Methuen, 1973.

frequent enumeration of the abuses women suffer she can get the women to see that the male ideas of women are wrong and can be remedied.

The underlying subversive nature of Cavendish's rhetoric can be seen in one of her most telling statements:

> what ever did we do but like Apes, by Imitation? wherefore Women can have no excuse or complaints of being subjects, as a hinderance from thinking; for Thoughts are free, those can never be inslaved, for we are not hindred from studying, *since we are allowed so much idle time that we know not how to pass it away,* but may as well read in our Closets, as Men in their Colleges; and Contemplation is as free to us as to Men to beget clear Speculation. (italics mine) (A6r)

Her technique of addressing both men and women in the same passage is a common method we will see throughout the Preface. Instead of an assertion she uses a question to show women what men think of them. Imitation is, according to the old cliché, the greatest form of flattery, but women are capable of going beyond that to think for themselves. If women follow the pattern of their predecessors they will be forever fixed in the imitation of the males. Writing translates and romances, and having no other recourse but to remain enslaved. Yet, using their logic and reason they can think like the males. The phrase, "since we are allowed so much idle time that we know not how to pass it away," is heavily ironic, but in the same breath she assures women that their closet can be the same to women as the colleges are to men. For Cavendish, it was not

important where you studied, but that you studied. Women do not attempt to use their minds because they are denied anything to think about during their "idle" time. They have never been given a chance to exercise their logic and reason.

The fate of women can be found in her use of the word "if." Throughout the Preface she uses "if" to place some doubt in the reader's mind about some of her statements. She states that, "if we were bred in Schools to mature our Brains, and to manure our Understandings, that we might bring forth the Fruits of Knowledge" and "if Nature had made our Brains of the same temper as Mens, we should have had as clear Speculation, and had been as Ingenious and Inventive as Men" (A6r). The first statement speaks to the female audience in the querelle des femmes tradition, that women could advance with education. The second statement speaks to the men, but in this statement, women, aware of the *Précieuses Neoplatonic* tradition, can see the possibilities of being "ingenious and inventive," because the power of female virtue would make them equal, but they are held back by the "effects" that determined their fate in life–that "if" is always present. Once she has established that men and women are equal in thought, her next step is to sum up all the faults of women and again stress their subjection to men.

> And thus we may see by the weakness of our Actions, the Constitution of our Bodies; and by our Knowledge, the temper of our Brains; by our unsettled Resolutions, incoustant to our Promises, the perverseness of our Wills; by our facil Natures, violent in our Passions, superstitious in our

> Devotions, you may know our Humours; we have more Wit than Judgment, more Active than Industrious, we have more Courage than Conduct, more Will than Strength, more Curiosity than Secrecy, more Vanity than good Housewifery, more Complaints than Pains, more Jealousie than Love, more Tears than Sorrow, more Stupidity than Patience, more Pride than Affability, more Beauty than Constancy, more Ill Nature than Good; (A6r)

Within this list of humors one finds a pattern of binaries that are familiar to males and females, but Cavendish puts a twist on these and essentially describes herself. She starts with a stereotypical woman who is inconstant, perverse, violent, and superstitious, but she then gives four traits that look similar, even interchangeable, to the modern reader, but would be frowned upon during her day. Wit and Judgment, active and industry, courage and conduct, will and strength, all of these words mirror each other, but they can also represent that which is weak in women. What is common in these binaries is that the first signifies the raw power, and the second what happens to it with cultivation and discipline. By showing women the abuse heaped upon them, she can undercut the binaries to suggest that with the proper education women could possess the second, more refined, quality. She continues with the reasons men have given women for years for preventing their education.

> Besides, the Education, and libertie of Conversation which Men have, is both unfit and dangerous to our Sex, knowing that we may bear and bring

> forth Branches from a wrong Stock, by which every man would come to lose the property of their own Children; but Nature, out of love to the Generation of Men, hath made Women to be governed by Men, giving them Strength to rule, and Power to use their Authority.(A7v)

The passage is a concession to her male readers, but also a veiled attempt to show what men are afraid of if women become educated. It is an indictment of the basis of patriarchy. By repeating the fears of all men she shows how they are overdone. They collapse on themselves when women see the absurdity of the male reason.

The final part of the Preface confirms again that as women are weaker than men it is right for men to govern them, but, at the same time, there are women, if educated properly, who can be smarter than some men:

> yet some are far wiser than some Men; like Earth; for some Ground though it be Barren by Nature, yet, being well mucked and well manured, may bear plentifull Crops, and sprout forth divers sorts of Flowers, when the fertiller and richer Ground shall grow rank and corrupt, bring nothing but gross and stinking Weeds, for want of Tillage; So Women by Education may come to be far more knowing and learned, than some Rustick and Rudebredmen. (A7v)

Here we can see traces of the *Précieuses Neoplatonic* tradition. As it was an aristocratic tradition, Cavendish uses it to concede that men are more fit to govern, which upholds the hierarchal order Cavendish as an aristocrat wishes to uphold. The concession, though, does not rule out the fact that women of virtue

can, with education perform the same duties as men. She flatters men by saying that women can only be smarter than the most uneducated of men, however, she sees the potential for women to aim for an education equal to that of their husbands or brothers.

Cavendish knows that women have special qualities that set them above men. Even though these qualities are expected in a female, they elevate her because they are pure and good qualities. Nature has created both devils and angels in women, but in men she has created devils and gods. She states that nature has not given women

> Heroick Gallantry, yet she hath laid in tender Affections, as Love, Piety, Charity, Clemency, Patience, Humility, and the like; which makes them neerest to resemble Angells, which are the perfectest of all her Works; where men by their Ambitions, Extortion, Fury, and Cruelty, resemble the Devill; But some women are like Devills too, when they are possest with those Evills; and the best of men by their Heroick Magnanimous Minds, by their Ingenious and Inventive Wits, by their strong Judgments, by their prudent forecast, and wise Managements, are like to Gods. (A7v)

Even within this statement one can recognize a gentle stab at men, while at the same time appealing to their vanity by suggesting that while women, at their best, may be angels, men may be gods. This representation places men above their own station and emphasizes the absurdity of their claim to be the highest power over all creatures on earth. Cavendish uses the same comparison in the body of the

Olio when speaking of the arrogance of men of literature and science who see themselves as "gods." In a section on art, which includes science, she states that "those that find out new Arts, are esteemed so, that they become as Petty Gods, whether they become Advantageous to Man, or no" (84). As we will see later, Cavendish takes these men to task over their creation of mechanical arts which will help them penetrate nature's secrets. She also takes on those men of literature who, in creating new conceits, cause confusion in their readers.

Once Cavendish has established the fact that women are capable of learning, she begins the uphill struggle to defend herself. In her work one can see the familiar pattern of the apologetic Preface, where the writer humbles him/herself to gain the approval of the audience. This type of apology and defense is a rhetorical technique that many employed, most notably, Kenelm Digby and Walter Charlton, scientists and friends of her brother-in-law, Charles. In *Two Treatises* 1644, Digby begs the reader to forgive his errors and states that, "I find the whole piece very confusedly done; the stile unequall and unpolished...and in a word, all of it seemeth to be rather but a loose modell and roughcast of what I designe to do, then a complete worke throughly finished" (E1v). He explains that he did not want to delay the publication and promises to polish and correct the next edition. Further in the Preface he admits that his education was lacking when it came to writing of this nature and hopes the readers will forgive his first attempt. Like Digby, Charlton's dedication to Lady Elizabeth Villiers in *Physiologia Epicureo-Gassendo-Chartoniana* 1654, refers to the errors

and lapses in thought one can find in his work (A3v). He goes on further to say that without her patronage no one would read his book, and if they did, would not forgive him "for the exceeding Boldness of this my Application" or the "rashness of my Zeal" (A3r). Cavendish's use of this technique has precedent in her own circle.

The other approach she uses is to emphasize the fact that she writes in a plain and simple style; one can assume that this technique is used to target women in her audience and to write on a level that they will understand. However, this same approach to writing for a large audience, and the claim of a "plain and simple style" can be found in masculine writings of the time. Sir Kenelm Digby's dedicated *Two Treatises* to his son and states that he has not "endeavoured to expresse my conception eyther in the phrase, or in the language of the schooles" (a iiijr). Thomas Hobbes, in the Preface to *The Elements of Law Natural and Politic* written to William Cavendish, says, "Whilst I was writing I consulted more with logic, than with rhetoric" (19). Both say they reject the rhetoric of the time and wish their audience to understand the material, but as we will see Cavendish takes it to a different level. She too rejects the rhetoric of the time, but also the use of Latin and other foreign phrases and the conceits used by men to explain their systems.

One of the first Epistles Cavendish wrote in her own defense can be found at the end of Part One, Book One of the *Olio*. She begins by answering the critics who have accused her of not writing *Poems and Fancies* and *Philosophicall*

Fancies. She states:

> To answer the first, I do protest...they are my own, that is my head was the forge, my thoughts the anvil to beat them out, and my industry shaped them and sent them forth to the use of the world...I never converst in discourse with any an hour, at one time in my life...I never had a familiar acquaintance, or constant conversation with any profest Scholar, in my life; or a familiar acquaintance with any man, so as to learn by them, but those that I have neer relation to, as my Husband, and Brothers. (E2r)

Her defense is straight to the point and she acknowledges that all she has learned from others came from the men in her life. In *Philosophical and Physical Opinions*, she defends herself, and adds a statement from her husband to back her up:

> 'tis but your envious supposition that this lady must have converst with many Scholars of all kindes in learning, when 'tis well known the contrary, that she never converst with any profest Scooler in learning, for to learn, neither did she need it, since she had the conversation of her Honorable, and most learned Brother, from her cradle, and since she was married, with my worthy and learned Brother...and I assure you her conversation with her Brother and Brother-in-law, were enough without a miracle or an impossibility to get the language of the arts, and learned professions, which are their terms, without taking any degrees in Schools. (A1v)

Cavendish uses the fact that people are familiar with her husband and his friends, considered some of the best scientific and creative minds of the time, to further defend herself. The question that needs answering, though, is why take this approach. Why use the testimony of men to support her? It comes from being a female aristocrat. There were many objections to her marriage, and she had gained some enemies both male and female. Establishing the fact that the men in her life had confidence in her intelligence and supported her, would help squash some of the remarks from her enemies. The influence of the men in her life is important to the defense of her own intellect and the knowledge she has gained through her own contemplation and "natural" education.

When it comes to the question of knowledge, Cavendish turns to her "natural" education. She complains of "this ill natured, and unbeleeving age, in not allowing me to be the right Authour thereof" (A4r). She knows she is capable of rational thoughts, because "nature, hath power to temper a brain as she pleaseth both to receive, retain, discuss, and create" (A4r). She admits over and over that the men in her life were instrumental in teaching her many things, but Nature was her primary teacher. She introduces nature as a creative force in *Poems and Fancies,* but it is in the *Olio* she states that nature "is so free as to teach, for every straw, or grain of dust is a natural tutor, to instruct my sense and reason" (E2r). Through the observation of nature one can use all of the senses to come to understand, and even though the cause of things will never be revealed, God has "given men nature to observe her effects, and imaginations, to conjecture of her

wayes, and reason to discourse of her works, and understanding to finde some out" (E3v). All humans have the capacity to reason and God has given them nature, to observe and learn through the senses, observation, and contemplation, thus, anyone can learn. Cavendish states that

> there is natural education to all, which comes without pains taking, not tormenting the body with hared labour, nor the minde with perturb'd study, but comes easy and free through the senses; and grows familiar and sociable with the understanding, pleasant and delightful to the contemplation, for there is no subject that the sense can bring into the minde, but is a natural instructour to produce the breeding of rational opinions, and understanding truthes; besides, imaginary fancies, if they will give their minde time as to think. (E3r)

She gives the reader a sense of a distrust of organized education. She did not do this because she was denied that form of education, but because she truly believed that it cluttered the mind and denied the imagination free flight. No matter what the reason, the study of nature is much less painless than an organized education and is more fun. Cavendish stresses the pleasure of learning and the enjoyment of letting her imagination run flowing and free. The main point of a "natural" education is that rational opinions are allowed to develop without the constraints of the ideas of others. Therefore one does not have to depend on the ancient texts or works of modern scholars because Nature provides everything one needs.

In *Philosophical and Physical Opinions* she defends her knowledge and

capacity of nature to teach and for her to learn. She argues that

> Nature is Prevalent in all qualities and conditions; And since nature is so generous to distribute to those that fortune hath cast out, and education hath neglected, why should my readers mistrust nature should be sparing to me...and let me intreat my Readers to be so just to me, as not to condemn me for an ideot by their objections and doubts, as not beleeving I am capable of learning. (B1v-B1r)

With her "natural" education as her main defense, she addresses the specific objections made against her, starting with experience. She stresses that her husband can teach her of poetry, science, and many other arts. Like many wives, she listens when her husband talks, and she enjoys these educational conversations. Through this private instruction she was allowed to conceive her own ideas without the criticism that she would have received in formal instruction. She could go against mainstream thoughts, and envision ways the ways of nature that made sense to her. Even though she could have learned from her husband's many acquaintances, Cavendish points out the difficulty of absorbing anything over a few dinners or visits to the house. Then she admits that even if they were to converse with her she was too shy to participate.

> For though I have seen much company, yet I have converst with few, and I take conversations to be in talking, which I have not practised very much, unlesse it be to particular friends, for naturally I am so wedded to contemplations, that many times when I have been in company, I had not

known one word they have said, by reason my busie thoughts have stopped the sense of my hearing (B1r)

This is a bold move, to say the least, to admit that in the presence of great male scholars, she would drift off to her own thoughts, virtually ignoring the guest. Cavendish does this not to degrade the knowledge of the male visitors to the house, but to stress the originality of her ideas. This goes hand in hand with her distrust of male educational institutions, and the fact that they perpetuate the ancient beliefs of others instead of encouraging originality in the thought process. Her desire for originality also suggests her self-absorption, her need to be recognized, and her need for fame, not only in this life, but far into the future. Of course, all of her detractors cite these traits as a deterrent to her personally and thus to her writing, but Cavendish does not see it that way and revels in her "eccentricity."

The second objection against her is that she is not a real scholar, and that she cannot "know the names and terms of art, and the divers and several opinions of several Authors" (A4r). In a scathing rebuke to this charge, she answers

> that I must have been a natural fool if I had not known and learnt them, for they are customarily taught all children from their nurses brest being ordinarily discourses of in every family that is of quality, and the family from whence I sprung are neither natural idiots, nor ignorant fools, but the contrary, for they were rational, learned, understanding and wittie. (A4r-B1v)

Cavendish reinforces her stance that just because she is a woman she cannot know these things. Even though the critics do not mention the gender issue, Cavendish realizes that it is their underlying assumption, and she tactfully circumvents the accusation by turning it into a general assumption that all those from gentle families would know this information. Since she comes from a family that was recognized for their learned ways, she too must have some familiarity with current trends of thoughts. To criticize her is to criticize not only her husband but her family.

The last objection is that she has not read many books. Cavendish concedes this fact and states that she has never learned Latin, the language of most scholarly books. She then confesses that learning from books takes years of close reading and study, something that she has not had the time or opportunity to do. In a section on her "Philosophical Opinions" in *Philosophy and Physical Opinions*, she admits to reading part of Hobbes's *De Cive* and part of Descartes's *Les Passions de l'âme*, both of which she read only once. She goes on to say that no one has read any books to her even though she is familiar with most of the prevailing opinions, but she "did never take nor steal any opinion, or argument from any other as my own, nor never will, and if I hit or light upon the same, it is meer chance" (B4r). She is determined that anyone who reads her works realize that she is stating truly original and new ideas that have come straight from her wit, with no help from contemporary or ancient philosophers.

Next Cavendish defends her opinions against those of the ancient

philosophers, with whom she denies having any familiarity. In one Epistle to the Reader she humbles herself before her audience and reminds them that

> if you weigh my Philosophical and Physical opinions with the ancient Philosophers, lay by the weaknesse, and incapacity of our sex; my unexperienced age, my unpractised time, my ignorant studies, my faint knowledge, and dim understanding to help pair my discourse with theirs. (a1r)

When she addresses the readers she asks forgiveness first, for "our" sex, then for her faults. The mixing of the pronoun our with my, me and I, is an interesting tactic that Cavendish uses to bring all women into the text. In the first Preface to *Philosophy and Physical Opinions*, she uses "our" when she discusses the fact that she has not had time to closely study other authors. She next adds an aside. These generally start with "besides" and the tangent she goes off on can be related to the material at hand. Most often though, it is a dig at the male scholar.

> Besides, our Sex takes so much delight in dressing and adorning themselves, as we for the most part make our gowns our books, our laces our lines, our imbroideries our letters, and our dressings are the time of our studie; and instead of turning our solid leaves, we turn our hair into curles, and our sex is as ambitious to shew themselves to the eyes of the world, when finely drest, as Scholers do to express their learning to the ears of the world, when fully fraught with Authors. (B2r)

The wonderful metaphors she uses for women writing and dressing[3] lead up to the image of the scholar who gives the world his opinion, adorning it with the authors who are in his head, those he has read and those that have taught him. This aside ties in nicely with one found a few pages later in her Epilogue to *Philosophy and Physical Opinions*.

Cavendish, still arguing that her opinions are her own, and that she has not read or talked to great scholars, states:

> Besides, I have heard that learning spoils the natural wit, and the fancies, of others, drive the fancies out of our own braines, as enemies to the nature, or at least troublesome guests that fill up all the rooms of the house. (a1v)

This "known truth" about learning was enough not only to stop her from reading, but from listening to arguments or disputed opinions. Again one sees the use of the pronoun "our" and the adherence to the fact that the female natural wit and fancy is best left alone. Through her contention that it is best to let her own opinions out into the world rather than clutter her mind with the opinions of others, she allows women to understand that study is not necessary for using one's intelligence. These subtle and quiet hints can be found laced throughout her work. Occasionally she will come right out and say what is on her mind when it comes to the suppression of women's intellect.

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3 These metaphors will be discussed in detail later.

In the "Preface to the Universities," she attacks those men who would hold a woman back. The adjectives and imagery she uses would make any modern feminist proud. Cavendish always donated many copies of her works to the colleges of the two universities, Oxford and Cambridge. She states that

> I here present the sum of my works, not that I think wise School-men, and industrious, laborious students should value my book for any worth, but to receive it without a scorn, for the good incouragement of our sex, lest in time we should grow irrational as idiots, by the dejectednesse of our spirits, through the carelesse neglects, and despisements of the masculine sex to the effeminate, thinking it impossible we should have either learning or understanding, wit or judgement, as if we had not rational souls as well as men, and we out of a custom of dejectednesse think so too, which makes us quit all industry towards profitable knowledge being imployed onely in love, and pettie imployments, which takes away not onely our abilities towards arts, but higher capacities in speculations. (B3v)

Throughout the passage she aligns herself with other women with her use of the plural pronouns. The constant reference to "our" and "we" makes her plea more feminist, less personal. To accuse men of hindering women, and to admit that work commonly associated with women will dull the senses is a bold move. She begins the attack in the past tense to show that women were born with the ability to use their reason, but anything that is not used will grow dull. To emphasize this

she attacks the neglect of men who push women aside as if they were incapable, and notes that the "dispisements" of men when a woman does something outside her sphere, like writing. This "custom of dejectedness" is one of the main reasons women either do not attempt to achieve, or why they fail when they try. In the face of such discouragement, it is hard to retain faith in one's abilities.

If these accusations are not enough Cavendish employs her wonderful detailed images. She writes that women are

> like worms that onely live in the dull earth of ignorance, winding our selves sometimes out, by the help of some refreshing rain of good education which seldom is given us; for we are kept like birds in cages to hop up and down in our houses, not sufferd to fly abroad to see the several changes of fortune, and the various humors, ordained and created by nature; thus wanting the experiences of nature, we must needs want the understanding and knowledge and so consequently prudence, and invention of men. (B3v)

The images of women as creatures who live underground, worms that need the rain of a good education to let them escape from under the soil and birds in cages, restricted like the worm, unable to enjoy the capacities nature has given them, relate back to the Preface in the *Olio* where she accuses men of treating women worse than beasts. These images truly show that she sees what men can do to women with their refusal first to allow them an education, and second to take them seriously.

The other interesting aspect of this attack is the fact that it is addressed to the "wise School-men." Cavendish is not out to alienate these men, on the contrary she sets them up with this attack, then strokes their egos.

> If a right judgement, and a true understanding, and a respectful civility live anywhere, it must be in learned Universities, where nature is best known, where truth is oftenest found, where civility is most practiced, and if I finde not a resentment here, I am confident I shall finde it no where (B3v)

She expects better from the scholars within the walls, and hopes she gets the civility and respect that is due her. Cavendish has shown encouragement to her sex, but then dismisses them because her needs come first. She no longer uses plural pronouns, but reverts to a singular personal pronouns because she is alone in presenting her works. She has set aside her dejected spirit and proved to herself that women are capable of producing well reasoned thoughts. Cavendish's switch to the singular pronoun is not to belittle other women, but stresses the point that she, standing alone, is attempting to break down barriers.

Cavendish is defending not only her ability, but the ability of all women to produce well thought out and rational works. Through the use of the plural pronouns, Cavendish has built an imaginary group of women, so she does not have to stand alone when faced with the audience. The alignment of herself with "our sex" brings the company of other women who can do as she does. The only problem is that she is in actuality standing alone, and must depend on her wit to produce her works. She has no models to follow and no group to read her work

before publication. Cavendish sees herself as the one to lead; she will produce the texts that others can use as models. On one hand she presents herself as totally unique in action and thought, while on the other she is the defender of female "wit" and "fancy." By stressing that all women are capable, she reinforces her stance and her own capability. Although she is alone in her pioneering work, it helps her in her own isolation to know that others might just follow her footsteps.

Isolation for Cavendish was nothing new. She was a shy, withdrawn child, and when she joined Henrietta's court she remained in the shadows. Though she was surrounded by women, she keep to herself watching and listening. Cavendish never developed a circle of friends as the men in her life did. Her husband and brother-in-law would often meet and discuss things with men who had the same interests. They would write to each other frequently, exchanging ideas and even whole manuscripts. Through this circulation of ideas and written works, the male writers had not only feedback, but models on which they could base their writings. Cavendish did not have any of this. Women exchanged ideas in their letters, but she had no friends. (Whether this was her fault or that other women did not understand her is not relevant here.) Women wrote but not for publication and often looked on Cavendish with scorn for putting her writing out to the public. Lady Osborne and Lady Evelyn both condemned Cavendish for her outlandish behavior.[4] Therefore, Cavendish had to rely on what she knew to build a foundation for her writing skills. She had to rely on her interpretation of the

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information she learned from the men in her life to build a foundation for her ideas. Last, she had to rely on herself to determine how she wanted to be viewed by the contemporary public and her future readers. To help readers understand her better, she supplies more details in her Prefaces than the average writer. Cavendish tells us why she is writing and the obstacles she expects to face. She explains in more detail her mistakes and corrections; she gives more instruction to the reader on how to read her work, and she stresses that she writes because she has to create something that will last forever.

The Preface to *Poems and Fancies* introduces many of the tactics Cavendish uses to defend herself, not as a writer but as a woman writer. She begins with a note "To All Noble and Worthy Ladies," asking "Condemne me not as a *dishonour* of your *Sex*, for setting forth this *Work*" (A3r). This third person pronoun which keeps her at a distance from the women she addresses shows her standing alone, as different from other women, is soon abandoned in search for the solidarity with women not alienation. She knows that she will be "censur'd by my owne *Sex*; and *Men* will cast a *smile* of *scorne* upon my *Book*, because they think thereby, *Women* incroach too much upon their *Prerogatives*" (A3r-A4v). To gain the support of women she explains that writing would be profitable for women because it will keep them home safe from injury or malicious gossip. She asks the women to take her side in the battle against the men who would not let them use their reason. She appeals to the fact that women, when angered can be useful, and implores them that "in this *Battell* may your *Wit* be *quick*, and your

Speech ready, and your *Arguments* so *strong*, as to beat them out of the *Field* of *Disputes*" (A4v). The pronoun "your" is used in this section for the first and last time, and she begins to use first person pronouns to bring women inside her circle.

She moves from a general appeal to all women readers to just one woman in her "Epistle to Mistris Topp" and becomes more personal in her concerns.[5] She talks about her immediate family and her wish not to cause them any embarrassment or grief. She had something to say and felt it needed to be put out to the public. She apologizes to her friend for not asking whether she should publish the book or not. She states that it is easier to ask forgiveness for this transgression than to ask leave to publish, besides she just wanted her friends to know how she spends her "idle time." Cavendish states:

> For the truth is, our *Sex* hath so much waste Time, having but little imployments, which makes our *Thoughts* run wildly about, having nothing to fix upon, which *wilde thoughts* do not onley produce unprofitable, but indiscreet Actions; winding up the *Thread* of our *lives* in *snarles* on *unsound bottoms*. And since all times must be spent either *ill*, or *well*, or *indifferent*; I thought this was the *harmelessest Pastime*. (A5r).

This ties in with the "Preface to the Noble and Worthy Ladies" in the use of pronouns. There she used the third person when she addressed the fact that

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5 Mistress Topp, nee Elizabeth Chaplain was Cavendish's waiting maid. She married Francis Topp, a merchant who later became Newcastle's stuart.

writing was a good pastime for women, because it kept them safely at home and prevented them from spending all of their time gossiping. In this Epistle she repeats the same ideas but uses "my" and "I." She has become what she hopes others will see as truly good. She confides to Mistress Topp that the lure of the work took her mind off the gossiping. Without it she very likely would start harping on her neighbors and making fun of the way other women dress, or even step out of the female sphere and into politics.

Throughout all of the Prefaces and Epistles, Cavendish anticipates attacks from the critics. She begins by asking women to take her side when criticism arrives, as she knows it will, using tactics that allow her to be included in the circle of women, but at the same time to stand outside that circle. When she addresses the scientists or "Natural Philosophers" her tactics change, and she sounds more like the male writers of the time. She does not align herself with them as she has done with women. She keeps an optimal distance; she apologizes for her use of English instead of Latin and notes that because she does not know Latin, she cannot have read earlier works to give her any ideas. She then humbles herself before the reader:

> I cannot say, I have not heard of *Atomes*, and *Figures*, and *Motion*, and *Matter*; but not throughly *reason'd* on: but if I do erre, it is no great matter; for my *Discourse* of them is not to be accounted *Authentick*: so if there be any thing worthy of noting, it is a good Chance; if not, there is no harm done, nor time lost. For I had nothing to do when I wrot it, and I

suppose those have nothing, or little else to do, then read it. (A6r)

Cavendish is not saying that her work is not authentic, but the presentation of the work, because it is in verse form will not be considered authentic or scholarly. Since she has chosen a form she considers more appropriate to women, her tone here is light. She did not have anything else to do, so she wrote these poems and fancies, and if the readers does find anything good or bad in the work, then they also had some time on their hands to sit down and read it. Even though she has tried to mimic the male preface, too much of her female self is embedded in the text. First one finds in her tone the subtle irony which she aims at the male readers, and second, and she introduces a feminine analogy of a dinner party. She describes her work as not the best meat one can serve, but stresses that it is not dangerous. She apologies for not being able to serve "you on *Agget Tables*, and *Persian Carpets*, with *Golden Dishes*, and *Chrystall Glasses*, nor feast you with *Ambrosia*, and *Nectar*," but hopes the simple loaf of rye bread with the new butter will satisfy the reader (A7v). This is the first of many household analogies that can be found throughout her writings.

In the "Preface to the Reader," which comes last in the long line of Prefaces and Epistles in *Poems and Fancies*, she truly deviates from male writers by comparing her work to a female child that was created of her womb, with whom she has a material bond. Cavendish often uses the analogy of her writing as a child to strengthen her defense. In the first sentence she tell the reader that she has no children or estates to occupy her thoughts or time, and believes that is a

good reason not to condemn her for writing. The true reason, though, is the fact that the text is her child. She produced it in nine months and says that it is "*not* Excellent, *nor* Rare, *but* plaine; *yet it is* harmlesse, modest, *and* honest" (A8v). Her text becomes her daughter and what Cavendish would want for her daughter mirrors what she would want for her work.

> *True, it may taxe my* Indiscretion, *being so* fond *of my* Book, *as to make it as if it were my, Child, and striving to shew her to the* World, *in hopes* Some *may like her, although no* Beauty *to Admire, yet may praise her* Behaviour, *as not being* wanton, *nor* rude. *Wherefore I hope you will not put her out of* Countenance, *which she is very apt to, being* of bashfull Nature, and *as ready to shed* Repentant Teares, *if she think she hath committed a* Fault: *wherefore pity her* Youth, *and* tender Growth, *and rather taxe the* Parents Indiscretion, *then the* Child's Innocency. (A8v)

If the text is treated as a daughter, then she hopes people will be less harsh. Cavendish uses the tactic to appeal to both men and women, hoping a male will be careful in his criticism and hoping a female will see that writing can be an creative process that is equal to having children. Her tactic to describe the child as plain and simple is another way to gain acceptance and suggest that she loves it as a mother does any child. She employs it again in her next book, *Philosophical Fancies*.

The criticism that she was not the true author of the works came immediately. No sooner had she published *Poems and Fancies* than rumors began

to circulate. She addresses this problem in *Philosophical Fancies* published within weeks of *Poems and Fancies*. The fact that these two works were published so close to togther shows that she had to take up her defense quickly. In *Philosophical Fancies* she addresses the reader at the end of the work, and in prose and verse, which is a slight deviation. She sees the criticism of her work as a compliment to her wit. Cavendish states that, " If any thinke my Booke so well writ, as that I had not the Wit to do it, truely I am glad, for my Wits sake" (85). Even though her accusers have questioned her ability, she believes she is doing something right to attract attention. She defends her wit as her own, not the result of another man's wit. She then moves into verse and tells the readers that the work is her child.

> But be it bad, or good, it is my owne,
> Unless in *Printing* tis a *Changeling* grown.
> Which sure I have no reason for to doubt,
> It hath the same *mark*, when I put it out.
> But be it faire, or brown, or black, or wilde,
> I still must own it, 'cause it is my *childe*. (86)

This child is hers and hers alone. It might not be acceptable to everyone, but the child is from "harmless stock," conceived by her and dressed in a plain and simple style. The problem, of course, is that her work is not fashionable, it is even slightly "phantasticall." According to Cavendish, the world prefers ideas that are in fashion, even if they are ancient ideas, or even translations of ancient authors. This is the first of her defenses of style which she addresses along with spelling and grammar in her later prefaces.

In many prefaces of the time the author apologizes for his style and any

errors, but it is usually a short statement. Cavendish elaborates on the errors, ill construction, and hasty writing one will find in her works. In the *World's Olio*, she adds a short note about the construction of the text and the fact that she did little or no revision.[6] In a epistle added before Book Two of the *Olio* she addresses some of the problems her critics found. She begins by noting that even "weak writings of men get Applause" (O3r). Cavendish believes that it is not the wit or worth of what is written but the style of the writing that gets the praise.

> I find I live in a Carping age; for some find fault with my former Writings because they are not Grammar, nor good Orthography; and that all the last words are not matched with Rime; and that the Feet are not in just Numbers: As for the Orthography, the Printer should have rectified that; for I think it is against Nature for a Woman to spell right, for my part I confess I cannot; and as for the Rimes and Numbers, although it is like I have erred in many, yet not so much as by the negligence of those that were to oversee it; for by the false printing, they have not only done my Book wrong in that, but in many places the very Sense is altered...and many other words they have left out besides, and there is above 2 hundred

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6 For a complete overview of her revisions see Jim Fitzmaurce "Fancy and the Family: Self-Characterization of Margaret Cavendish," and "Margaret Cavendish on Her Own Writing: Evidence fro Revision and Handmade Correction." Fitzmaurce discusses Cavendish's extensive revision process. Though it is true that she did little or no revision to the content of her work, she did make handwritten revisions in the spelling and word choice in all of her works, and most seem to be done in her own hand.

of those faults, so that my Book is lamed by an ill Midwife, and Nurse, the Printer and the Overseer. (91)

These faults should have been fixed by those overseeing the printing of the text; she could not do much about them. In *Philosophical and Physical Opinions* she discusses the poor construction of the *Worlds Olio*, but takes exception to those who find fault with her work because it is Natural Philosophy. She takes the slights, and the unflattering remarks to heart, as if "a friend that should be hurt or lamed by some unhappy accident" (*PPO* A4v-A4r). She places blame for the errors on her printer but also on herself. She admits to the fact that she is new to this type of knowledge, "and not having a clear light I might chance to stumble in dark ignorance on molehills of errors" (A4r). While in the *Olio* she placed a majority of the blame on the printer, in *Philosophical and Physical Opinions* she takes responsibility along with the printer for the mistakes. However, in both works and the works that follow, she places more emphasis on the faults her critics have found with her style and content.

In the *Olio*, Cavendish admits that she is not a scholar and knows little of the rules of grammar, but "that little I have heard of it, is enough for me to renounce it; for if I have any wit, it is so little that it would be lost in scholastical Rules" (O4v). If she did follow these rules she would sound pedantic, and a woman sounding this way is even worse than a man. The common or the young writer strictly follows the rules of grammar, but "those that are nobly bred have no Rules but Honour, and Honesty, and learn in the School of Wisdom to understand

Sense" (O4v). She is a writer who will express herself "sensibly and freely with a gracefull negligence, not to be hidebound with nice and strict words, and set phrases, as if the Wit were created in the Inkhorn, and not in the Brain" (O4v). Cavendish defends herself first as an aristocrat whose material virtues mitigate petty rules, then she turns her short comings into a positive aspect of her writing. According to her, grammar hinders and constricts free flowing thought. She argues that

> Language should be like Garments, for though every particular Garment hath a general Cut, yet their Trimmings may be different, and not go out of the fashion; so Wit may place Words to its own becoming, delight, and advantage, and not alter Language nor obstruct the Senses; for the more liberty we have of words, the clearer Sense delivered. (O4v)

The use of the clothing image is important in Cavendish's emerging writing style, and is usually associated with language. The analogy suggests clothes are alike in many ways, but each person decides how to wear them and what accessories to add. Like the common cut of clothes, language is common to all English speaking people, and it too is not used the same way by everyone. It is up to the speaker or writer to decide how one will use the language to convey thoughts and ideas, what will be added to the language to set it apart from others. Just as society judges women by the appearance they present to the public, Cavendish understands she is judged by her writing. Her firm confidence in the fact that writing is her public persona is one aspect of Cavendish that does not change. Her idea of style does

not waver and she builds on the metaphor of clothing and fashion to create a thread of constancy that is found throughout her works.

We find the analogy of language as clothing again in one of the many Prefaces to *Nature's Pictures*. Cavendish states that "I have not endeavoured so much for the eloquence, and elegancy of speech, as the naturall and most usuall way of speaking" (D3v). She stays away from what she earlier calls the pedantic approach to discourse. She admits it is common and knows that some will say the she has "dressed the severall subjects of my Discourses too vulgar, or that the Garments, which is the language is thread-bare"(D3v). Again the metaphor is used to describe her language, but this time the garment and the language are thread bare or simple, "not drest up in constraint fashions, which are set phrases, nor tied up with hard words, nor bumbast sentences" (D3v). Now her language is loose, free flowing and not restricted by the set fashion of rhetoric. Cavendish does not adhere to the standards of poetry that require an exact number of feet and measures. In the Preface to *Sociable letters* she defends her poetry stating that "Rimes and Numbers are only as the Garments, and not as the Body of Wit" (C1r). Rhetoric or form are just the garments, the outer wear of the true substance, and for Cavendish, the male writers of the time lean towards elaborate dressing over plain and simple styles. She states that she has written all of her books as plainly as possible, and if there are readers who cannot detect the underlying substance, she can not help them because she is not capable of giving them more wit and understanding (C2v).

Her plain style is addressed many times in her Preface and Notes to the Reader, but it is *Observations upon Experimental Philosophy*, where we find her strongest attack against those writers who have more style than wit. She again addresses her education, reminding the reader that her learning is sparse, and aligning herself with all women because they were not allowed "to be instructed in Schools and Universities" (c1v). Even though women are fully capable of learning, they are not able to attain it through the channels opened to the men, but according to Cavendish "learning is artificial" (c1v). Since she adheres to common sense writing, she sees rhetoric as a defect that makes men's writing seem artificial. She argues that when she began to read other authors, she was so

> troubled with their hard Words and Expressions at first, that had they not been explained to me, and had I not found out some of them by the context and connexion of the Sense, I should have been far enough to seek; for their hard words did more obstruct, than instruct me. (C1v)

She swears to her readers that she will not write like this. She understands that male writers write to each other and to exclude the general public. Whereas only scholars can understand male philosophers, she will write for everyone so that her work "may better [be] understood by all, learned as well as unlearned" (c1r). A simple style allows the reader to concentrate on her ideas instead of trying to figure our hard words and phrases. Cavendish wants the world to view her works more as "naturally wise than artificially foolish" (C1r). In order to accomplish she goes on to tell the reader how to read her natural philosophy.

In the last of many Prefaces and Notes in the *Olio*, she issues a stern warning. She does not want people to read her work in a judgmental or harsh way. Clearly she is responding to the criticism of her first published works and is admonishing those critics. To understand fully what she is saying, she needs to be "read well" because an ill reader will misconstrue what she has to say. She states that the "very sound of the Voice will seem to alter the sense of the Theme; though the Sense will be there in despight of the ill Voice or Reader, but it will be concealed, or discovered to its disadvantage" (A7r). According to Cavendish it is the reader not the author who has the greatest effect on a work. A work can sound good or bad according to the reader. A good reader can "give a grace to a foolish Author, and those that read ill, disgrace a wise and a witty Author" (A7r). She is also concerned that if the reader skims the works and only reads parts of it out of order or at different times her meaning will be lost. In *Observations upon Experimental Philosophy* she asks the reader to read the book from beginning to end because she has discovered that "when I read not a Book thoroughly from beginning to end, I cannot well understand the Author's design, but may easily mistake his meaning" (c2v). Books such as hers in which all of the parts depend on each other should be read from start to finish. Cavendish then recommends that the reader takes time to look at her other works in the order in which they were written.

An important aspect of the standard apology defends her right to an opinion, the right to express that opinion. In *Poems and Fancies* she tells

Mistress Topp that she has "an Opinion which troubles me like a conscience" (A4r). A philosopher's main goal is to express personal opinions about nature and to show the world how they think nature works. She aligns herself with them instead of with scholars who, she believes, only teach the opinions of others. True philosophers may be original, because it is impossible to know the cause of things in nature. It is all a guessing game, and one opinion is just a good as the next. She believes that Natural Philosophy should be "used as Delight and Recreation in Mens Studies, as Poetry is, since they are both Fictions and not a Labour in Mans Life" (*WO* 159). Her defense of opinion becomes prominent in the Prefaces to her more mature works of Natural Philosophy published after her return to England. In 1664, she published *Philosophical Letters*, which she begins with a dedication to her husband. Cavendish points out that her opinions are new and different from any other's. This means that they will not be understood as readily as those philosophers who just repeat the opinions of the ancients. If her opinions happen to contradict others then it is normal, since most opinions do not adhere to the same line of reasoning (a1r-a2v). She restates her stance in the Preface to the Reader, and goes further to say that she welcomes those who can contradict her opinions. Cavendish admires those men with whom she can find argument and wishes the readers not to look at her work as a defamation of them, but as love for truth (b2v).

This search, not so much for answers, but for truth or the "probability of truth," is explained in more detail in the Preface to the Reader of *Observations*

upon Experimental Philosophy which was first published in 1666.[7] Her search for truth constitutes a new philosophy that is not encumbered with the thoughts and opinions of the ancients. She has delved into Nature to form her opinions, and she wishes readers to do the same. Cavendish understands that nature can not fully be known, but since the basis for her arguments is her sense and reason, she believes that her opinions are close to the natural truth (c3v). She clarifies this when she states that

> When I say, that Sense and Reason shall be the Ground of my Philosophy, and not particular natural effects; My meaning is, that I do not intend to make particular Creatures or Figures, the Principle of all the infinite Effects of Nature, as some other Philosophers do; for there is not such thing as a Prime or Principle Figure of Nature, all being but Effects of one Cause. (d2v)

The one cause for Cavendish is self moving matter.[8] The concept of self-moving matter is important, not just to Cavendish's natural philosophy, but also her concept of women and writing. Where self-moving matter comes together in sympathetic harmony it creates something lasting and strong. For normal men and women, children are their creations which live on for generations. For Cavendish, who did not have any children, her works are her posterity. Like the

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7 There is little change in the preface of the 1666 edition and the 1668 edition. The reference in this paper are from the 1668 edition.

8 Self-moving matter will be examined in more detail later.

atoms, her writing is the creation of something lasting and strong.

Cavendish is not subtle about her wants and needs when it comes to her search for everlasting fame. She is the only one writing at this time who admits this. In *Poems and Fancies*, Cavendish states that

> if my *Writing* please the *Readers*, though not the *Learned*, it will satisfie me; for I had rather be praised in this, by the *most*, although not the *best*. For all I desire is *Fame*, and *Fame* is nothing but a *great noise* and *noise* lives most in a *Multitude*; wherefore I wish my *Book* may set a worke every *Tongue*. (A3r)

Her goal is not praise of scholars, but of the common reader. If this group sees in her any spark of wisdom, then she will gain fame. Fame continues longer when it circulates among the most people. Fame for Cavendish is not lasting glory, but lasting recognition.

In her note to the natural philosophers she shifts her analogy from children to the atoms she explains in her poetry. Even though the atoms are the smallest objects known, they comprise the universe. She hopes that they please her readers because her desire is "as big as the *World* they make" (*P&F* A6r). She then becomes an atom that is still in motion, not yet in sympathy with any other atoms, so she is in "a confus'd heape, till I heare my *Censure*" (A6r). If she receives praise then her atom will be fixed in the world, but if she is condemned for her work, the atom would become nothing. The catch here is that matter can not be destroyed, and once her works are in the world, they can never be removed.

Cavendish realizes that publishing her work enables it to survive. This is one reason she takes special effort to supply copies of her work to the universities. In *Philosophical and Physical Opinions*, Cavendish states,

> who knows but after my honourable burial, I may have a glorious resurrection in following ages, since time brings strange and unusual things to passe, I mean unusual to men, though not in nature: and I hope this action of mine, is not unnatural, though unusual for a woman to present a Book to the University, nor impudence, for the action is honest, although it seem vain-glorious, but if it be, I am to be pardoned, since there is little difference between man and beast, but what ambition and glory makes. (B3r)

With her books safely tucked away in the university libraries, she can assume that if she is not appreciated in her own age she will be appreciated in a later age. She understands that a woman writing is unusual and bold, but her work is an honest attempt to be included with other writers. As she states in *Nature's Pictures,* men gain fame through many different venues including waging war and holding public office, which are denied women, and for participating in which women would be condemned. Her "ambition is restless," and she dares to do one thing open to women. Writing is not an ordinary way for women to achieve success, and it will not just bring fame, but an "extraordinary fame" (C1r).

Cavendish knows that writing is the only way she, as a women, can gain fame. Her ambition not only alienated her contemporaries, but also modern

readers who appear to think desire for fame unseemly.[9] In her last work, *The Description of a New World, called the Blazing World*, she states in the Preface that

> For I am not Coventous, but as Ambitious as ever any of my Sex was, or can be; which makes, that though I cannot be Henry the Fifth, or Charles the Second, yet I endeavour to be Margaret the First. (A4r).

This statement has been used both to condemn and praise her. In reality it establishes the main concept of *Blazing World*. The ambition to be the "First" should only be seen as figurative. Cavendish understands her place in the social order of things and would never consciously disrupt that order. In the world of fiction, though, she can disrupt the order and create worlds where she is mistress. She continues with references to great conquers of the world and admits that as she could never be one, she must create a place she can conquer and control. Cavendish is not out to control this world, just a small part of it, one's own corner where women can and should write. The world she creates through writing is a world anyone can create, male or female, so she stresses to women that fiction and writing is part of their very nature. Fame, a sort of child, and children may both live on for women as well as men, but to achieve it one must take action. Neither a lack of education or being a woman should stop one from attempting to write and if wit and fancy creates something original then it will lead to fame.

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9 Her need for fame and the spotlight was often condemned because of her eccentric ways. See Jean Gagen, Dorothy Osborne, Mary Evelyn, and Samuel Pepys.

Cavendish knows men will ridicule women for writing. Because they do not approve or understand what women write, they will try to control it, just as they try to control nature which they also do not comprehend. In a "Preface to Poets" that begins the second section of *Poems and Fancies* she addresses the men.

> that Women *writing seldome, makes it seeme* strange, *and what is* unusuall *seemes* Fantasticall, *and what is* Fantasticall, *seemes* odd, *and what seemes* odd, Ridiculous: *But as* Truth *tells you, all is not* Gold that glisters; *so she tells you, all* is not Poore, *that hath not* Golden Cloaths *on, nor mad, which is out of* Fashion; *and if I be out of the* Fashion, *because* Women *do not generally* write; *yet, before you* laugh *at me, let your* Reason *view strictly, whether the* Fashion *be not* usefull, gracefull, easie, comely, and modest: *And if it be any of* these, *spare your* Smiles *of* Scorne, *for those that* are wanton, carelesse, rude, *or* unbecoming: *For though her* Garments *are* plaine, *and* unusuall, *yet they are* cleane, *and* decent. Next, Truth *tells you*, that Women *have seldome, or never, (or at least in these latter Ages) written* a Book *of* Poetry, *unlesse it were in their* Dressings, *which can be no* longer read *then* Beauty lasts. (121-122)

Cavendish returns to her clothing metaphors. The creative motion of women may seem strange to men, but as much care is given to women's poems as to masculine verse. The creative processes of both men and women follow a logical progression. As women are new to this process, female fancies may seem strange

or out of fashion, according to men, and even some women. Nevertheless, with fashion, as with literature, what is in style, at the moment may either become outmoded or become a classic. If men come across a creative work by a woman that seems inappropriate for a female, if, for example, the verse does not involve common feminine themes or is not written in "their dressings," it should not be scorned but embraced as a possible classic. Then, it will have every chance of surviving.

Throughout the introductory Prefaces, Notes, and Epistles, Cavendish mounts a reasonable defense, starting with the testimony of her husband, moving to her own testimony that she is the true author of her works, then to her tactic of giving higher priority to her thoughts and "natural wit" while, at the same time humbling herself. This shows a major difference between her and the men who also write in defense of their work. Where they apologize for their shortcomings, she celebrates her ability to reason out the natural world on her own. Where they defend their weak points as human failings, she celebrates her weak points as an aspect of growth and learning. She stresses her ability because it is always in question, whereas men do not have to worry about their readers questioning their abilities, even if they are writing about a subject that is out of their field. Cavendish brings, to all of her work, a female touch. Hilda Smith states that "it is difficult to imagine any individual thinking more often about how being a women influenced her life or how being male determined the life of men...the theme was a constant in her works" (80-81). Though Smith goes on to condemn her opinions,

it is a telling statement and one that sums up Cavendish's defense not only of her work, but of the work of all women. Her defense in the prefaces is important because it is a defense of women, a defense of nature, and a defense of female creativity.

Chapter Two
The Arguing of a Feminine Mind: Cavendish and Natural Philosophy

Cavendish's Prefaces indicate the inception of her idea of female creativity, and are written to formulate her ideas and justify herself as a writer. Through the appeal to both men and women she establishes her belief that all humans are capable of learning. In her eyes a formal education is not necessary, but through close observation of nature a reasonable mind could come to understand the effects of nature. She hopes to write so all will understand but because of her feminine style, she often perplexes her readers with discursive imagery that "runs wild about" and shows more "*courage*, then it doth of *Feare*" (*P&F* 110).

If she had remained a literary amateur, the devoted biographer of her husband, and an eccentric scribbler, she might have been treated more generously by her contemporaries and been less a subject of ridicule by later critics. However, she shunned the traditional role of the closeted female writer and pursued the newest thought of her time, natural philosophy. She begins as a dabbler, putting her ideas of atomism into verse and finding that nature has an infinite variety that she had never noticed. She begins her self education by listening to those around her, eventually reading some of the contemporary natural philosophers. As she attempted to understand the philosophical systems, she found their work not only oppressive but faulty in methodology. Cavendish was

highly selective in what she took from contemporary natural philosophers. However, she turned these ideas to her own purpose, and developed a theory of matter and motion that established a system of equality in knowledge for all people. In doing so she challenged what has become the dominant and predominantly masculine discourse of later Western thought.

Cavendish's writings are problematic. Most contemporary critics dismiss her scientific work, and indeed it is difficult for a modern reader to take her science seriously. While some of her ideas were mainstream, she did not support the experimental method of science, faith in which has come to dominate Western culture.[1] Francis Bacon, René Descartes, Robert Boyle, and Thomas Hobbes are all familiar to us today because they paved the road for later experimental science. Those who disagreed with them have fallen by the way side or only recently been rediscovered.[2] Cavendish's science, too, deserves reconsideration, not for the truth of the content but for what it tells us of her and her approach to creativity. Bowerbank wrote that, though Cavendish is dismissed because of her "ponderous

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1 See introduction, Gereld Meyer, *The Scientific Lady 1650-1760*; Sara Mendelson, *The Mental World of Stuart Women*; Lisa Sarasohn, "A Science Turned Upside Down"; Sophia Blaydes, "Nature is Women"; Maria de Santis, *Projecting a New Science*; John Rogers, *The Matter of Revolution*; Jay Stevenson, "The Mechanist-Vitalist Soul of Margaret Cavendish"; Eve Keller, "Producing Petty God"; Deborah Bazeley, *An Early Challenge to the Precepts and Practice of Modern Science*; and Rebecca Merrins, "A Nature of 'Infinite Sense and Reason.'"

2 For information on the scientific minds of the 1600's that have resurfaced see Richard Kroll, *The Material World*; Robert Kargon, *Atomism in England from Hariot to Newton*; Barry Brundell, *Pierre Gassendi*; Lynn Joy, *Gassendi the Atomists*, and E.J. Dijksterhuis, *The Mechanization of the World Picture*.

tome(s), nevertheless, "anyone who has ventured to read ten pages of Cavendish's work know[s] that her method, or rather or defiance of method is deliberate" (393). This deliberate method is the start of what I call her theory of the female imagination. One could look seriously at her science to discover threads of agreement or argument with the males who have published, but it would be wiser to look at her science for threads of her emerging theory of feminine creativity.

In the last of her scientific works Cavendish tells the readers of her experience with writers of natural philosophy and the difficulty she had with their language, especially when they wrote in English. She states that they "did more to obstruct, than instruct me" (*Obs* c1v). She goes on to say that she will write in a plain style that will more likely "prove naturally wise than artificially foolish" (c1r). Her work will be inclusive; it will reach interested men and women; it will be accessible.

Language designed to exclude the laity was and still is the language of science, philosophy and society. Luce Irigaray recognizes that philosophical speech in the western world is discourse that "constructs the discourses on discourse" (74). Bacon and other male mechanical scientists of the Seventeenth Century set this standard for scientific language which is now pervasive.[3] Irigaray believes it should be challenged because women have been repressed by it.

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See Merchant, *The Death of Nature*; Evelyn Fox Keller, *Reflections on Gender and Science and the Secrets of Life*; Sandra Harding, *Discovering Reality*; and Brain Easlee, *Science and Sexual Oppression*.

Women must delve deeper into the philosophical discourse that reduces everything to the same masculine norm. Women must first recognize the subjugation found in the philosophy and work to rewrite it, not as "other" but as an active participant in the discourse. If a woman works to destroy this "discursive mechanism," then she can "recover the place of her exploitation by discourse, without allowing herself to be simply reduced to it" (76). Instead of trying to reverse their position in the philosophical discourse by challenging the sameness, women must actively practice the difference. While men write to men, women must write to both men and women and in a style that challenges the exploitation. Irigaray searches for a writer to challenge the old discourses, and jam the "theoretical machinery itself" (78) in order to find discourses that do not accept the traditional language, methods and rhetoric of the dominant males. Cavendish is the writer that Irigaray envisions when she states that this woman is:

> indefinitely other in herself. This is doubtless why she is said to be whimsical, incomprehensible, agitated, capricious. . .not to mention her language, in which "she" sets off in all directions leaving "him" unable to discern the coherence of any meaning. (29)

Cavendish is the she who writes in every direction and confounds men to such an extent they do not know what to do with her or her writings. When she first began to publish she shocked the polite world, and they responded with harsh words.

When she challenged the discourse of the Royal Society, Pepys labeled her mad.[4] She lived up to their expectations as an eccentric who baffled them not only with her works but with her appearance and behavior. Only Cavendish understood her role in the scientific debate of the time.[5] Not only does she satisfy her insatiable need to be heard, she adapts the new scientific thought to her own purposes and modifies its discourse to her own feminine ends. Her role was to conduct rational inquiry into the mysteries of nature using feminine insights and basic common sense.

Cavendish lived in an age of change and disorder; while the Civil War raged throughout England, she lived in exile on the continent. Everything she had known was gone or in disarray. Cavendish was not the only one to feel a loss of control; many of the writings that appeared after the reign of Elizabeth the First reflected the loss of order people were experiencing. As John Donne says in his poem, *An Anatomy of the World*,

> And the new philosophy calls all in doubt,
> The Element of fire is quite put out;
> The sun is lost, and th'earth, and no man's wit

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4 Pepys does not mention any of her scientific writings, but degrades the one piece of writing that would be considered acceptable for a woman to write. On reading the biography Cavendish wrote of her husband, Pepys wrote that it "shows her to be a mad, conceited, ridiculous woman, and he an ass to suffer her to write what she writes to him and of him" *Diary*. ed. H.B. Wheatly (1949) vii, pp. 343-4.

5 See Merrins, "A Nature of 'Infinite Sense and Reason.'" She describes Cavendish's role in scientific debate as third party "pest" who encouraged and furthered the scientific debate just by her presence. Merrins shows that Boyle's *A Free Inquiry* is a direct answer to Cavendish's *Observations on Experimental Philosophy*.

Can well direct him, where to look for it.
And freely men confess, that this world's spent,
When in the planets, and the firmament
They seek so many new; they see that this
Is crumbled out again to his atomies.
'Tis all in pieces, all coherence gone
(ll. 205-213 p. 212)

With new discoveries, beliefs that had been common assumptions disappeared. As the new philosophers continued to disrupt the known and looked for more unknowns, the changes they brought about were reflected in both published and unpublished works. According to Christopher Hill, more than ten percent of the books found in the *Short Title Catalogue* between the years 1475 and 1640 deal with natural science and ninety nine percent of them are in English (16). One can find books that deal with everything from recipes for curing the most common ailments to detailed mathematical and astronomical treatises. Yet, at the time of the Civil War, publication not only of natural science but all kinds of works came to a halt. Strict censorship allowed only the most conservative religious works to appear. Hill points out that Herbert, Herrick, Milton, and a few minor poets may be found, along with four or five playwrights. He then points out that "apart from Milton and Herrick (whose poems remained mostly unpublished) there was little originality; poets drew on the traditions established by Spenser, Jonson, Donne, and Shakespeare" (11). Nevertheless, in English aristocratic circles, writers produced volumes of natural philosophy that circulated among themselves, rarely venturing out into the public domain.

This time period has been labeled the "scientific revolution," but many

recent critics are quick to point out that the term is just that, a label. It was not a revolution in the sense of a defining moment that changed the way humans think, but as Steven Shapin states, "a diverse array of cultural practices aimed at understanding, explaining, and controlling the natural world" (3).[6] Most sixteenth and seventeenth century natural philosophers thought they were creating something new and different. What they considered new were the practices they used to gain knowledge and the methods used to legitimate their work (5). Shapin sees four aspects of change in knowledge and method:

> First, the mechanization of nature...second, the depersonalization of natural knowledge...third, the attempted mechanization of knowledge...making...explicitly formulated rules of methods that aimed at disciplining the production of knowledge by managing or eliminating the effects of human passions and interest; and fourth, the aspiration to use the resulting reformed natural knowledge to achieve moral, social, and political end. (13)

Mechanization of knowledge allowed the experimenter control over the research environment. With the introduction of better machinery to investigate nature, new parameters and rules changed the way knowledge could be gained. These devices,

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See Shapin, Herbert Butterfield, *The Origins of Modern Science 1300-1800;* Rupert Hall, *The Scientific Revolution 1500-1800*; Maria Boas Hall, *The Scientific Renaissance*; and Robert F. Jones, *Ancient and Moderns*; The old school of scientific critics see the "revolution" of the sixteenth century as the turning point in ideas, and methodology and give major credit to Bacon.

the telescope, microscope, and air pump, allowed many different people to perform the same experiment. This led to the establishment of rules for experiments, that if followed, should produce the same results. Nature lost "her" capacity of "purpose, intention, or sentience" (37), and was viewed as "irreducible properties of matter and its states of motion" making "the interpretation of nature like the interpretation of machines" (46). By reducing nature to a machine that can be observed, the conceptualization of an organic feminine life giving force is all but destroyed (Merchant xvi). With this reduction of the feminine personification of nature to a passive inert object, the new methodology excludes women from its practices, reducing them to objects of reproduction not production.

As the Copernican system became accepted many philosophers found the beliefs of the ancient Greeks inadequate. Atomism, what many refer to as mechanical philosophy, developed in response to the Aristotelian science taught in all of the Universities. Robert Kargon gives a view of Aristotelian belief using Scripion du Pleix's *Corps de Philosophie.*[7] There are two types of matter, prime and secondary. "Prime matter is the 'first principle of natural things.' It is the principle of pure potentiality or receptivity, without any forms or qualities whatever" (2). Prime matter can not be associated with any particular element or

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According to Kargon, Scipion du Pleix's, *Corps de philosophie* (Geneva, 1645), and Johannes Magirus', *Physica Peripatetica* (Frankfurt, 1597) were both widely used in the English Universities during the sixteenth century.

form. It is the potential of the qualities of matter to create a form or object. Secondary matter is matter found in nature. "Natural bodies are composed of the four 'elements' [air, earth, fire and water] which are formed from the union of four primary qualities in matter [hotness, coldness, wetness and dryness]" (2). The character of the elements depend on the forms of quality and the union with secondary matter (2). Each of the elements had a "natural motion" according to which it moved. As Shapin explains "bodies naturally moved so as to fulfill their natures, to transform the potential into actual, to move toward where it was natural for them to be" (29). More important though, Aristotelean nature was "far superior to human artifice, and it was impossible that humans should compete with nature" (31). Human art (technology) can imitate nature and help nature's work, but it could never replace nature. Rejection of this notion impelled late sixteenth century natural philosophy, and the work continued well into the eighteenth century (31). Bacon and Descartes argued that mechanical art was no different from objects formed in nature. So long as an effect was produced, it did not matter whether it came from nature or human art (31-32). Through the use of machines, they were not merely imitating or helping nature but controlling and manipulating it to achieve desired effects.

Many credit Francis Bacon with establishing a "new science" that would ultimately bring order back to the universe.[8] His goal was to replace ancient

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For Bacon and the "new science" see footnote # 6.

beliefs, the contemplation of abstractions, with a hands on approach that would allow humans to manipulate nature to produce desired results. The introduction of an experimental method that could be conducted by many to achieve the same results was the beginning of man's expressed interest in the control of nature. No longer would one contemplate the great mysteries of nature, one would invade "her" hidden secrets to understand "her." At this juncture Bacon still envisioned a world animated by a female soul which was the internal source of activity in nature. The atomist would later replaced this with a mathematical system of atoms in motion derived from an external source that was not feminine. Bacon's goal was to create new ways to investigate and control nature, and his use of controlling and subjugating metaphors became the starting point for those that followed.

Bacon's method for investigating nature introduced not only a new theory of scientific practice, but also a new language of science. Since the earliest philosophers, humans have attempted to understand Nature, but not until mechanical science gained a foothold did "man" see the possibilities of taming nature and making "her" do "his" bidding. According to Carolyn Merchant

> The brilliant achievement of mechanism as a world view was its reordering of reality around two fundamental constituents of human experience–order and power. Order was attained through an emphasis on the motion of indivisible parts subject to mathematical laws and the rejection of unpredictable animistic sources of change. Power was

> achieved through immediate active intervention in a secularized world. The Baconian method advocated power over nature through manual manipulation, technology, and experiment. (216)

Bacon is an interesting character in the drama of anti-feminism created by the "new science." As he was one of the age's most advanced thinkers, he has become the target of modern feminists both in and out of the scientific arena.[9] Merchant firmly lays the blame for the domination of nature on Bacon. One reason for this is the nearly divine status he was accorded by the Royal Society at its inception; in Sprat's authoritative *History of the Royal Society*, 1667, one finds a testimony to Bacon's greatness. The next reason is, of course, the language Bacon uses to introduce his new method to the readers. Merchant finds in almost every one of his works language that gives "man" permission to dominate female nature. Nature must be "bound into service," put "in constraint," and "molded" (169). The new methods introduced by Bacon interrogate nature through a dissection of all "her" parts and "'by art and the hand of man,' nature can then be forced out of her natural state and squeezed and molded.' In this way, 'human knowledge and human power meet as one'" (171). From this conception that "man" controlling nature through experimental observations emerged many atomistic systems. Thus nature and knowledge were controlled by men, and with the inception of new theories nature was stripped of a feminine creative role.

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[9] For the feminist critics and Bacon see footnote # 3.

Margaret Cavendish found the new masculine systems of atomism to be detrimental not only to nature but to all women. Cavendish's science has been called difficult and "ponderous," but it is not that difficult to unravel. The main problem stems from the fact that one cannot label her a true atomist, even a vitalist, without running into huge variations in each of the systems within her work. She begins with a system that involves matter, motion and the void, then refines her ideas to reject a void and the existence of atoms. However, the one strand of thought that stays consistent is her notion of motion activated by rational and sensitive spirits. Cavendish retains the female soul of nature but disguises it in her ever changing systems. Throughout her changes one can see influences of other natural philosophers on her developing systems. Using Bacon as a starting point it is possible to piece togther her systems of natural philosophy.

According to Kargon, Bacon at first had little to do with atomism. From 1603 until he wrote *Novum Organum*, he favored the atom, a void and motion as important components of nature, but he rejected these theories when he discovered they were not compatible with his new methods (44-45). The *a priori* construction of atomism was not conducive to laboratory work or human observation and sense perception. Bacon found a lack of certainty in the Aristotelean and Epicurean systems. In response to the controversies surrounding both, he asserted that "works as well as Hypotheses" should be produced (47). Like Cavendish, he thought the atomists of the time had simply exchanged one ancient system for another which did not advance the goal of natural philosophy

(47). His new method, outlined in the *Novum Organum*, was a mechanical process of rules that would not allow the mind "to take its own course, but guided at every step; and the business be done as if by machinery (Bacon 61). According to Bacon

> There are and can be only two ways of searching into and discovering truth. The one flies from the senses and particulars to the most general axioms, and from these principles, the truth of which it takes for settled and immoveable, proceeds to judgement and to the discovery of middle axioms. And this way is now in fashion. The other derives axioms from the senses and particulars, rising by a gradual and unbroken ascent, so that it arrives at the most general axioms last of all. This is the true way, but as yet untried. (71)

Though each path goes from particulars to generalities, the first does it quickly through the senses with little experimental observation, but the second allows one to reach the generalities methodically and gradually with more observational and experimental facts. In order to accomplish this, the notion that matter can exist without form (the atom) can not be true because form or gross matter along with an "activating spirit" is the cause of all natural operations (Kargon 48-49). Therefore natural operations or motion of a form came from an activating spirit, not from the collision of atoms being thrown about a void.

Bacon's activating spirits are thin, invisible and have a material quality much like air, but differ from air because they have perception (49). Bacon's

spirits come in two forms: the animate and inanimate. The animate or "vital" spirit moves continuously and the inanimate spirit is surrounded by heavy bodies which hinders its motion. For Bacon the animate spirit works from the desire to replicate itself and to attract like spirits (50). At the early stages of her thought, in 1655, Cavendish's system closely resembles Bacon's. She too rejects the void, and her concept of motion comes from rational and sensitive spirits that, like Bacon's, are airy and have perception. Though she modifies her system in later years, this one idea remains constant and become an important aspect in her theory of creativity.

While Bacon wrote what has been considered the definitive work on experimental science, the true work of the "new science" was taking place in the homes of prominent aristocrats. Cavendish's exposure to the new systems came from one such circle that included her brother-in-law Charles Cavendish, Thomas Hobbes, John Pell, Kenelm Digby, and Walter Charleton. This intimate circle grew to include the French philosophers Rene Descartes and Pierre Gassendi who would greatly influence Margaret Cavendish's future thoughts. Through her own creativity she developed a system from the intellectual dialogue that surrounded her. In Descartes she found someone she could disagree with on every level; in Gassendi she found some common ground and in Hobbes she identified a kindred spirit who, like her was rejected. Just as she was influenced by her immediate circle, they were influenced by an earlier aristocratic group.

According to Kargon the rise of Atomism was first impelled by a group of

men under the patronage of Henry Percy, the ninth Earl of Northumberland, in the late sixteenth century. The circle of men included Thomas Hariot, Walter Warner, Nicholas Hill, John Dee, and Thomas Diggs (6-8). Even though the Northumberland circle published very few tracts, they did influence other circles and their ideas spread and were revised. They were among the first to combine Copernicus with Democritus, Epicurus, and Lucretius (7), using matter and motion not only to explain machinery, but also physical realities that were not as noticeable (27).

The theory of atoms derived during this time combined many different notions of the size, shape and motion of matter. Not everyone agreed on all aspects of atomism, but it became the main source of new thought that would allow people to "penetrate" the secrets of nature. The atomists, in complete opposition to Aristotle, saw the universe as infinite, and believed "the matter of which it was composed was divisible only to a basic indivisible–the atom" (25). Thus, the expanding and moving universe no longer ended at a fixed point. It became infinite and the matter that composed the universe became finite, divisible to a certain point. Kargon explains that

> the universe is composed of atoms with void space interposed. The atoms themselves are eternal and continuous. Physical qualities result from the magnitude, shape, and motion of these atoms, or corpuscles compounded of them. The role of motion was central. (26)

From the Northumberland circle the ideas of atomism spread to the Cavendish

group, the Newcastle circle. Kargon credits them with the advancement of atomism in England because of their association with three central theorists, René Descartes, Pierre Gassendi, and Thomas Hobbes (42).

Even within the mechanical systems of these three great thinkers there was division. All three used the atomism of the Democritean-Epicurean system as the basis for their philosophy. Barry Brundell describes an ancient system that revolves around the theory that primary matter is composed of eternal and infinite atoms existing within a void and possessing an innate ability to move (56). Since the system allowed for infinite space and infinite atoms within a finite cosmos, then it also allowed for an infinite number of worlds to exist (65). The existence of atoms, a void and the motion of the atoms became the main points which each of the three philosophers pulled from the ancient system and used to further their own goals.

Descartes, Gassendi, and Hobbes brought new insight to the ancient system because all three were first and foremost mathematicians. They sought to explain everything in nature in mathematical and physical terms. As E. J. Dijksterhuis describes it, Descartes believed that

> Natural science is mathematical in character not only in the wider sense that mathematics ministers to it, in whatever function this may be, but also in the much stricter sense that the human mind produces the knowledge of nature by its own efforts in the same way as it does mathematics. (404)

Through the use of math, Descartes set up a system that shows the cosmos as a

world with infinite extensions that consist of a primary matter which is the same throughout and infinitely divisible (409). For Descartes, a plenist, primary matter has three shapes that are formed through an evolutionary process and determined by motion. These shapes include:

> a fine dust which gets between interstices of larger corpuscles and permits no void, larger but still subtile round particles (matière subtile or aether) and finally, relatively larger particles composing gross matter. The three 'elements' differ only in size and motion. (Kargon 64)

The size and the external motion of the primary matter are responsible for the building of other forms. As the three types of shapes move about space and collide with each other, new forms are built. Motions are joined and transferred, and the infinite variety of nature begins. The motions for all particles of matter are constant according to their shape, size and weight, therefore, atoms can not exist (67). From this principle of matter Descartes concludes that no change can take place without an external cause. Motion is not spontaneous, nor does it work through an internal cause, change can only occur through the influence of other bodies (Dijksterhuis 410). Therefore, as Kargon explains, the division of primary matter into three types, according to their motion, negates the concept of a void and propounds the idea that if the cosmos is extended and infinite, there cannot be any space that lacks matter (64). Within these system Descartes, along with Gassendi, dismissed pagan notions in order to advocate a Christian theory that involved God. Primary matter was no longer eternal, but created by God and then set in motion by God.

Descartes's theories were known in English scientific circles but Gassendi had the greatest influence.[10] His system varies slightly from Descartes in that it accepts the notion of the void. For Gassendi all natural phenomena can be explained through the motion of atoms in the void (67). Matter, created by God, consists of small, hard atoms the movement of which is inherently unchanging. Their movement can slow down for long periods if hindered by other atoms, but once released it will continue on at its original speed (Dijksterhuis 430). Atoms are divisible mathematically, but physically indivisible because of their permanent nature. Gassendi believed that once God created prime matter nothing else could be created (Dijksterhuis 426). Atoms have essential properties of size, shape and weight which do not change. What does change is the quantity of atoms that come together through motion to form larger gross bodies. Some hard atoms interlock through hooks and eyes, and soft atoms which are round form through pressure (428). Only through direct contact can atoms come together to form another body. Attraction, a tendency to move towards a natural place, is not an acceptable explanation (428). Motion of the atoms is hindered when they come in contact with each other. If the atoms that collide do not bond to form another body, they will, on release, continue at their original speed (429-30). Gassendi believes in two types of void. The first is the infinite void created by God that

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See Robert Kargon, *Atomism in England from Hariot to Newton*; Richard Kroll, *The Material World;* Barry Brundell, *Pierre Gassendi*; Lynn Joy, *Gassendi the Atomist*; and Lisa Sarasohn, *Gassendi's Ethics*.

contains the finite world. Within this void is a material void that is necessary for movement of the atoms (426).

Cavendish does not adhere to either of these systems. Her idea of atoms was closer to the Aristotlean conception that prime motion and matter were first created by God, but she gave more importance to matter than motion. She also deferred taking a stand on the void or vacuum until 1666. In *Philosophicall Fancies*, 1653, and in *Philosophical and Physical Opinions*, 1655, (which includes *Philosophicall Fancies* word for word) she takes both sides of the issue. She first states that if the degrees or size of the atoms are equal, or if they resemble Descartes's atoms, then there is no vacuum. She compares them to nesting boxes that "small, and smaller may contain,/So bigger, and bigger must there be again" (*PPO* 4). There can be no void if everything fits nicely together. Then she states that if there are "infinite inequalities," the opinion held by Gassendi, there must be a void because "what's unequal, cannot joyned be/So close" (4). In an aside to this she states "the readers may take either Opinion" (4). I believe that if we were to find someone whom she resembles in thought, besides Bacon, it would be Thomas Hobbes.

Hobbes had created his own atomistic system by 1645 but refined it around 1655 making it more materialistic. According to Kargon, one can see the evolution of his ideas in letters exchanged between the members of the Newcastle

group.[11] This correspondence allowed Cavendish to stay abreast with the developing theories of Hobbes, Descartes, and Gassendi before they were refined and published. It also revealed Hobbes' total rejection of Descartes and his admiration for Gassendi. Hobbes, during this time admitted to a void and held that atoms, through their motion, determined the different figures found in nature (57). Motion, can only come from an external mover; nothing can move itself and once in motion the object can only be stopped by an opposing object in motion. Hobbes believes that the "cause of all motion and all change is motion" (56). He concerned himself more with motion than matter, and as Kargon states developed "the first truly kinetic notion of hardness in the seventeenth century" (57). This theory sought ways to explain the hardness and softness of bodies in nature by the movement of the atoms that composed the bodies; i.e. hard bodies are a result of very fast motion, while soft bodies are the result of a very slow motion. His theories of motion remain at the forefront even when he refines his system.

Later, when he discards the idea of a void for a plenist viewpoint, motion remains important as the cause of all effects in nature (58). The cosmos still contains atoms but instead of a void, there is "the fluid aether 'which so fills all the rest of the universe, as that it leaves in it no empty space at all'" (59). The

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[11] See Kargon pages 55-62. Helen Hervey, "Hobbes and Descartes in the Light of some Unpublished Letter of the Correspondence between Sir Charles Cavendish and Dr. John Bell"; Jean Jacquot, "Sir Charles Cavendish and his Learned Friends"; and Stephen Clucas, "The Atomism of the Cavendish Circle: A Reappraisal."

fluid or "aether" becomes the mechanical medium which explains physical occurrences in nature (59). He believed that sounds, odors, sensations of heat and cold and other phenomena could be explained as motion through the "aether" acting on human senses (59). The last important aspect of Hobbes' system is his rejection of immaterial spirits. Hobbes' system does not allow the presence of immaterial or immortal substances in the "aether." This notion, that spirits exist without a corporeal reality, goes against the theory that all matter has dimension and is finite. He states in *Leviathan* that "Substance and Body signify the same thing; and therefore substance incorporeal are words, which when they are joined together destroy one another, as if a man should say incorporeal body" (Qtd in Kargon 61). This viewpoint so upset theologians and prominent members of society that all of his theories were rejected, and he was labeled a pagan Epicurean (62). We cannot discount Hobbes, though, because of his influence on many important members of the Royal Society and especially on Margaret Cavendish.

Cavendish found in Hobbes' system, even though it was mechanical, ideas which she could expand upon and make her own. The main influence found in her work comes from Hobbes' idea of corporeal reality in nature. As all matter has a corporeal reality, immaterial objects or spirits cannot exist. From this premise, Cavendish develops her later materialistic theory that matter possesses rational and sensitive spirits which enable self-motion. The masculine systems of motion lacked a natural order which she could not ignore. If atoms collided at random to create forms then the diversity found in nature would also be random. Cavendish

uses the motion of rational and sensitive material spirits to explain virtually all effects found in nature. Her idea of motion allows an order and an equality in all rational forms. As we will see, if the rational spirits were responsible for creating knowledge and understanding in humans, then it was possible that all humans held the same degree of intelligence. This allows her to break from the masculine mechanical systems that explain motion through mathematics and use terms that promote the subjugation of nature and females.

Hobbes and Bacon's influence on Cavendish is a direct result of her interpretation of the concept of spirits. Hobbes' spirits are corporeal, thus giving them an existence that can be found in nature, and Bacon describes two types of spirits that are perceptive in that they attract like spirits. Cavendish concludes that self-motion must come from a perceptive spirit found in all animate matter. She includes two types of spirits in her system, and, like Bacon, has one that deals with creation of inanimate figures and another with creation of animate figures.

In 1653 when Cavendish first published many saw her as an atomist, but even at this early stage she showed signs of breaking from this school. To be an atomist one must also concede or accede to mechanical aspects, a stand she would refuse to take. The closest thing we can find to an atomistic system is in her first published work *Poems and Fancies*. The best way to describe her first system is a combination of Aristotle, Epicurus, Descartes, Gassendi, and Hobbes. She retains the Aristotlean idea of the four main elements: earth, water, fire, and air, but her elements, or what she refers to as figures, are comprised of differently shaped

atoms that have come together.

> The *Square flat Atomes*, as dull *Earth* appeare,
> The *Atomes Round* do make the *Water* Cleere.
> The *Long streight Atomes* like to Arrowes fly,
> Mount next the points, and make the *Aiery skie*;
> The Sharpest *Atomies* do into *Fire* turne,
> Which by their peircing quality they burne; (ll.1-6 p. 6)

While she believes that the four main figures are part of the building blocks of all other figures, she stresses throughout that they are not prime matter. These figures are derived from prime matter, the first and only matter, infinite and created by God. It is the source of all, and thus one can deduce that all objects possess the same inherent building blocks. In the poem "Change is *made by severall* figur'd Atomes *and* Motion" she states,

> If *Atomes* all are of the selfe same *Matter*;
> As *Fire*, *Aire*, *Earth*, and *Water*:
> Then must their severrall *Figures* make all *change*
> By *Motions* helpe, which orders, as they range. (10)

Motion is used to form the first matter into the four figures which are in turn used to form all other figures as she points out in the poem "The *Joyning of severall* figur'd Atomes *make other* Figures":

> Severall *Figur'd Atomes* well agreeing,
> When joyn'd, do give another *Figure* being.
> For as those *Figures* joyn'd severall waies,
> The Fabrick of each severall *Creature* raise. (9)

At this point in her developing theories she does not mention how the atoms move, just that they move in agreement with each other. Unlike Descartes, Gassendi, and Hobbes, her atoms do not move from collision or from a set motion

given them at creation, they are attracted or repelled because of an inherent sympathy within each, and this allows them to come together.

> Small *Atomes* of themselves a *World* may make,
> As being subtle, and of every shape:
> And as they dance about, fit places *finde*,
> Such *Formes* as best agree, make every kinde.
> For when we build a house of Bricke, and Stone,
> We lay them even, every one by one:
> And when we finde a gap that's big, or small,
> We seeke out Stones, to fit that place withall.
> For when not fit, too big, or little be,
> They fall away, and cannot stay we see.
> So *Atomes*, as they dance, finde places fit,
> They there remaine, lye close, and fast will sticke. (ll.1-12 p. 5)

Using Aristotle's shapes she adapts Descartes' idea of how shapes fit together, but instead of colliding, her matter performs a "dance" showing that a sympathetic harmony is necessary for atoms to come together to form figures. The house building metaphor is one of many domestic images she uses to describe her system, one ordered on reason and sense perception. Atoms, as arranged by a stone mason, find places to fit in and belong, places where they remain the strongest. To Cavendish motion is the most important aspect of her system. Because all comes from one matter, it is the motion that creates the infinite number of figures found in the universe. This notion is repeated ad nauseam, but it is the cornerstone of her developing theories of art.

The last section on atomism in *Poems and Fancies* concentrates on the idea set out by Epicurus that infinite space and infinite matter allow for infinite worlds to exist. Though void is not referred to in *Poems and Fancies*, one can see

the influence of Gassendi's concept of an infinite void that contains the finite world. Cavendish takes it further to say that the infinite void full of infinite atoms can create infinite worlds. In her poem "The Infinites of Matter" she states

> And if that *Matter*, with which the *World's* made,
> Be *Infinite*, then more *Worlds* may be said;
> Then *Infinites* of *Worlds* may we agree,
> As well, as *Infinites* of *Matter* bee. (ll. 5-8 p.30)

Her notion, that many worlds can exist contributed to her notorious reputation especially when she stated that a world could exist on a woman's earring. It played an important role not just in her developing natural philosophy, but in her theories of how to encourage creativity in women. It was scandalous in that it disrupted the religious notion that man ranked just below the angels in the hierarchy of order. If other worlds exist, then humans may not be at the center of the universe. People were just getting used to the idea that the earth was not the center of the cosmos, so to suggest that this world could be a small part of a larger world or that other worlds exist in this one was unthinkable. Cavendish did not say this to upset the Church. As she saw it, God created the Prime Matter, and if there existed infinite figures then God could create infinite worlds for those figures. Cavendish's true goal is to explain the process of thought; she wants to demonstrate how the rational spirits work on the mind to create infinite thoughts; these thoughts could create infinite fancies, which in turn could be used for individual creativity. She does not believe in the physical reality of infinite worlds, but in the reality of the imagination where these worlds can and do exist.

This idea as we will see later is crucial to the encouragement of creativity in others.

The suggestion that other worlds exist is also linked to Cavendish's firm belief that one cannot know all there is to know. In the poem, "It is hard to believe, that there are other Worlds in this World" she states

> Nothing so hard in *Nature*, as *Faith* is,
> For to beleive *Impossibilities*:
> As doth impossible to us appeare,
> Not cause* 'tis not, but to our *Sense* not cleere; *As it seemes to us
> But that we cannot in our Reason finde,
> As being against *Natures Course*, and *Kinde*.
> For many things our *Senses dull* may scape,
> For *Sense* is *grosse*, not every thing can Shape.
> So in this *World* another *World* may bee,
> That we do neither *touch, tast, smell, heare, see.*
> ...
> But we are apt to laugh at *Tales* so told,
> Thus *Senses* grosse do back our *Reason* hold.
> Things against *Nature* we do thinke are true,
> That *Spirits change*, and can take *Bodies* new;
> That *Life* may be, yet in no *Body* live,
> For which no *Sense*, nor *Reason*, we can give.
> As *Incorporeall Spirits* this *Fancy* faines,
> Yet *Fancy* cannot be without some *Braines*.
> If *Fancy* without *substance* cannot bee,
> Then *Soules* are more, then *Reason* will can see. (ll. 1-10, 33-42 p. 43-44)

Though all things do not appear to our senses, we have reason, and reason should not be held back by the senses. Even though she does not believe that the soul is incorporeal, she uses it as an example of the faith people have in things they cannot see. Ideas exist that sense, even reason, cannot comprehend. Cavendish links this to her concept of "fancy," a part of the imaginative process. If one can use one's fancy to believe in things not seen or reasoned, then one can use fancy

to create other worlds. Cavendish's other worlds are those of the imagination or fancy, worlds beyond the sense and reason of the known world to which people can escape.

In her second work, *Philosophicall Fancies,* published in May of 1653, Cavendish gives the reader a more detailed explanation of her new system, and continues her defense both of herself and other of women who do or will write. It is here that she adds her theory of movement. The cause of motion is two fold. There is "*Essence*, or *Life*, which are Spirits of Sense, move of themselves: for the dull part of matter moves not, but as it is moved thereby" (16). Like Bacon, Cavendish's spirits possess perception and "move according to the matter they worke on" (17). Atoms which come from one matter, the Prime Matter, possess sensitive spirits. When those sensitive spirits bring the matter together, figures are formed which she refers to as dull matter. Once the figure is formed, the sensitive spirit gives it motion. Sensitive spirits impart four common types of motion.

> *Attractive* is that which we call *Growth*, or *Youth*. *Retentive*, is that we call *Strength*, *Digestive* is that we call *Health*, that is an equall distribution of Parts to Parts, and agreeing of those Spirits. *Expulsive* is that which we call *Death* or *Decay*.
>
> The *Attractive* Spirit gather, and draw Materialls together.
>
> The *Digestive Spirit* do cut and carve out everything.
>
> The *Retentive* do fit, and lay them in their proper places.
>
> The *Expulsive* do pull down, and Scatter them about. (16)

Cavendish's spirits control matter, and here she incorporates words that again show she envisions an audience of both women and men as she does in her Prefaces. "Gather, draw, cut, carve, fit, lay them in their proper places" and then "pull down, and Scatter about" are all words that relate to either dressmaking or house building. Cavendish, believing all should be equal, chooses metaphors both genders may understand in their own way. These words show a systematic process, whether it is dressmaking or house building, that connotes order. Sensitive spirits do what is innate in them and follow the laws of nature, just as a woman would follow a pattern or a man would follow blueprints. These spirits do not work alone; they are controlled by a higher spirit.

Rational spirits, an "Essence of Spirits," the "Minde, or Souls of Animalls" (30), are stronger and control the sensitive spirits (30). They have the greater knowledge and so do not work on dull matter but on the figures of thoughts found in the human mind: memory, understanding, remembrance and will (30). For Cavendish the mind is the source of reason which controls the senses. Reason controls those creative aspects of the mind that are necessary to art. The rational spirits move in a specific order depending on their movement, what Cavendish calls their dance.

> What *Object* soever is presented unto them by the *senses*, they straite dance themselves into that *Figure*; this is *Memory*. And when they dance the same *figure* without the helpe of the *outward object*, this is *Remembrance*. When they dance *figures* of their owne invention, (as I

> may say) then that is *Imagination* or *Fancie. Understanding* is, when they dance perfectly (as I may say) not to misse the least part of those *Figures* that are brought through the senses. *Will* is to choose a dance, that is to move as they please, and not as they are perswaded by the *sensitive spirits.* (31)

Only when they are joined together in a perfect harmony or motion is there the most "perfect Knowledge" (32). Cavendish uses the neoplatonist notion of the harmony of the universe that music and dance show creation. As E.M.W. Tillyard argues, for the early Greeks motion in the created universe was "in a state of music, that it was one perpetual dance" (101). It was a familiar metaphor, and Cavendish uses it to her advantage. The earlier notions of motion as part of an ordered dance are now used to show not the motions of the universe but the ordered motions of the mind. In her examples of the dance that rational spirits perform, she includes a dance of "their owne invention," one that has not been performed before but yet is present. The dance of the "Imagination or Fancie" is the dance of originality she performs in her works. By making it a normal motion of the mind, she can later propound the importance of fancy in shaping other worlds through writing.

At this point Cavendish is testing theories about matter and motion, finding ways to connect it to her notion of female creativity. Cavendish explains that rational and sensitive spirits work together to form figures; rational spirits work on the internal motion after sensitive spirits work on the external motion of

a figure. To work together the two must be in complete agreement (*PFancies* 37). She states that "the *rationall Spirits* by moving severall waies, may make severall kindes of *Knowledge*, and according to the *Motions* of the *Sensitive Spirits* in their severall *Figures* they make" (42). In other words, the sensitive spirits form the figure, whether it be animal, vegetable, or mineral and the rational spirits, in small gradual degrees, endow the figure with the knowledge needed to exist.

> Whatsoever hath an *innate motion*, hath *Knowledge*; and what *matter* soever hath this *innate motion*, is *knowing*...*Knowledge* lives in *motion*, as motion lives in *matter*: for though the kind of *matter* never alters, yet the manner of *motions* alters in that *matter*: and as *motions* alter, so *Knowledge* differs, which makes the severall *motions* in severall *Figures* to give severall knowledge...So *Sense* is weak *knowledge*, and *knowledge* a strong *sense*, made by the degrees of the *Spirits*. (52-53)

Everything, from the tiniest grain of sand to a human being has knowledge from motion of the sensitive and rational spirits. The sensitive spirits work on both objects and creatures, while the rational spirts work only on the mind of creatures. The knowledge with which animals are endowed is just sufficient for survival. The rational spirits will move a lower animal to hunt, mate and raise the young. Any knowledge above that is not necessary, so the motion is limited. The rational spirits give humans several motions that increase knowledge beyond basic survival instincts. These motions are present in all, and "where there is a likenesse of motion, there is a likenesse of knowledge" (53). Cavendish wants to

show that all humans have the same knowledge, but she argues that this knowledge comes in different degrees. Since there must be a unity in nature, matter is eternal, the same. She states that variety "is made according to the several *Degrees*, and the several degrees do palliate and in some sense make an *Equality* in *infinite* (*PPO* 5). It is not the matter that makes the difference but the motion.

Motion of the spirits is one cornerstone of Cavendish's system and plays an even larger role in her later works. At this point in her thought she begins to move from atomism to materialism. Atomism for Cavendish could never really be a viable system. First, it is not a system which allows order. Second, a mechanical system is not in touch with the feminine creative side of nature. It reduces it to something to be examined under a microscope in order to extract all of "her" secrets and relies only on the senses to make deductions. Finally, mechanical theories caused many disagreements among their proponents because they do not allow for the voicing of opinion. She begins the evolution of her new theories in her next work, *Philosophical and Physical Opinions*, 1655, "A Condemning Treatise of Atomes" which is not an actual condemnation of atomism but of the mechanical nature of atomism. Cavendish views the random motion subscribed to my Descartes, Gassendi and other atomists as creating "infinite and eternal disorder." She states

> such wandring and confused figures could never produce such infinite effects; such rare compositions, such various figures, such several kindes,

such constant continuance of each kinde, such exact rules, such undissolvable Laws, such fixt decrees, such order, such method, such life, such sense, such faculties, such reason, such knowledge, such power. (a4v)

From this she condemns the general view of atoms. She believes that if every atom is of the same degree, quantity and matter then all atoms are living substances. However, if each atom is a life force of its own with knowledge, reason, and sense, then these qualities would have to be equal. Thus, as she states in the 1663 edition of *Philosophical and Physical Opinions*,

> for if Every and Each Atome were of a Living Substance, and had Equal Power, Life and Knowledge, and Consequently a Free-will and Liberty, and so Each and Every one were as Absolute as an other, they would hardly Agree in one Government. (c2r)

Though the prevailing view of atomism does not ascribe life to individual atoms, Cavendish does not see how such a system would work unless it were true. She prefers to give motion, not matter, the life force necessary to create the effects of nature. Thus she creates her rational and sensitive spirits.

Cavendish, up to this point, has tried to keep religious views separated from philosophical views. As a devout Anglican, she was surprised that her religious views would come under attack. In the 1655 edition of *Philosophical and Physical Opinions*, she includes a short "Epistle to my Readers" that addresses accusations of atheism; she reaffirms her belief in God, and reminds the reader that she is dealing with natural philosophy not theology. When Hobbes

was accused of atheism because of his idea of corporeal spirits, she discovered that she had to change the way she presented her material and include God's role in the universe. In the 1663 edition of *Philosophical and Physical Opinions* she includes a more detailed explanation to the reader. Since Cavendish also believed in a corporeal reality of matter which excluded an immaterial soul, she found she must distinguish between the divine soul of man and the general soul of nature.

> I meddle not with the Particular Divine Souls of Men, but only the General Soul of Nature, which I name the Rational matter, neither do I insist only upon the Particular Life of Mankind, but the General Life of Nature, which I call or name the Sensitive matter, both which is Animate matter; neither do I Treat only of the Bodies of Men, but of the Body of Nature, which I name the Inanimate matter, all which is the Infinite matter of Nature, that is, the Soul, Life, and Body of Nature, the Sensitive and Rational being the Quintessence, Spirit, or Purity of Nature, but the other Part a more Gross and Senseless matter. And I do not meddle with the Divine Souls of Men, so I do not as many Men do, which Study, Argue, and Write much, to prove there is a God, as also to Prove his Power, Will, or Decrees, all which is a Presumption for Men to do, for Men cannot Prove what they cannot possibly know. (b2r-b3v)

Cavendish's studies deal strictly with natural philosophy, and she leaves matters of faith to the theologians. Her system is based on a contemplation of her observations using sense and reason, not on faith, which is the foundation of

religion. Nature can be observed, and one can draw well informed inferences from it to instruct people how to live. It can be used to instruct one about farming, navigation, architecture, physics, "indeed all Arts and Sciences are produced in one kind or other from Natural Philosophy" (b3r). Cavendish's methods and theories will exclude no one.

With the publication of *Observations of Experimental Philosophy* in 1666, Cavendish abandons the notion of her material spirits.[12] She retains the idea of self-motion but instead of the sensitive spirits moving inanimate matter and the rational spirits moving animate matter, she gives all animate matter the ability of self-motion, combining the rational and sensitive in to it. Inanimate matter is non-moving, dull, gross matter, that is moved by the animate matter. According to Cavendish all actions in nature are voluntary. She explains that motion is not by rote or by imitation

> but by Voluntary-actions I understand Self actions; that is, such actions whose Principle of Motion is within themselves, and doth not proceed from such an exterior Agent, as doth the motion of the inanimate part of Matter; which, having no motion of it self, is moved by the animate parts, yet so, that it receives no motion from them, but moves by the motion of the animate parts, and not by an infused motion into them. (d3r)

Cavendish's refusal to adhere to the mechanical system becomes evident in her

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12 All quotes from *the 1668 re-issue of Observations of Experimental Philosophy.*

expanded theory. Animate matter is self-moving and its motion cannot be transferred from one object to another, but it can move another object; therefore the inanimate matter can have no self-motion.

In "An Argumental Discourse" Cavendish argues with herself about her prior and current beliefs. It is an interesting discourse but difficult to follow, because in typical Cavendish fashion, her mind seems to work faster than the rest of the world. She had, in the "Preface" and "Epistle to the Reader," repeatedly mentioned that her new theories were based on "Sense" and "Reason." If Cavendish hopes to develop a theory of creativity that permits women as well as men to participate, she must first develop a theory of nature that will allow equality of thought for all. She does this in *Observations* and her constant references to "Sense" and "Reason."

First there must be an order and balance to nature that allows for infinite variety in the composition of the infinite figures of nature. Animate matter is self-moving and of a purer quality than inanimate matter which is dull and passive. Inanimate matter is used for balance, to slow animate matter because "there would be no degrees of natural figures and actions, but all actions would be done in a moment, and the figures would all be so pure, fine and subtil, as not to be subject to any grosser Perception" (e3v). Animate and inanimate matter cannot be separated, much like the soul and body of a human. The inanimate matter, the body, cannot exist without the animate matter, the self-moving and rational part, the soul. If separated the body would be a gross mass of flesh and the soul would

be in constant motion. Animate matter has two motions, just as Cavendish's spirits do, the rational directs the sensitive motion that works upon inanimate matter. Since the two forms of animate matter work so closely together as to be "inseparable," she concludes that matter cannot be divided into atoms. She then describes the whole process using her house building metaphor.

> For as in the exstruction of a house there is first required an Architect or Surveigher, who orders and designs the building, and puts the Labourers to work; next the Labourers or Workmen themselves; and lastly the Materials of which the House if built: so the Rational part, said they, in the framing of Natural Effects, is, as it were, the Surveigher or Architect; the Sensitive, the labouring or working part; and the Inanimate, the Materials: and all these degrees are necessarily required in every composed action of Nature. (e3r)

With the order of nature established, Cavendish then can proceed to her other objections against experimental philosophy to strengthen her own theories of sense and reason.

Next Cavendish begins a straight forward attack on the mechanical philosophers. She makes her usual assaults on philosophical systems that have been cobbled together and create chaos rather than an ordered universe. Then she attacks the inventions of the mechanical philosopher.

> For I cannot perceive any great advantage this Art doth bring us. The Eclipse of the Sun and Moon was not found out by Telescopes; nor the

> motions of the Loadstone, or the Art of Navigation, or the Art of Guns and Gun-powder, or the Art of Printing, and the like, by Microscopes; nay if it be true, that Telescopes make appear the spots in the Sun and Moon, or discover some new Stars, what benefit is that to us? Or if Microscopes do truly represent the exterior parts and superficies of some minute Creatures, what advantageth it our knowledg? For unless they could discover their interior, corporeal, figurative motions, and the obscure actions of Nature, or the causes which make such and such Creature; I see no great benefit or advantage they yield to Man. (b3v)

Though Cavendish and the Newcastle circle had employed these inventions, she cannot see the usefulness of them in the greater scheme of things. Yes, one may look at far away objects and observe the tiniest detail on an animal or object, but can that teach us anything about the causes and effects of nature? Looking at vegetables will not tell us how to sow better food, and looking at bees will not tell us how to make more honey, so these activities have no benefit for humans. She states

> The truth is, most of these Arts are Fallacies, rather then Discoveries of Truth; for Sense deludes more than it gives a true Information, and an exterior Inspection through an Optick-glass, is so deceiving, that it cannot be relied upon; Wherefore, Regular Reason is the best guide to all Arts. (b3r)

Cavendish intends to look at the big picture nature has to offer. She is not

interested in dissecting nature but in using sense and reason to understand and accept nature's mysteries. She associates the microscope with the failure of natural philosophers to search for larger truth and to introduce and strengthen her method of philosophy.

Cavendish's system is based on reason, "for reason reforms and instructs Sense in all its actions" (3). Since the use of the microscope only allows the exterior to be examined, the interior aspect, truth, is ignored. She believes those who use sense and "art" "delude their Judgments, instead of informing them (92). She states "In short, Magnifying-Glasses are like a high Heel to a short Leg, which if it be made too high, it is apt to make the wearer fall" (12). The best optic device one can use is the eye. Reason must make judgements about those observations. Cavendish prefers the use of reason to inform the senses not "art."

Cavendish's goal is to find the "probability of truth, according to that proportion of Sense and Reason Nature has bestowed upon me" (b3r). Cavendish accepts the fact that her education is lacking, but feels that a formal education is not necessary for the development of opinions. She expresses in her prefaces her distrust of formal leaning and prefers to rely on her natural wit. In *Observations* she states that "learning is artificial but Wit is Natural" (c1r). Wit or natural reason "is a better tutor then education" because "natural reason produceth beneficial effects, and findes out the right and the truth, the wrong and the falshood of things, or causes" (*PPO* 1655 B2r). To convince others that natural reason is the best method of study, Cavendish expands her theories of motion and

endows her matter both animate and inanimate with self-knowledge. The first knowledge that all matter, even inanimate, has is the knowledge of God (*PPO* 1663 d1r). Animate matter, composed of both rational and sensitive motion, have a higher knowledge which she calls perception. All rational and sensitive motion has perception because they are active and self-knowing.

> action and motion depends upon Matter, yet Matter does not depend upon Motion, as being able to subsist without it: and though perception depends upon self-knowledg, yet self-knowledg does not depend upon perception: nevertheless, wheresoever is perception, there is also self-knowledge; by reason, that wheresoever there is an Effect in act or being, there is also its Cause. (206)

Just as matter can exist without motion so too can self-knowledge exist without perception because even inanimate figures have some self-knowledge, but it is only through motion that perception can exist. Sensitive motion uses perception in "respect to exterior parts or objects," but it is reason that "does not rest in the knowledg of the exterior Figure of an Object" (223). Sense can view an object and reason can examine it to speculate on the interior effects, but Cavendish stresses that above both of these is self-knowledge.

> Self-knowledg is an interior, inherent, innate, and, as it were, a fixt being; for it is the ground and fountain of all other particular knowleges and perceptions, even as Self-motion is the cause and principle of all other particular actions. (225)

Self-knowledge is inherent in all matter, but it is connected to motion. If this is true, then Cavendish can establish an equality of self-knowledge in all motion and matter, both inanimate and animate.

Cavendish envisioned a universe constantly in motion; she believes that there is no rest in nature (Bazeley 174). She believes that even though one can not perceive motion in objects it is present. Here, Cavendish simply expands on Hobbes' theory of kinetic energy which states that harder objects move more slower than lighter objects. Her theory of constant motion also supports her theory of creativity. Human thoughts must also be in motion; whether in observation or contemplation the mind must never stop, but some minds move slower than others. Some people have harder more burdensome thoughts that will move slower in the brain, but some, especially women are capable of light fantastical thoughts which move quickly and effortlessly through the brain. This does not mean that the knowledge is less, or that the faculties of sense and reason are irregular, but, because of the variety of figures and degrees in the world, differences are to be expected and knowledge and perception will vary.

Cavendish's system of natural philosophy relies on four main premises: 1) the true method of investigating nature is through sense and reason, 2) there is no absolute knowledge of the whole of nature but only a partial knowledge of its parts and figures, 3) all things have self-knowledge, and 4) only animate matter has self motion and perception. Cavendish finds that by connecting these premises in her investigations of nature she can show the harmony and balance that orders the universe. She rejects mechanical natural philosophy because it disrupts the harmony of nature. Nature is an organic whole, made up of infinite

parts, but these parts cannot be separated and studied because of the connections. Using these premises Cavendish chooses a unique way to explore and write about the processes of nature.

Cavendish had no formal training in writing and no female authors to use as models. She had to rely on what was available whether published, in letter form, or word of mouth. She also had to rely on her own instinct, on her own reasoning with herself. This reasoning figures prominently in her work. When she first started publishing, she used verses to explain her philosophical systems. At the time she believed poetry was best suited to women, and that because it was considered more whimsical than prose, many would ignore her mistakes and her flights of fancy. Most of the poems are comparisons of nature to domestic images or straight forward explanations of things like the wind, the clouds, the moon, and the sun. There was precedent for her choice of verse, as most of the Latin works of the earlier philosophers were in verse, but her verses failed to establish her reputation as a natural philosopher. Her second book combined verse and prose to explain her philosophy, and she followed a more standard procedure. Rather than jumping from subject to subject she tried to follow a logical progression of thought. Not until *Observations on Experimental Philosophy* did she show true argument of the mind.

What people find tedious in her opinions is that she writes as if she is arguing with herself, relating her theories to her main theories of matter and motion. Thus she repeats her self constantly. This repetition is not that of an

inexperienced writer trying to fill pages, but a well thought our strategy used to emphasize her most important idea–that knowledge is inherent in all and reason can be used to examine all aspects of life. If one compares her ideas on color to another scientific work in circulation at the time her distinct style and methodology may easily be seen.

Walter Charleton published *Physiologia Epicuro-Gassendo-Chartoniana* in 1654. Charleton was part of the Newcastle group and one of Charles Cavendish's closest friends. The treatise is a defense of atomism based on Epicurus and Gassendi. Since it was published after her trip to London, we can be reasonably sure Cavendish had access to it. From what we know of her, she would have skimmed it, because interspersed throughout the work are Latin and Greek phrases. Like anything written during this time a modern reader would find it "ponderous" and verbose, but it shows the difference between how Cavendish thought natural philosophy should be presented and what was actually being done.

The nature of color is an issue that all of the natural philosophers dealt with. No agreement had been reached. Charleton begins with justification of his premise, stating that many believe this subject to be in the realm or "catalogue of secrets" (183). After discussing the beliefs of everyone from Plato to the "Sons of Hermes," he gives Epicurus' text which he says is faithfully reproduced.

> That in the Extrems, or superficies of all Concretions, there are such certain Coordinations and Dispositions of their component particles[...]as that, upon the incidence of Light, they do and must exhibit some certain

> Colour, or other, respective to their determinate Reflection and Refraction, or Modification of the the rayes thereof, and the position of the eye, that receives them. That from these superficial Effluviaes, constituting the visible Image; which striking upon the primary Organ of Vision, in a certain Order and Position of particles, causeth therein a sensation or Perception of that particular Colour. But, that these Colours are not really Coharrent to those superficial particles, so as not to be actually separated from them, upon the abscedence of Light: and, consequently that Colours have not Existence in the Dark. (185)

In short, one can not see color unless light is present, and the color that one sees depends on the amount of light, the place of the light, and the position of the eye. Light creates color, the objects themselves do not possess color. This was the prevailing thought on color found in Hobbes, Descartes, Gassendi and even some of the aristocratic writers such as Kenelm Digby. The idea is based on experiments done with a prism. Since colors appeared only when light was reflected or refracted through the prism, they decided that light caused color, and what the eye sees is not the color of an object, but light reflected off of that object.

Cavendish could not agree with this premise, but because she agrees that it belongs to the secrets of nature, her opinions of color ought to be just as acceptable. Her first attempt to describe light and color is found in *Philosophical and Physical Opinions*. Here she compares light to a blank sheet of music and colors to the musical notes that appear on the sheet. It is a fanciful comparison

but does not really explain colors. In *Observations* she provides detailed information and uses inherent knowledge, motion, and perception, important aspects of her overall theory.

She begins with a discussion of sensitive and rational perception. Colors can be perceived from exterior figures, but also from rational perceptions because "there are also Perceptions, of Colours which never were presented to our sensitive Organs" (59). The reason these colors are not presented by exterior objects is that "some bodies so consist of several different figures," and it is the same with colors. She gives an example of the color of human skin. When healthy it is one color, but when the humors are out of balance the skin appears to be a different color. The color of the humor itself cannot be perceived, but the effect on a human is noticeable. She states

> Wherefore it no more wonder to see Colours change in the tempering of Steel (as some are pleased to alledg this Experiment) then to see Steel change and rechange its temper from being hard, to soft; from tough to brittle, &c. which changes prove, that Colours are material, as well as Steel; so that the alteration of the corporeal parts, is the alteration of the corporeal figures of Colours. They also prove, that Light is not essential to Colours; for although some Colours are made by several Reflexions, Refractions and Positions of Light; yet Light is not the true and natural cause of all Colours; but those Colours that are made by light, are most inconstant, momentary and alterable, by reason Light and its effects are

very changeable: Neither are Colours made by a bare motion, for there is no such thing as a bare or immaterial Motion in Nature; but both Light and Colours are made by corporeal figurative motions of Nature. (60)

By using simple observations and reason, Cavendish shows that colors are material to objects. First she asserts that if objects are composed of many different figures so too can they be composed of color. Earlier she proved that fire was not light, and it was the heat that changed the color of steel not the light of the fire. Therefore light is not necessary for color to be present. Cavendish's scientific discourse is clearer and more cogent than Charleton's. By avoiding scientific words, the use of Latin and Greek, and including simple examples that come from observation rather than experimentation, she delivers on her promise of writing in a more plain and simple style. Moreover, by the use of her own principles, her imagination, reason and common sense, she comes nearer to what would now be considered true.

Cavendish does have a tendency to wander off the subject, but she uses these digressions to emphasize that sense and reason do not always work together. This sometimes causes changes that other parts of the body are not aware of. She uses an example of a traitor to the government who causes the whole kingdom to take arms. Regular citizens do not know the circumstances of the war, but they know it is their duty to assist one another. So it is in nature, that a change in color "may cause no wonder, by reason there is oftentimes in Nature a sudden change of

Parts" (62). Color is just another material part of nature and is just as much part of a figure.

She then uses color to emphasize her premise that no part of matter can be lost. If strands of silk are divided into small threads, they seem to lose their color, but when wound or twisted back together their color returns. Cavendish argues "they being divided into such small and fine parts, it makes their Colours, which are the finest of their exterior parts, not to be subject to our Optick perception" (62). Next she gives a recap of her optic theory using color to demonstrate when the perceptive motions of the optic nerve are not working properly. Color can also be used to debunk the existence of atoms.

> Superficial colours are more various, though not so various as they would be, if made by dusty Atoms, flying about as Flies in Sun-shine; for, if this opinion were true, all Colours, and other Creatures would be composed or made by Chance, rather then by reason; and, Chance being so ignorantly inconstant, nor any two parts would be of the like colour. (63-64).

If atoms, then everything would come from random change which does not allow order and would not allow objects to be of the same color. The order Nature requires allows variety but also requires "reason, which is knowledg; for there is no part of Nature that has not sense and reason, which is life and knowledg" (64). Cavendish has quietly slipped in her theories of the infinite knowledge of nature, and because nature is "divisible as well as composable," there is a loss of some knowledge in her parts but not in the inherent knowledge all of her parts.

Cavendish contends that if some of the particulars of nature were not obscure, "men" would not attempt to discover general knowledge.

Cavendish's explanation of color is similar to her other explanations. She includes as many of her premises as possible which to some is tedious. However, it is calculated on her part, because Cavendish, like "Nature," is perpetually self-moving. She writes as she thinks, sometimes in circles, sometimes in a straight line, but always for the purpose of writing, of expressing her opinions. For Cavendish every argument must connect, every premise must adhere to her examples, everything in nature is bound to everything else in an harmonic unity. From her theory of color, Cavendish shows that in nature an equality of knowledge exists, differing only in degree. There is not one principal sense, figure, cause, or motion that is higher than others because nature has

> Infinite Wisdom to order and govern her Infinite parts; for she has Infinite Sense and Reason, which is the cause that no parts of hers, is ignorant, but has some Knowledg or other; and this Infinite Variety of Knowledg makes a general Infinite Wisdom in Nature. (69)

The "she" in nature is just as the "she" in humans. Females have infinite sense, reason, and some knowledge; however they must use sense and reason to understand their capabilities. Cavendish encourages active engagement with the rational part of nature and the rational part of oneself. She believes everyone should delve past the point that the men have, past experimentation, past explanations using "art" and invention to the use of reason in order to argue with

the mind. The interior motions of the mind are like the interior motions of nature, they must be constantly moving. Like Irigaray, Cavendish believes that to have knowledge, understanding and opinions one does not have to accept the traditional ideas, methods, or discourse of established science. Infinite sense and reason will produce some knowledge in everyone, and the infinite variety of knowledge enables the rational part of oneself to see the infinite degrees of thought, imagination, and understanding everyone is capable.

Margaret Cavendish, even when she was trying to claim a place in science, refused to be tied to the methods of the male scientific discourse that the Royal Society advocated. To find truth, one must rely not only on knowledge, but also on imagination. To be able to see things through the imagination is to get past obstructions and delve deeper. Cavendish's discourse is a result of reacting to the world as self--as woman. In her philosophical texts one finds what Cavendish terms a "natural rational discourse". Cavendish responds freely and openly to what she sees around her, and her discourse "runs wild about. *It* cares not where; / *It* shewes more *courage*, then it doth *Feare*" (*P&F* 110). Cavendish indeed exemplifies what Irigaray is looking for when she says that the style of a new philosophical discourse "resists and explodes every firmly established form, figure, idea or concept" (79).

Cavendish's style of writing also conforms to her own definition of discourse: "By discourse, I do not mean Speech, but an Arguing of the mind, or a Rational Inquiry into the Causes of Natural Effects; for Discourse is as much

reasoning with our selves; which may very well be done without Speech or Language" (*Obs* c3v-c3r). Thus, if discourse is a "reasoning with our selves," in Cavendish's case it must also represent her reasoning as a woman. Through her constant shifting and moving within the discourse, she revises her ideas, building and continuing her view of nature and creativity. Her next step is to extend her science into the creative realm.

Chapter Three
The Motion of Thoughts:
A Creative Theory of Art

Cavendish's rejection of mechanical natural philosophy emphasizes her belief that "Nature" is a material and feminine creative force. She constantly reminds the reader that nature "is divisible and compoundable," yet this division and union can only occur within it. Since all parts of nature are connected, then one cannot study individual parts without taking into account the whole of nature. In the note "To the Reader" of *Observations*, Cavendish requests that her works be examined the same way as nature. Just as creation in nature depends on all of the individual parts working as whole, her theories work the same way. Through the examination all of her works one can come to an understanding of her true meaning. One must compare section to section, idea to ideas, and then connect all the parts to her whole theory.

Creativity works the same way. The harmony between the brain and mind is a basic premise of her natural philosophy. Cavendish makes it clear that the physical and the mental cannot be separated, both move and work together. In the *Worlds Olio* she states that

> The Mind is like a God, that governs all; the Imaginations, like Nature, that created all; the Brain, as the onely Matter which all Figurative Thoughts are printed and formed; Or the Mind is like Infinite Nature, having no Dimension nor Extension, and the Thoughts are like Infinite

Creatures therein. (103)

The sensitive motions work the brain while the rational motions give us thoughts. These thoughts are the key to creativity. According to Cavendish, the "senses bring the material to the brain and the brain cuts and divides them and gives them quite other forms" (20). The brain can turn these forms into different figures which she categorizes as imagination, conception, opinion, understanding, and knowledge, all aspects of creation. Cavendish's method of creativity is the same as the method used for natural philosophy. She equates philosophy to creativity because "It gives room for the untired appetites of man, to walk or run in, for so spactious it is, that it tis beyond the compasse of time; besides, it gives pleasure in varieties" (*PPO* a2v). Just as one uses sense and reason, along with contemplation, to find the infinite varieties of nature, one can also find the infinite varieties of wit and imagination. In natural philosophy the interior motions of nature are vital to understanding all of creation and in creativity the interior motions of the mind are necessary to build an understanding and knowledge. Cavendish exercises her motion of thoughts to develop images of creation to convey her ideas. In many of her verses, creation is a major theme, whether it is the creation of nature, a dress, a house, or a meal.

In the *Olio*, she gives a general idea of poetry and poets. Cavendish believes that true poets and natural philosophers are born. She argues that "natural Ingenuity [wit] that creates fine fancies, and produceth rational opinions" cannot be learned (64). Cavendish, skeptical of formal education, holds that

formally trained poets and philosophers tend to use the thoughts and words of other philosophers rather than developing original ideas. She claims that

> Scholars are never good Poets, for they incorporate too much into other men, which makes them become lesse themselves, in which great scholars are Metamorphos'd or transmigrated in to as many several shapes, as they read Authors, which makes them monstrous, and their head is nothing but a lumber struft with old commodities, so it is worse to be a learned Poet then a Poet unlearned, but that which makes it a good Poet, is that which makes a good Privie Councellor, which is, observation, and experience, got by time and company. (5)

"True" poets are keen observers and use their observation and experience in their work. Poets do not rely on the works of others to express their opinions, only on nature. In *Poems and Fancies*, Cavendish introduces her section on Fancy with a poem called "Of Poets, and their Theft." Here she argues that those poets honored for their work do not deserve the praise, because they have "Of severall Patches stole, both here, and there" (l. 20 p.124). She writes of modern poets stealing from Homer, Virgil, and Ovid to the point where all original meaning is lost. These poets

> By *Sorcery* the *Ignorant delude,*
> Shewing *false Glasses* to the *Multitude.*
> And with a small, and *undiscerning Haire,*
> They pull *Truth* out the place wherein *she* were.
> But by the *Poets Lawes* they should be hang'd.
> And in the Hell of *Condemnation* damn'd. (ll.36-41 p.124)

Using her distrust of the mechanical arts, she compares false poets to those philosophers who believe they can come to the ultimate truth of something by examining an object under a microscope. Of course, as we saw earlier, she was suspicious of these particular truths because they did not lead to a general understanding of the object. A poet is

> quick of invention, easie to conceive, ready in executing, and flies over all the world, yet not so swiftly, but they take strickt notice of all things, and knows perfectley the laws, and wayes which inables them to judge more uprightly, and having an universal knowledge, joyned to his natural wit, makes him the best general judge. (*WO* 7-8)

Poets observe all of nature's details, not just one aspect of nature, to come to universal truth. They have no need for artificial means to understand that a general truth comes from looking at all the particulars. Sir Philip Sidney in *The Defense of Poetry* writes that the difference between philosophers and poets is that philosophers "counterfeit only such faces as are set before them" while poets, being "the more excellent...borrow nothing of which is, hath been, or shall be; but range, only reined with learned discretion, into the divine consideration of what may be and should be" (218). Though Cavendish would consider poets and philosophers as the same, she would agree that the false philosophers and poets would conform to this description.

We will never know if Cavendish read Sidney, but she would have been aware of his ideas of art which remained influential long after his death. Sidney

states that

> Poesy therefore is an art of imitation, for so Aristotle termeth it in the word mimesis–that is to say, a representing, counterfeiting, or figuring forth–to speak metaphorically, a speaking picture–with this end, to teach and delight. (217)

"To teach and delight" would appeal to Cavendish, but not instruction in a scholastic sense, nor did she mean moral or theological instruction concerning greater universal truths. Her aim was to teach readers the simple things in Nature and take delight in them, whether it was the mystery of Nature, the cooking of a meal, or the simple act of dressing. Cavendish believed that poets create by painting speaking pictures that show, not general truths and principles, but the particulars she so loved. While Sidney used using broad strokes Cavendish lavished her attention on the smallest details of what might or can be in Nature. For her, poets and philosophers must understand that ultimate truths cannot be known. They can only present the infinite particulars of nature through metaphorical pictures to enable the reader to come to a self discovered conclusion.

Cavendish would approve of Sidney's observations on the condition and types of literature in his time, the Aristotelian aspects of his defense. She believed that the study of nature was more meaningful to philosophers and poets than the study of theology, moral philosophy, logic, rhetoric, or law because the poet should adopt a simpler way of telling. In *Philosophical and Physical Opinions* she tells the reader that to study theology is difficult because there are too many

paths to follow, while to study moral philosophy is too restricting because it teaches more than can be followed. Further, to study law is to study dissension, logic to study deceit, and rhetoric to study words more than sense (a2r). Sidney argues that historians are "so tied, not to what should be but to what is, to the particular truth of things and not to the general reason of things, that his example draweth no necessary consequence, and therefore a less fruitful doctrine" (221). While Sidney sees the history as random human acts and not truths or principles, Cavendish thinks that historians must be serious in their style and content because history "is truth and should be told with grave rhetoric and delivered civilly, smoothly, comly, sweet, and harmoniously not rudely roughly fantastically nor contemptibly" (*WO* 7). Poets present images and objects that can be fantastical. Cavendish agrees with Sidney that the poet should not begin with "obscure definitions, which must blur the margin with interpretations, and load the memory with doubtfulness; but he cometh to you with words set in delightful proportion" (226-27). These delightful proportions are what Cavendish believes allows poetry to make something rather than persuade someone, for poetry is "to delight the Wit, than perswade the Reason" (*WO* 120).

Cavendish follows Sidney's idea that the poet "coupleth the general notion with the particular example" (221). The poet generates an active progression from particular images to a general image of nature. The idea or conceit formed by the poet is a crucial aspect of the poet's work. Sidney argues that the skill of the poet is in the conceit and not in the arrangement of the work, for "it is not in rhyming

and versing that maketh a poet" (218). Cavendish would agree that conceits should be pleasant, simple and within the grasp of the average reader, and that rhyme and construction do not make a poem. The difference between Cavendish and Sidney lies in the themes of poetry. Her concern is not to teach virtue, love, or the other aspects of life that are dealt by most poets. Her chief aim is to present nature in all of its wonder to the reader. She deviates from Sidney's argument that the poet creates something new. Sidney declares that

> Only the poet, disdaining to be tied to any such subjection, lifted up with the vigour of his own invention, doth grow in effect another nature, in making things either better than nature bringeth forth, or, quite anew, forms such as never were in nature, as the Heroes, Demigods, Cyclops, Chimeras, Furies, and such like: so as he goeth hand in hand with nature, not enclosed within the narrow warrant of her gifts, but freely ranging only within the zodiac of his own wit. Nature never set forth the earth in so rich tapestry as divers poets have done; neither with so pleasant rivers, fruitful trees, sweet-smelling flowers, nor whatsoever else may make the too much loved earth more lovely. Her world is brazen, the poets only deliver a golden. (216)

Cavendish would not be able to comprehend making nature "better" or creating anything "new." The monsters, furies and heroes that Sidney evokes, Cavendish believes are already a part of nature. She sees fairies, monsters and heroes in everyday life. Cavendish also would not give poets the credit that Sidney gives

them. Nature has created a "rich tapestry," and the poet cannot make it better, only make it better known.

In *Natures Pictures* Cavendish stresses that fancy and judgement create good poetry, "descriptions are to imitate, and fancy to create; for fancy is not imitation of nature but a natural creation, which I take to be the true poetry" (d1v). Fancy or imagination is a natural creation because it comes from the harmony of the mind and the brain working together. Cavendish labels this harmony wit. The picture created by fancy is the imitation; the conceit or fancy itself is not an imitation, but an original creation. The manipulation of thoughts or as Cavendish would say the "fantasticall Motion" of the brain is the imagination, that singular human quality that allows one to see things that are not, or can never be truly known. The stress on fancy and wit is paramount in her works, and Cavendish uses them to reinforce not only her idea of poetry and creativity, but also her idea of nature. Jacob Bronowski, in *The Visionary Eye*, states that imagination is necessary when trying to "conceive of things not present to the sense...and this ability requires the existence of a symbol somewhere inside the mind for something that is not there" (9). This symbol or metaphor allows us to recreate images presented to us in a new way, and links things that we know to things we do not know (12-15). Cavendish prides herself on the ability to create images of things she has never seen. This ability is natural and does not come from leaning, but as any natural ability is strengthened by exercise of sense and reason.

The *Oxford English Dictionary* defines wit as "the seat of consciousness

or thought," the mind which directs the "faculty of thinking and reasoning" by using the five senses for perception. In the *Olio* Cavendish states that wit is a natural and "free gift of nature" and the "essence of the mind, or soul." A "true wit" uses not only the five sense but also the temper and form of the mind which is created by the diverse motions. These seven qualities "beget imagination, which imaginations we call fancies, which fancies is wit, which is like eternity in being fixed, and yet proveth a perpetual motion with continual changes and varieties" (17). As mentioned above, one is born with a natural wit, but the creative process of the wit is ever changing. Each new fancy can create new pictures and opinions. Then, true to her fashion, she uses a simple image of a drawing as an allegory for wit.

> Wit is like a Pencill that draws several Figures, which are the Fancies; and the Brain is the Hand to guide that Pencill, where all hands draw not one and the same Figure, but according to the skill of the hand; so all Fancies do not run one way, but according to the temper of the Brain, some run into Invention, as Artificers; some into Verse, as Poets; so that all Wit is Fancy; yet so much is the Poets Wit above the Artificers, that his fancie cannot be put into Artificial Figures, but is as the Spirit, the other as the Body. (98)

Wit is the pencil that draws the figures (fancies); however, the brain is the hand that actually moves the pencil. Thus, the differences in the fancies and the diversity of the fancies depends on the temper of the brain. Poets are higher than

those philosophers who use artifice rather than imagination because the numerous fancies do not actually create a figure but the spirit of the figure.

A true wit needs Fancy or imagination to develop ideas for all to understand. It is "the Ground whereon the Poetical aery Castles are built" (98). Cavendish's foundation for "aery Castles" is fancy, and the builder of the castles is the motion of thoughts. As we saw in her Prefaces and in her scientific writing, she stresses the fact that there can be no absolute knowledge of nature and no absolute power because of the infinite degrees of matter. In *Observations* she explains that because matter is divisible, the parts of nature are divided and thus have divided knowledge. This prevents any universal knowledge (c3v). The vast differences in all figures play an important role in her theory of creativity, because they permit a semblance of equality between men and women, especially in the way the motion of thoughts produces knowledge.

All things have knowledge because of innate motion, but the several degrees of motion make different kinds of knowledge. In *Philosophical and Physical Opinions* she argues that "knowledge works after a different manner; in every different figure, which different manners we call particular knowledges which works according to the figure" (42). Poets and natural philosophers do not create "new" but can give a different perspective on nature. They need not be learned scholars or established poets; however, they must have the natural wit to observe closely and record their observations in simple everyday terms. Cavendish would like to see more people explore this gift and believes that if one

has the natural inclination to write, one should pursue it.

She begins the *Olio* with her notion of why "men" write. She tells readers that writing is a self-serving exercise, but necessary because the words will live on in the minds of others,

> for writing is the picture of thoughts, which shadows last longer then men, but surely men would commit secret Idolatry to their own wit, if they had not Applause to satisfie them, and examples to humble them, for every several man, if wit were not discovered, would think not any had it but he, for men take pleasure first in their own fancies, and after seek to gain the approving opinions of others. (3-4)

Men write for fame, for eternal recognition of their "neat and new words." They take delight in their creations and wish others to worship their quick wit and hearty imagination. Though they see themselves as "petty gods," Cavendish sees them as merely tailors who sew together words and phrases. She sees only confusion and discord. Cavendish compares their opinions of their conceits to the dress of women:

> for some [women] will get such advantage in putting on their cloaths, who although they have ill faces, and not so exact bodies, will make a better shew then those that are well favoured, and neatly shaped, with disordered attire, wherein some men are so happy in their language and delivery, as it beautifies and adorns their wit, which without it would be like an unpolished Diamond, but such difference there is between, that to

> create a fancy is the nature of God, but to make neat and new words, is the nature of a Tailour." (4)

Fancy, or in this case, conceits must be neatly shaped. They cannot do the writer any good. Just as that outrageous dress will not help a woman, outrageous conceits will not help a writer. The best conceits come from the imagination and not the fashion, style or rhetoric of the day. In *Sociable Letters*, LXIII, she states

> I have observed, there are amongst Mankind as often Mode Phrases in Speech, as Mode Fashions in Cloths and Behavior, and so Moded they are, as their Discourse is as much Deckt with those Phrases as their Cloaths with several Coloured Ribbands, or Hats with Feathers, or Bodyes with Affected motions, and whosoever doth Discourse out of the Mode, is as much Despised, as if their Cloaths or Behaviours were out of Fashion, they are accounted Fools or Ill-bred Persons; indeed most Men and Women in this Age, in most Nations in Europe are nothing but Mode. (131)

Cavendish is very aware of appearance, and her clothing metaphor in this section reflects the way others perceived her and her language. As noted, she was criticized for her work, and often that criticism was a result of the fact that people saw her as affected in her appearances in public.[1] Cavendish did not fit the style of the day, and the attack on those who did is evident here. She continues in the

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See footnote #1 Chapter One and "A Piece of a Play" that is included in the 1668 edition of her plays. It has a wonderful parody of herself and the rumors of her appearances in public.

same letter to defend those out of step with "Mode." Cavendish points out that a true wit will choose the best conceit whether it be in or out of fashion and that "Grave, Experienced and Wise men give their Judgment or Opinion, not according to the Mode or Fashion, but according to Probability, Sense and Reason" (132). Cavendish's language for her fancies will be like "Haire's uncurled, the Garments loose, and thin," and even though "glittering shoes" would attract more attention what is on the inside is more important than the outside (*P&F* 212). This conforms to her preferences for a plain style that may be understood and writing that follows a logical order rather than a fashionable one.

Cavendish's ideas of art, like her scientific concepts, were formed in response to current thought. She mentions Shakespeare, Jonson, Donne, and Davenant in her works, and one can assume she was familiar with Drayton and Spenser, so she knows what is fashionable.[2] However, she sets herself apart by selecting what suits her own views. As she evolved her own ideas of color through observation and reason, so she developed her theory of creativity by using particular images and conceits derived from everyday experiences. In the scientific poems of *Poems and Fancies* she uses comparisons to explain many of her concepts. When describing air, which consists of long atoms, she compares its form to thread "which interweaves like to a Spiders Web" (7). When describing the sympathetic motion of figures, she compares them to a

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See Douglas Grant, pp. 113-115 where he gives an interesting account of her criticism of Davenant found in *Sociable Letters*.

flock of sheep the shepherd keeps in order and introduces the image of a fox to show the consequences of matter and motion in disagreement (12, 16). She explains the different degrees of sharpness of fire atoms by comparing them to the stings of bees and flies, where some are more painful than others (13). Ashes become an army that has lost and is scattered about a field, while the increase and decrease of a flame is a flock of birds feasting on a dead horse. The more fuel available the higher the number of birds, when the fuel is depleted the birds disappear (26). These images are what she refers to as "similizing thought." In the beginning she uses them for simple comparisons, but as she continues they become more complicated and the conceits have deeper meaning.

Although the atomistic poems are often read as Natural Philosophy, one can see that her verses actually concern themselves more with natural creation and as the work progresses she presents a more sustained conceit, a "similizing thought," to show that Nature is not just a creator, but a female creator. The first poem of the atomistic verses illustrates her whole theory of creativity, with all parts of Nature working together in accordance to "her" plans. The verses continue with the creation of natural phenomenon from the four main elements. She discusses the creation of air, earth, the planets and the sun. Intermingled are verses that deal with the harmony of motion required for atoms to work in the building of the phenomenon. As she draws to the end of the section she begins to include poems that deal with the interior motion of the human body, physically and mentally. Finally she concludes with the verses that deal with the possibilities

of multiple worlds. There is no real order to the poems, just one strand of continuity which is central to her natural philosophy and her creativity, all matter must move to create. Whether it is atoms, the four main elements, or thoughts in the mind, constant motion is the key to all creative life.

The first poem in the work, "*Nature calls a Councell, which was* Motion, Figure, matter, *and* Life, *to advise about making the World*" deals with creation, not only natural creation but creation through imagination. One cannot help but notice the female references in the beginning of the poem. Nature calls together her "Councell" of Motion, Figure, Matter, and Life to receive advice on the creation of the world.

Of course, her council cannot agree, and Nature must intervene to set aside their fears that their creation will be destroyed. Nature and her Council at this point still represent Cavendish's atomistic system. In *Natures Pictures* she gives the reader a more detailed description of her council and how they work together.

> Matter was grave, and solid, and of a sound judgement. Form or Figure had a clear understanding, but was unconstant and facile, complying to the last councel (matter), though it were the worst. Motion had a subtil, ingenious, and quick Wit, and was most dextrous in all his dispatches of Affairs. Life would give very strong and sound reason in the height and heat of his discourse, but at first would seem weak, and at latter end dull,

as if his understanding wanted either maturity, or wear tired.[3] (1656, 157)

To create, Nature needs the service of many elements which must be in sympathetic agreement or they would cause disruption in the creative process. Cavendish captures not only the capabilities of women but also their isolation in the first few lines: "We can, and may do a fine Worke, said she,/Make some things to adore us, worship give,/ Which now we only to our selves to live."(*P&F* ll. 6-8 p.1). Cavendish believes that women's creativity can bring them to the forefront and give them something that will live on forever. She states that it is her nature to create, to breed, and to make strong destiny. Nature will lead the way with instructions for all women because it is also their "nature" to create.

Nature calls on motion first to produce a new inner light: "that all the world may see,/My only Childe from all Eternitie" (ll. 23-24 p.2). For Cavendish motion, or movement of the mind can produce light and knowledge that will aid in the creative process. The child produced will light the way, but motion points out that it cannot do it alone.

> Alas, said *Motion*, all paines I can take,
> Will do no good, *Matter* a *Braine* must make;
> *Figure* must draw a *Circle*, round, and small,
> Where in the midst must stand a *Glassy Ball*,
> Without *Convexe*, the inside a *Concave*,
> And in the midst a round small hole must have,
> That *Species* may passe, and repasse through,
> *Life* the *Prospective* every thing to view. (ll.27-34 p.2)

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[3] She uses male pronouns in this description of the council but in the poem she uses female pronouns. I cannot give a reason for this except that *Natures Pictures* was written a year later, or it may be a misprint.

Thoughts begin the creative process, and imagination determines how the brain will shape the result, which is a circle or perfection. Life, the imagination, is the force that allows different perspectives to come together and see what is not there. Therefore one needs light and an eye, the human imagination, to gain the perspective to create. But there is a force that will try to hinder the light and all things that nature creates, death.

In the next section of the poem, the council laments that death can destroy what nature creates and can break the perfect circle of creativity. Cavendish's switch to a masculine pronoun for death, while she never assigns a personal pronoun to motion, matter, life or form, is interesting because it may be seen as the masculine aim to prevent women from using their creativity. Cavendish believed that hindering the intellectual ability, especially the creative nature of women, was worse than killing them. Nevertheless, women should write, should create, and risk being suppressed. Life tells Nature that Death is her greatest enemy and no one can stop his strong power because:

> He cares for none of your commands, nor will
> Obey your Lawes, but doth what likes him still;
> He knows his power far exceedeth ours;
> For whatso'ere we make, he soone devours. (ll. 41-44 p. 2)

Cavendish describes an order that strives to circumvent Nature's laws in order to gain control, a power that exceeds the council. It causes decay but not destruction, something the council has not yet recognized.

Even though Death will do his best to make trouble and always find ways to disrupt things, Nature is not daunted. She knows that death will wage war against her, envy her and attempt to gain control, but it is something she is willing to risk.

> Let us agree, for feare we should do worse,
> And make some worke, for to imply his force (ll. 65-66 p. 3)

Nature thinks that the fight is worth it and is ready to get to work. Even faced with destruction, something at least was created that was good and had beauty.

Cavendish's desire to create something lasting is echoed here. Women are only considered to have certain areas of creativity, the primary one of which is childbirth. Cavendish repeatedly uses the childbirth image to discuss her writing. Associating it to writing enables other women to envision a new creative process. Cavendish further expands the conceits to other images associated with women that involve creation. Women not only give life, they cook, heal, sew, and create an outward appearance through fashion. The specific image Cavendish uses here is dressmaking. She has used it before in her science writing where the image could have referred to both dressmaking and house building, but in this case it can only be seen as a dressmaker at work. She finally gives female pronouns to her council, and they set out to create using very logical and well planned out steps.

> First *Matter* she brought the *Materialls* in,
> And *Motion* cut, and carv'd out everything.
> And *Figure* she did draw the *Formes* and *Plots*,
> And *Life* divided all out into Lots. (ll. 69-72 p.3)

The description of the creation of "man," is based on a seamstress cutting out a pattern to make a dress, an image familiar to women. When man is created, Nature makes her most perfect creation because the mind will live on even after death. Like a dress pattern, the material may wear out, but the pattern on which the original was based may be used over and over. The council gives "man" knowledge, understanding, wit, passions, and free will which sets him apart from all other creatures. (Cavendish uses the masculine plural which according to the standard of her time includes both sexes.) It is the mind, though, that is associated with the feminine metaphor of dressing: "To dresse, and cloath this Minde in fashions new" (l. 117 p.4). Nature endows all humanity with the same basic features, men and women alike, it is the accessories that are different. Ultimately it is motion that sets forms and figures apart from each other, and it is motion that moves the mind utilizing thoughts to create "things to live/Eternally" (ll. 135-36 p. 4).

Throughout the atomistic verses, Cavendish explores the creative process of nature in detail. Each poem explains the effect of a natural phenomenon and emphasizes the harmony of matter and motion in the creative process of nature. Nothing works alone. Her selection of phenomena is interesting in that she not only explains aspects of the heavens and earth but also includes many verses that deal with the body. Most of these verses deal with illnesses that are associated with females such as consumption, cholic, and apoplexy. Overall the verses discuss the normal natural phenomena that the males included in their works, and

her slight deviations come from her interest in how the body is affected by what she views as a disruption of harmony between matter and motion.[4] Nature is not always perfect, and by including aspects of nature that can be destructive, she shows that all aspects of nature are necessary but they can work against each other. Like Nature's council which is afraid of death, women and even men fear what makes them uncomfortable, but these things are part of nature and should be included in any thought process that involves creation. Doubts and fear may be overcome through rational inquiry into nature using the senses for observation, the reason for judgements and opinions, and contemplation which allows sense and reason to come to a knowledge of the world.

The second section of *Poems and Fancies* presents a series of dialogues. The poems range from water, earth and air complaining to the sun, an oak tree arguing with a man who wishes to cut it down, the body challenging the mind, the earth confronting darkness and cold. All of these discussions ultimately end with both sides understanding their natural connection and the harmony necessary for the existence of life. These dialogues represent what Cavendish refers to as "arguing with the mind." These active debates are part of what she views as the contemplative aspect of her method. Contemplation is an active process, not one of solitary meditation, but active debate between the many thoughts that move in the mind . Cavendish believes that contemplation strengthens sense and reason,

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Cavendish was considered sickly and was diagnosed with melancholy. She would often ignore her doctor's advice and decide and administer her own treatments.

and it becomes an prominent part of her method. It is the incubation period required for fancies of the mind to come to maturity. In the poem "A Dialogue between Melancholy and Mirth," she compares Melancholy to contemplation. First Mirth describes Melancholy as living in her own mind, with only her imagination to give her pleasure. Mirth finds this distasteful. Melancholy does not contradict Mirth and adds

> True, I am dull, yet me you shall know
> More of your selfe, so wiser you shall grow.
> I search the *depth*, and *bottome* of *Man-kind.*
> Open the *Eye* of *Ignorance* that's blind.
> I Travell far, and view the *World* about,
> I walk with *Reasons Staff* to find *Truth* out (ll. 95-100 p.78)

Cavendish shows the importance of living in one's own thoughts, but she also show that contemplation should be active and not isolated. Mirth does offers some qualities, and like everything in nature, the two are connected. Throughout the dialogues of *Poems and Fancies* she demonstrates connections that describe her writing process. She finds ways to encourage creation in the simplest things.

In the third section of *Poems and Fancies*, titled "Fancies," one can see Cavendish's innate feminine creativity at work. Here she creates a sequence of poems that begins with the interior of nature's boudoir. The sequence continues to other parts of the house, outside to gardens and fields, and finally to the city. This movement from the most intimate spaces of women to the public sphere leads from private writing to publishing. Cavendish, never shy about encouraging others to write and publish, assigns non-traditional roles to the elements of nature.

Some of her best work uses domestic images and metaphors. The images of clothing and dressing are most predominate, and as we saw in the Prefaces, become a thread of continuity in her works. Her dressing, clothing, and sewing images are usually associated with language or the interior motions of thought that create the fancy. It is the conceit, the fancy, that makes poetry, that creates an idea that can become familiar to readers. Cavendish not only incorporates domestic images of cooking, dressing, and, sewing, but selects insignificant details to build a larger conceit in order to "instruct and delight" the reader.

In the first poem of this section, "Nature's Cabinet," the brain is the couturier who dresses the world in bright garments and jewelry, colorful ribbons, thin veils, and becoming. In her poem she tells us that

> In *Natures Cabinet*, the *Braine*, you'l find
> Many a fine *Knack*, which doth delight the *Mind*.
> Severall *Colour'd Ribbons* of *Fancies* new,
> To tye in *Hats*, or *Haire* of *Lovers* true.
> *Masques* of *Imaginations* onely shew
> The *Eyes* of *Knowledge*, t'other part none know.(ll. 1-6 p.126)

The brain is capable of imaginative creations that are not only new, colorful and decorative, but spark new knowledge. She continues the poem by assigning clothing to the different parts of the mind.

> *Fans* of *Opinion*, which wave the *Wind*,
> According as the *Heat* is in the *Mind*.
> *Gloves* of *Remembrance*, which draw off, and on,
> *Thoughts* in the *Braine* sometimes are there, then gon.
> *Veiles* of *Forgetfulnesse* the *Thoughts* do hide,
> The *Scarfe* turn'd up, then is their *Face* espied.
> *Pendants* of *Understanding* heavie were,
> But *Nature* hangs them not in every *Eare*.

Black Patches of *Ignorance*, to stick on
The *Face* of *Fooles*: this *Cabinet* is shewn. (ll. 7-16 p.126).

The brain is like a dressing room that includes fans that can wave off or invite suitors, gloves that are put on or taken off and often lost, veils that can hide things, scarves that when arranged properly can reveal beauty, earrings, heavy and sometimes uncomfortable, and black patches or artificial beauty marks. All can be found in a woman's cabinet, just as opinion, remembrance, forgetfulness, understanding, and ignorance may be found in everyone's brain. She then takes these dressing images further into the cosmos to describe nature. In "Natures Dresse" she begins in the heavens to clothe nature and moves to the earth for finishing touches. The sun crowns her head and the stars decorate her hair, while the sky and the zodiac form her garments. The grosser planets and earthly elements provide her with accessories.

The *Polar Circles* are *Bracelets*, for each *Wrist*,
The *Planets* round about her *Neck* do twist.
The *Gold*, and *Silver Mines*, *Shoes* for her *Feet*,
And for her *Garters*, are soft *Flowers* sweet.
Her *Stockings* are of *Grasse*, that's fresh, and green,
And *Rainbow Ribbons* many *Colours* in.
The *Powder* for her *Haire* is *Milk-white Snow*,
And when *she* combes her *Locks*, the *Windes* do blow.
Light a thin *Veile* doth hang upon her *Face*,
Through which her *Creatures* see in every place. (ll. 5-14 p.127)

Cavendish depicts nature as active and working for and with humans. The veil she wears is not the veil of forgetfulness found in the earlier poem, but a thin veil that allows her creatures to see. However, it also reminds the reader that the mysteries of nature can be seen , but not necessarily understood. Cavendish

works with colors and materials to create new fancies from everyday events and adds a twist to them.

Cavendish moves from Nature's bedroom to her kitchen beginning a group of poems that uses images of cooking. In the first of these poems she associates death with a cook who prepares meat in several different ways. "Some Meates shee rosts with Feavers," others "shee boiles with Droppsies." The list continues with stuffing with pain, pickling, broiling, frying, and baking, yet all result in the same end, death (127). The violent images of death come first, but she then switches cooks, and Life begins her creations. The next poem describes Nature's oven and is directly associated to the writing process. The oven that will be used is the brain where the fancies will be baked from the wood of thoughts "which Motion sets on fire" (l. 3 p.128), gently reminding readers that one must keep the fire of creativity hot. The rest of poems in this section are a series of recipes for a variety of dishes made especially for Nature's table.

The recipes for these delicacies can be associated to the same processes of creation we see in her science. Recipes represent order, if followed precisely, the same result should occur. However, really good and creative cooks do not follow recipes to the letter, ingredients may be substituted or added for different flavors or presentation. The premise or the main ingredients remain the same, but are used only as a guideline for the finished product. Nature, in creating figures, uses a main ingredient, first matter, then allows leeway in the production of the final product, in the creation of many diverse figures. Cavendish, by using

recipes, not only selects domestic images and duties that are familiar to women, she also suggests that women already have creative ability and further education is not necessary.

The first of the recipes is a Posset (a drink usually made with hot milk, ale, or wine then sweetened with spices). The steps are outlined and easy to follow. One must first skim the cream with "*Times Spoon*" and add some "*Wine* of *Blushes*" then when it is thick add "crumbl'd *Bread of Truth*" to it. As it cooks on the "*Fire* of *Life*" it should clear and then one can add the "*Eggs* of *Faire*, and *Bashfull Eyes*." Next it requires the "*Lemmon* in of *Sharpest Wit*" along with chaste thoughts, a "*Nobel* and *Gentle Mind*" with a "*Graine* of *Mirth* to give't a little *Tast*" (128). Life is the cook in this and many of the other recipes because, unlike nature, it is not perfect. The poems in this sequence show both the good and bad sides of humans.

For the next recipe life dresses a piece of meat with love for nature's dinner. This recipe calls for two young and tender hearts that have been wounded by "Cupids Dart."

> Then sets it on the *Fire of Love*, and blowes
> That *Fire* with *Sighes*, by which the *Flame* high growes.
> And boiles it with the water of *fresh* Teares,
> Flings in a bunch of *Hope*, *Desires*, and *Feares*.
> More *Sprigs* of *Passion* throwes into the Pot (ll. 3-7. p 129)

When it is finished, the meat is placed in a dish that has been cleaned of envy and spite and the garnishes are added.

> Then doth *she* presse, and squeese in *Juice of Youth*,

And cast therein some *sugar* of sweet *Truth.*
Sharp Melancholy gives a quickning tast,
And *Temperance* doth cause it long to last.
Then doth she *garnish* it with *Smiles*, and *Dress*,
And serves it up a *Faire*, and *Beautious Mess.*
But Nature's apt to *surfet* of this *Meat*,
Which makes her seldome of the same to eat. (ll. 11-18 p.129)

Again, Cavendish takes us from the beginning to the actual presentation of the meal. This is one of her few love poems, and she ends by informing the reader that this is nature's favorite meal, but a rare occurrence in her diet. It usually only happens once for humans and if all the ingredients are present, love will last forever.

In most sonnet sequences, a blazon and an anti-blazon usually may be found. Cavendish provides both in her brief collection. The blazon is described as a bisque for nature and she begins in the traditional fashion, at the top of the head. However, Cavendish only describes one side of the face as if she is viewing the subject from the side instead of the front. There is a high smooth forehead, one "large great Eye, black," an arched brow, bent like a bow, and a "Rosie Cheek"(ll. 1, 2, 4 p.129). She also includes the heart, not as an image of love, but as an organ, along with the liver and stomach. This, added to "A *body plump, white*, of *even* growth," with "A *Brawny Arme,*" and "A *"Hand* that's fat, smooth, and very white," (ll. 11, 17, 15 p.129) deviates from the traditional courtly blazon, giving the impression of a none too remarkable figure. The figure has a hint of intelligence in "A *sharp*, and *quick*, and ready, pleasing *Tongue,*" that has speech

that is "plaine, and easie understood" (ll. 8, 22, 14 p.130). The blazon ends with final touches.

> These mixing all with *Pleasure*, and *Delight*,
> And strew upon them *Eyes* that's quick of *Sight*;
> Putting them in a *Dish* of *Admiration*,
> And serves them up with *Praises* of a *Nation*. (ll. 21-24 p.130)

Ending the blazon with admiration and the praise of a nation, again shows Cavendish's need for fame, but it also can be associated with any women, not just Cavendish. Cavendish, a proud aristocrat, shows that all can acquire fame.

The anti-blazon that follows takes the figure to extremes. Titled "A Hodge-Podge for Natures Table," she remains within her recipe sequence, but alerts the reader that this is not a carefully planned dish but a meal that might not sit well on the stomach. She begins with "wanton eyes" and a "Dissembling Countenance" both of which are used for deception. Cavendish then uses a male pronoun to identify the figure. In the blazon she does not identify the figure as male or female, though the traditional subject is female, but in the anti-blazon the figure is definitely male. She describes his "griping hand" as holding "whats none of his." Cavendish then gives this figure a "jealous mind," a "purple face, where Mattery Pimples stood," and a "Slandering Tongue"(130). He shows anger and rage in his brow, and she gives the reader an insight into his personality by telling us of his broken promises, ill-intent, and feigned words. She returns to his physical attributes of a hoarse voice, squinting eyes, and wrinkled face, and then back to his personality.

Vaine-glory brave, that fall in full *Disgrace.*
A *Selfe-conceited Pride* without a *cause,*
A *painefull desperate Art* without *Applause.*
Verse no *Sense,* nor *Fancy* have, but *Rhime.*
Ambitious fall, where highest *Hopes* do climbe. (ll. 20-24 p 130)

She includes him with those she abhors, those who are so vain, so full of pride that they create verses that have no sense or fancy, only a style. All of these qualities Cavendish then boils in a pot of dislike, adds some dry roots of vices and herbs, serves it in "Repentant Dishes,/And sends it up by Shadows of vaine Wishes" (ll. 31-32 p.131).

To end this section of the sequence she offers two desserts, both blazons that show the true qualities of women of all ages. The first, "A Tart," describes a girl from childhood to adulthood. She uses a metaphor of dough rising to show the stages of growth, and the filling of the tart includes the body of the girl. The second dessert has no name. From the lines "*Marmalade* of *Kisses* new gathered,/Preserv'd *Children* that are not Fathered"(ll.1-2 p.132), the reader is aware that it represents an older woman past the child bearing years. The woman described here is full of sweetness, love, friendship, and honor. Cavendish ends with Nature being pleased with her dessert and the pleasure that lingers. The two desserts express Cavendish's admiration for women, those young, those responsible for raising the young, and those past years of childbirth who are still productive members of society.

The next section of the sequence moves from the kitchen to the rest of the house. Where the recipe verses dealt mainly with outward appearance and

actions, this section deals with internal aspects of humans. Cavendish begins with a poem that represents the ordered household of nature. The usher is eternity and the porter, responsible for letting people in and out, is destiny. Nature's personal servants include the fates as her maids, mutability as the housekeeper and motion as her foot-boy. Cavendish then moves outside the household:

> The dais are the *Surveyors*, for to view,
> All *Natures works*, which are both old, and new.
> The *Seasons* foure their *Circuites* by turnes take,
> *Judges* to order, and distribute, make.
> The *Months* their *Pen-clerks*, write downe every thing,
> Make *Deeds* of *Gifts*, and *Bonds* of all that spring.
> *Lifes Office* is to pay, and give out all
> To *Death*, which is *Receiver*, when he call. (ll. 9-16 p.132-33)

This last group represents the harmony and order of nature. Numerous times the surveyor metaphor has been associated with reason; here she equates it to the senses. The seasons as judges keep the order of nature and the months write everything down, just as the mind orders thoughts and then the body records them. The gifts of the mind are an important aspect of creativity. Cavendish continues the sequence with verses that show the mind and the body working in harmony.

From the servants Cavendish turns to the house itself. She begins with a structure that is built on honesty, with foundations of love, walls of friendship held together with constancy as the mortar, and topped with thanks as the roof. The "*Windows of Knowledge*" let in *Light of Truth*" and are covered with curtains of joy. The chimneys are stones of affection and the fire of love burns "cleare and bright." The outside of the house is tiled with noble deeds and topped with

"*Turrets of Fame*" (133). Cavendish presents us a house constructed of the best of nature and the best of humans. The virtues found it in come from both outward action and inner thought. Cavendish takes the reader from the wine celler, the gardens, the fields, to parts of the bigger world seen from the house. She begins by "Comparing the head to a Barrell of Wine" and the wits to the wine itself. According to Cavendish, if the liquor is too strong it will expand and break the rings on the barrel, and if it is too weak, it should stay in the barrel to age and emerge when ready. Much like wine, wit, if it is strong

> Will through *Discretions* burst, and run about,
> Unlesse a *Pen*, and *Inke* do tap it out.
> But if the *Wit* be small, then let it lye,
> If *Broacht* to soon, the *Spirits* quickly dye. (134)

As she stresses, wit is inherent in all humans; some people possess strong wit which may run wild, but if one puts these thoughts on paper, the wit will be under control. If the wit is weak, not to worry, because like wine, it will age and ripen to a fine taste. Some wines do not take as long as other wines to mature, but if the wines that need aging are opened too soon, they will be flat and dull.

The next image, in "Comparing the Tongue to a Wheele,"uses spinning imagery to discuss speech.

> The *Tongue's* a *Wheele*, to spin *words* from the *Mind*,
> A *Thread* of *Sense*, doth *Understanding* twine.
> The *Lips* a *Loom*, to weave those words of *Sense*,
> Into a fine *Discourse* each eare presents.
> This *cloath* i'th *Chest* of *Memory's* laid up,
> Untill for *Judgements* Shirts it out be cut. (136)

This is a fine example of her domestic imagery, because it requires familiarity with how a spinning wheel and loom work to produce material. A spinning wheel is used to produce fine thread from raw material. Cavendish incorporates the image to explain spoken words. The words start in the mind, and the wheel or tongue creates an understanding of the how to use the words. The loom places the words in an order that makes sense and creates a discourse. The cloth or the combined thought is received in the memory of the listener and remains until the listener arrives at a judgement. Cavendish often uses sewing images to indicate the necessity of the physical and the mental working together. In her science she often used it to represent how matter and motion create figures and forms. Here she shows the importance of order and harmony between the mind and the tongue in expressing well thought out ideas.

Cavendish also includes the delightful side of life. In the poem "Similizing the Heart to a Harp, the Head to an Organ, the Tongue to a Lute, to make a Comfort of Muscik," she retains an idea of order through the harmony of music, but the images that dance throughout the poem are both functional and whimsical. The mind plays the passions of the heart as one plays the strings of a harp, and the harmony created brings a peace for the soul. Next, thoughts come out of the head like sound out of the pipes of an organ. The imagination is the bellows, opinions the air which allows thoughts to blow through the pipes, and fancies are the various sounds produced by the organ. The last section compares the tongue to a lute.

The *Tongue*, a *Lute*, the *Breath*, are *Strings* strung strong,
The *Teeth* are *Pegs*, *Words*, *Fingers* play thereon.
These moving all, a sweet soft *Musick* make,
Wise *Sentences*, as grounds of *Musick* take.
Witty light *Aires* are pleasant to the *Eare*,
Straines of *Description* all *Delights* to heare.
In *Quavers* of *Similizing* lies great *Art*,
Flourishes of *Eloquence* a sweet part.
Stops of *Reproofe*, wherein there must be skill,
Flattering Division delights the *Mind* still.
All *Thoughts*, as Severall *Tunes* these just do play,
And thus the *Mind* doth passe its time away. (ll. 11-22 p.137-38)

As we saw earlier, the tongue is an instrument, whether it is a spinning wheel, or lute. A musical instrument creates delightful sounds and sensations; the tongue must also create harmony in creating "wise sentence." Descriptions, comparisons, skillful delivery and "flattering divisions" are part of the harmony the spoken words can create.

Cavendish continues the idea of harmony in nature in her poem "Similizing the Braine to a Garden," to discuss creativity of the mind. This type of comparison was a standard in Renaissance literature and can be found in Marvell and Drayton, also Jonson uses the bee metaphor many times in his work; however, Cavendish envisions a more active garden that extends past the confines of the garden wall. As in a garden where several different varieties of flowers grow, fancy grow in the mind. As the sun gives life to flowers, thoughts give life to fancies, which like flowers, may be full grown and colorful, small and sweet, or still tender, just on the verge of blooming. Wit resembles butterflies that go from fancy to fancy, enjoying each one as a lover would. The actual creative process

begins with Bees who "Suck out the sweet,'Wax of Invention gather with their feet" (ll. 21-22 p. 137). The bees then take the thoughts produced by the imagination back to the hive to keep them alive until the "birds of poetry" carry the finished product out to the world (136-37). The last image of the bees forming the work and the "birds of poetry" singing the verses is associated to her overall theme of movement from the inside to the outside, from the senses to reason, from reason to paper, from paper to the publisher.

Cavendish continues her journey from the private estate to the outside world. As with the house she begins with hierarchy. In a sarcastic look at politics in a small community, she uses animals to show the base human conduct and natural occurrences to show the creative side of the city. The citizens are worms who very rarely venture above ground; the magistrates are moles, blind creatures, who "undermine/Each ones Estates, that they their wealth may finde (ll. 5-6 p. 140). The gentry are door mice who grow fat and lazy, relying on the ants to labor for them. She imagines merchants as bugs dashing about selling anything and everything. She then moves to the artisans.

> But *Vapours* they are *Artisans* with skill,
> And make strong *Windes* to send which way they will.
> They make them like a *Ball* of *Wild* fire to run,
> Which spreads it selfe about, when that round *Forme's* undone. (ll. 21-25 p.140)

The images of vapors, winds, and a ball of fire imply things that are out of control. However, Cavendish views these images not as negatives aspects but as active aspects, and through the association of the active with the creative, she shows

action that effects the whole area. The images she starts with all remain in their own domain and work only for their own benefit. The artists work for everyone to create something strong and lasting.

In the rest of the section she compares the market place to illness, a horse to the clouds, birds to ships, and the list goes on, but, as in the other sections, in the verses that deal with the capacity of the human mind, Cavendish shows the creative process. The first of these is "Similizing the Mind," in which she compares the mind to a merchant.

> The *Minds* a *Merchant*, trafficking about
> The *Ocean* of the *Braine*, to finde *Opinions* out.
> *Remembrance* is the *Ware-house* to lay in
> *Goods*, which *Imaginations Ships* do bring.
> Which several *Trades-men* of beliefe still buies
> They onely gaine in *Truth*, but loose by *Lies*.
> *Thoughts* as the *Journey-men*, and *Prentice Boies*,
> Do help to sort the *Wares*, and sell the *Toies*. (143)

Following what she has outlined in her natural philosophy about the brain and the mind she shows that opinions, remembrance, and imagination are part of the creative process with thoughts as the busiest aspect. However, the products of creativity still have to be "bought," and only when you supply the truth will people come back for more. Cavendish then takes the mind out of the public sphere and retreats to the private interior parts of it by comparing it to a church. In the poem "A Prospect of a Church in the Mind" Cavendish uses all of the parts involved in creativity: imagination, knowledge, conceits, understanding, thoughts, fancy, judgement and opinions, but also includes the aspects that hinder creativity.

An *Isle* of *Thoughts* so long, could see no End,
Fill'd full of *Fancies Light** to me there seem'd. *a church
Pillars of *Judgments* thick stood on a row,
And in this *Isle Motion* walk'd to, and fro.
Feare, Love, Humility kneel'd downe to pray,
Desires beg'd of all that pass'd that way.
Poore Doubts did seem, as if they quaking stood,
Yet were they lapt in *Mantles of Hope* good.
Generous *Faith* seem'd bountifull, and free,
She gave to all that askt her *Charity*. (ll. 9-18 p. 143-44)

All of the interior aspects that hinder creativity may be overcome through hope, faith, and charity. Again Cavendish shows that the motion of thoughts is active, like the workers in the previous poem. One can not let doubt stop the activity of thoughts producing fancies.

Thoughts are active and in continual motion. Cavendish expresses this in many of the next verses. In the poem "Of Thoughts" the wind is the active part or the thoughts which move the leaves of imagination and in "Similizing Thoughts" she shows that "Thoughts as a Pen do write upon the Braine" (l. 1 p. 145). Active thoughts write on the brain, and fancies from the thoughts create the colors of the words produced. This continual motion of thoughts is necessary for the imagination to create; to keep the thoughts active, one must always be aware of their surroundings. In "Similizing the Head of Man to a Hive of Bees" she represents the bees as thoughts. Bees must be attuned to their surrounds to find the pollen and their way home. As in the earlier verse where she compared the mind to a garden, the bees are the industrious aspects of the mind. In this poem thought she shows how bees or thoughts must work together.

Just as bees swarm in the hottest Weather,
In great round heapes they do hang all together.
As if for Counsell wise they all did meet;
For when they flye away, new Hives they seek.
So Men, when they have any great designe,
Their Thoughts do gather, all in Heapes do joyne. (ll. 7-12 p. 149)

Action and ambition are the keys to creative success. Just as a person who is not industrious or ambitious lives on inherited wealth, an unambitious poet will steal others "Wits" and dress it in their own language. These latter bees have lost touch with their senses and are drawn to old and withered flowers instead of new and young buds. Not only does she stress the importance of active thoughts working in harmony with the other aspects of the mind, she again reinforces her belief that industrious and ambitious thoughts produce original fancies.

The last poem in the sequence compares the wit to a mine, and she includes a complaint that most writers tend to melt the ideas of others into a new form which is often weak. True gold and silver only come from a natural wit and will stand the test of time. Original fancies from original thoughts are the basis for creation. In her natural philosophy she states:

> Thoughts are more pleasant to the minde, then the appetite to the senses, and the minde feeds as greatly on thoughts, as a hungry stomacke doth upon meat; and as some meat breeds good nourishment, and some bad nourishment, causing either health and strength, or diseases and pain...the minde is always feeding...thoughts are the fruition of the minde, as objects the fruition of the sense (*PPO* 110-11)

Every rational being is capable of thoughts and these thoughts are the basis for creation. Cavendish points out that from eight notes, million of tunes can be produced, and from twenty six letters millions of words can be created. Therefore from one thought women can produce infinite number of creations.

She ends the section on fancies with a note "To all Writing Ladies" which is her call to arms. She argues that "there is a secret working by Nature, as to cast an influence upon the mindes of men" (*P&F* 161).[5] This working of nature is "severall invisible spirits, that have severall, but visible powers, to work in severall Ages upon the mindes of men" (161). The spirits cause different movements of ideas throughout the ages. She shows examples of religion, government and art. In the section on poets and philosophers she argues that "In some Ages againe, all run after Imitation, like a company of Apes, as to imitate such a Poet, to be of such a Philosophers opinion" (160). She then gets to the age of women.

> For our Sex is wonderfully addicted to the spirits. But this Age hath produced many effeminate Writers, as well as Preachers, and many effeminate Rulers, as well as Actors. And if it be an Age when the effeminate spirits rule, as most visible they doe in every Kingdome, let us take the advantage, and make the best of our time, for feare their reigne should not last long...And though we be inferiour to Men, let us shew our

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5 The page numbers are my addition because the numbering ends here and then begins again three pages later out of sequence.

> selves a degree above Beast; and not eat, and drink, and sleep away *our* time as they doe; and live only to the sense, not to the reason; and so turne into forgotten dust. But let us strive to build us Tombs while we live, of Noble, Honourable, and good Actions, at least harmless; That though our Bodies dye, Our Names may live to after memory. (161)

Cavendish sees the spirits of her age empowering the feminine and should make women aspire to public life and publication. She has taken advantage of the age and would like to spread the fame.

Cavendish echoes the first "Preface to the Reader" found in the *Olio*, when she discusses the educational opportunities of women. Here she associates beasts to women and men who do not live an active life. According to Cavendish the age in which they are living is full of possibilities for women to use their creative powers, whether it is for government, religion, or writing, women must actively pursue their creative nature. Women must use nature, not only as a teacher of her causes and effects, but of how to use the mind. Cavendish states that

> nature hath given men understanding, to bring them out of that darknesse into the light of knowledge; and though nature hath obscured the secrets of the natural cause, yet he [God] hath given men nature to observe her effects, and imaginations, to conjecture of her wayes, and reason to discourse of her works, and understanding to finde some out, and these gifts are general to mankinde...there is natural education to all, which comes without pains taking, not tormenting the body with hared labour,

> nor the minde with perturb'd study, but comes easy and free through the senses; and grows familiar and sociable with the understanding, pleasant and delightful to the contemplation, for there is no subject that the sense can bring into the minde, but is a natural instructour to produce the breeding of rational opinions, and understanding truthes. (*WO* E3v-E3r)

Women must use their sense to observe, their reason to understand, and they must breed their opinions for the rest of the world. This all involves the active motion of thoughts. The process of creation is an active one, an equitable one, and one that creates not only ideas, but also identities.

Cavendish's use of domestic images show that she wishes to develop a female self that creates not only in the household and surrounding communities but in the larger world. She can create in the confines of the interior of her mind, but finds that to release her multiple fancies she must publish. Sandra Sherman argues that "All of her works are in a sense autobiographical, preoccupied with the self...One might say that Cavendish elaborates her inner life, through *several* genres, that she has founded a discourse not of the self, but of herself" (202). Cavendish develops texts that actively create herself in the hopes that other women can leave their "closets" and actively allow their private musing to create themselves in the exterior world. Cavendish shows women that in the active pursuit of their creativity they too can create themselves. For Cavendish the age is one of multiple possibilities created through the motion of thoughts. These possibilities are translated in her work to show what the creative mind can

achieve. She accomplishes these through her use of domestic images that show how easy one can connect thoughts to images and she expands these further to show the possibilities of women taking control of their creative minds. Cavendish's last act is to create a world of multiple possibilities where she creates a space not only for herself but for all.

Conclusion
Many Worlds in One

Cavendish defends her ability and intelligence in her Prefaces, establishes the connections necessary for creation in her natural philosophy, and furthers the connections in her creative process through her verses. Her last act is to combine natural philosophy with creativity to create a place that can mirror the infinite possibilities of the mind. It is a fictional place in which she can create multiple worlds for her multiple selves.

As Sylvia Brown points out, writing was considered a dangerous pastime for women. Publishing was even more detrimental to their character, but as Cavendish argues in her Prefaces, writing is the perfect outlet for women in their idle time to tame their wild thoughts so they can release those thoughts constructively instead of "wantonly." She states that she "thought this was the *harmelessest Pastime*" (*P&F* A5r). She further defends women's writing with the infamous clothing metaphor she always associates with the creative production of language. A woman writing is not fashionable; what is different seems strange, what is strange seems odd, and what is odd seems ridiculous, but though it seems ridiculous, it is not necessarily decadent, for she considers that her "Garments are plaine, and unusuall, yet they are cleane, and decent" (121).

Cavendish first broaches the subject of writing as a woman in *Poems and Fancies*. In the dedication to her brother-in-law she explains that "True it is, Spinning with the Fingers is more proper to oure Sexe, then studying or writing

Poetry, which is the Spinning with the Braine...since all braines work naturally, and incessantly, in some kinde or other" (A2r). Using a feminine metaphor, spinning, she insists that women can spin with their brain as easily as with their fingers. In the note "To All Noble, and Worthy Ladies," she incorporates the metaphor of clothes, a instinct for which she considers innate in women. For Cavendish, poetry especially belongs to women because:

> Poetry, which is built upon Fancy, Women may claime, as a worke belonging most properly to themselves: for I have observ'd, that their Braines work usually in a Fantasticall motion; as in their severall, and various dresses, in their many and singular choices of Clothes, and Ribbons, and the like; in their curious shadowing, and mixing of Colours, in their Wrought workes, and divers sorts of Stitches they imploy their Needle, and many Curious things they make...and thus their Thoughts are imployed perpetually with Fancies. For Fancy goeth not so much by Rule & Method, as by Choice: and if I have chosen my Silke with fresh Colours, and matcht them in good shadows, although the stitches be not very true, yet it will please the Eye. (A3r)

Cavendish understood that women must work with what they have, but given the time and opportunity, women can direct the part of the brain that deals with the complicated matters of dressing and needlework not only towards self-education but also towards the production of poetry. If women can employ their fancies in these simple pleasures, then they can move on to higher creative levels. It was the

self-presentation of aristocratic women, their ability to select clothes, mix colors and work multiple types of stitches in every day life, that Cavendish relates to their creative abilities. If women can see the richness in the smallest detail of a stitch, then they can see the richness of nature.

As we saw, intermingled with the "Atomic" poems are subtle allusions to female creativity and imagination. However, it is in the allusions to other worlds where creativity can be experienced that Cavendish gives women a space to create and write. In the Poem "A World made of Atomes," the first line states that "Small Atomes of themselves a World may make" (l.1). Keeping within Atomistic tenets, she includes her own reasoning which is based on her common sense. Cavendish's atoms move and fit together like the stones and bricks of a house. Where there are gaps, we find something to fit in the empty space. Her vision of the atoms' movements is like a dance, moving in a synchronized pattern, looking for places to fit. Those that find their niche stay, but those that do not fit in that particular pattern will continue to dance until they find one. These atoms are creating new worlds of reason and common sense that, if we associate atoms with the thoughts of the mind, contain the motion of creativity. They signify the female imagination working inside the greater scheme of things to create a microcosm of the outside world.

One of the controlling themes of Atomism is, of course, the infinities of creation. The poem "If Infinite Worlds, Infinite Centers" shows the reader how two worlds can co-exist. The worlds must be placed so there is a space between

them, otherwise they would always be bumping in to each other. According to Cavendish it is the air that surrounds the worlds that keeps "them equall, and in order right,/That as they move, shall not each other strike" (ll. 9-10). In the next poem, "The Infinites of Matter," she continues her search for other worlds in which one can exist.

> If all the World were a confused heape,
> What was beyond? for this World is not great.
> We finde it Limit hath, and Bound,
> And like a Ball in compasses is made round:
> And if that Matter, with which the World's made,
> Be Infinite, then more Worlds may be said;
> Then Infinites of Worlds may we agree,
> As well, as Infinites of Matter bee. (p.30)

In this world one finds limits and boundaries, but if one looks past the narrow confines one can see that infinite matter allows many worlds to be created. These worlds can exist in places we would not believe possible. Cavendish equates the many worlds to a nest of boxes in "Of many Worlds in this World."

> Just like unto a Nest of Boxes round,
> Degrees of sizes within each Boxes are found.
> So in this World, may many Worlds more be.
> Thinner, and lesse, and lesse still by degree;
> Although they are not subject to our sense,
> A World may be no bigger than two-pence.
> ...
> If foure Atomes a World can make, then see.
> What severall Worlds might in an Ear-ring bee.
> For Millions of these Atomes may bee in
> The Head of one small, little, single Pin.
> And if thus small, then Ladies well may weare
> A world of Worlds, as Pendents in each Eare. (p. 44-45)

The possibilities of worlds, smaller or larger, surrounding this one leads to the

creation of a world in which Cavendish can show many different worlds coexisting together. Throughout her natural philosophy and her verses she shows women the creativity of "feminine" nature, but it is in her *The Description of a New World, called the Blazing World*, 1666, that she actively constructs a world in which women may use their creative powers.

Modern criticism of *Blazing World*, however, tends to ignore Cavendish's theories of creativity and focus on the creation of self. How does a female create an identity for herself in a society that does not allow her a voice? Catherine Gallagher uses the ideology of absolute monarchy to provide a transition to an ideology of the absolute self (25).[1] She explores Cavendish's need to write and sees her creation of enclosed private spheres as places where she is the absolute sovereign. Gallagher shows how Cavendish, in *Blazing World* turns this absolute sovereignty into self-enclosed models of singularity (26). This need to create a place for absolute self stems from the fact that the only position in government a woman can hold is that of monarch. To fulfill this ambition Cavendish creates a place in which women can create worlds over which they have absolute power, even if it is their own imagination (27). What Gallagher fails to do here is investigate how Cavendish's natural philosophy is tied into the worlds created through imagination. Absolute power is negated in the real world because one can only have partial knowledge; if there is no absolute knowledge then one can

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[1] Gallagher, "Embracing the Absolute: The Politics of the Female Subject in 17th Century England." (1988).

not have absolute power. Cavendish then negates absolute power in an imaginative world through the possibility of multiple worlds. The world in which Cavendish creates could very well be a creation of another self. Therefore the existence or creation of a singular authoritative self cannot be found in Cavendish's work.

Sandra Sherman attempts to show that Gallagher was not correct in her belief that Cavendish uses the absolute monarchy to create self.[2] Sherman believes that Cavendish's retreat into the imagination implies a "self-in-isolation" that can only be located in her texts (184). She argues that through the Blazing World, Cavendish "enacts a rationale for creating, asserting, and preserving the self through infinite regress into private mental space" (191). In contrast to Gallagher, Sherman believes that the creation of the private place inside the female mind is the perfect place for creation of poetry which Cavendish insists belongs to women anyway.

One must delve into Cavendish's multiple texts to understand and see her sense of all parts of nature as connected. In *Poems and Fancies* the reader first encounters Cavendish's beliefs concerning women writing poetry; metaphors of creating multiple spaces for creativity run throughout the verses. Cavendish's theory of infinite varieties, limited knowledge, and constant motion must be incorporated when looking at the mental imaginative spaces Cavendish created for

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2 "Trembling Texts: Margaret Cavendish and the Dialectic of Authorship." (1994).

women in *Blazing World*. Sherman states that in *Blazing World* one can see the patterns of discourse "external to self are firmly excluded in favor of the self's own inwardly ramifying thoughts" (199). The ancient and contemporary men of the new science, their thoughts, words, and actions, are not necessary for the creation of imaginative thoughts. By moving inward to the imagination Cavendish shows "an act of creation in which the creations are themselves creators of a perfect mental world" (187).

Cavendish creates a world where "self" is not an singular identity nor is it an identity that allows absolute power. "Self" is Cavendish herself, already established, already with an identity that is unique. She comes from the infinite parts of nature moving together in a harmony of free will to create a figure, but she knows she must adhere to the dictates of society. Self comes from the infinite motions of thoughts that create the imagination. She is contemplative, withdrawn into the mental world, yet moves in the physical world as an active participant. She seeks fame, just as nature seeks perfection, but knows it is fleeting and changeable. She does not seek an emancipation of "self," but an understanding of how the creativity of nature is connected to a theory of female creativity.

This piece of fiction added to the end of *Observations on Experimental Philosophy* apparently has no connection to it, yet in publishing the works together, she not only continues her natural philosophy into her fiction, but she gives the reader a fictional account of the evolution of her thoughts concerning women and their relationship to nature and creativity. Cavendish uses *Blazing*

World as a critique of the mechanical scientists and their ultimate effect on society, but takes it further to show how the use of imagination can create a place where the contemplative and the active selves can merge. Cavendish does this through the creation of two women who lead opposite lives. One is the Empress of the Blazing World who actively governs her people, and the other is the Duchess of Newcastle, who leads a quiet contemplative life. Both of these women embody Cavendish the natural philosopher and the woman.

In the Preface, Cavendish labels the first part of the tale as "Romancical," but the journey is in reality a very short introduction to the rest of the tale. The Empress arrives in the strange world through a series of events beyond her control. It is composed of a series of Islands, and the first inhabitants she encounters are various animals who walk and talk like humans.[3] She is transported to the royal city where there are men and women who look human, but are not "white, black, tawny, olive or ash-coloured," but purple, green, red, orange and many other colors (14).[4] When she is presented to the Emperor, he thinks she is a goddess. After she convinces him that she is mortal, he weds her and gives her complete power to rule the kingdom.[5] Much like Cavendish during the

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3 For a fictional illustration of the Blazing World see Alberto Manguel and Gianni Guadalup, *The Dictionary of Imaginary Places*, 1980, p. 48.

4 All citations for *Blazing World* are from the 1668 edition.

5 This is a typical move for Cavendish in her fictions. The heroines usually gain power through marriage and the husband steps aside. It is evident in many of her plays, especially *Bell Campo*.

Commonwealth, the Empress is a cast-off and an exile in a strange land where she has to learn the language and customs. Cavendish had to endure a sea voyage and when she arrived in Paris, she found herself isolated by the language and customs. Only when she met Newcastle did her life change for the better.

Cavendish next begins the part of the tale which she calls the "the philosophical." Again the parallels to Cavendish's own life can be found. The Empress erects schools and forms societies that study "several arts and science; for they were as ingenious and witty in the invention of profitable and useful arts" (15). After the schools were built, she took pleasure in discussing all aspects of nature with her philosophers. In control of the conversation, she could lead the questioning to any subject she desired. She would question them and make suggestions on how they should proceed, and she would give her opinions of their findings. She would listen to her philosophers and would change the direction of her thinking, altering her opinions and beliefs. While Cavendish did not have the ability to erect schools, she was surrounded by the Newcastle group and though not as active a participant as the Empress, she would listen and begin to develop her own theories of natural philosophy. She was also exposed to the debates surrounding theories and see that not everyone agrees. In the *Blazing World*, the Empress also encounters the arguments among the philosophers. Her philosophers cannot decide on what causes the sun to produce heat, what composes wind, fire and snow, and countless other disputes over natural creation. However, she allows her philosophers to proceed with their own opinions.

It is here that she begins her direct attack on the mechanical philosophers. As seen earlier in *Observations,* Cavendish shows that her male counterparts have committed some serious errors in their examination of nature by relying totally on their senses. By studying just the exterior of nature, their "Art" cannot "inform us to the Truth of the Infinite parts of Nature" (5), and they "trust more to the deceiving sight of their eyes, and deluding glasses, then to the perception of clear and regular reason" (260). She stresses that to rely on mechanical means to look at nature is a dangerous practice, that often with microscopes or telescopes, the true nature of things can be distorted. Reason is the only way to advance knowledge. One must not depend on the mechanical art of looking at parts of nature to understand, but look at the both the small and infinite parts of nature. Perception through a microscope gives the observers false information and it is "unprofitable" because the observation does not solve the problems of nature, for example, why the flea bites and how to prevent the bite.

The other problem with a microscope is that what one observer sees another may see differently. Cavendish believes that the illustration produced from viewing an object is just a copy of a copy, not the real object. She states in *Observations* that objects will appear different according to the "Reflections, Refractions, Mediums and Positions of several Lights" (9). Therefore, some imagination was necessary to produce the illustration of the mechanical scientists. Eve Keller explores this use of the imagination further, pointing out that Cavendish's "critique of the microscope blurred the epistemological boundaries

claiming to distinguish fact from fiction, discovery from creation, truth from fancy" (455).[6] Keller argues that Hooke wanted to follow the objective nature of the new science and its instruments, to exclude fancy and the impulse to "create and fabricate rather than merely to discover and reveal" (453). However, he admits in the Preface to *Micrographia* that he was aware of the problem of objects under the microscope looking different when viewed at different angles and with different light. He assures his readers that his illustrations come from the "true form" and "true appearance" because he could manipulate his instrument to provide that view (453). This admission, according to Keller, is an admission of using his fancy in creating composite drawings of the object. Keller strengthens Cavendish's views that the microscope was an instrument of creation, not revelation, because of the use of the observer's imagination in creating the illustrations.

In *Blazing World* Cavendish demonstrates this point through the conversations with her philosophers concerning telescopes and microscopes. She starts a discussion about the planets and stars, but soon the conversation takes a turn because they cannot seem to agree. They argue over the number of the stars, the size of the stars, and about the nature of the moon (26-27). She tells them to go back to their telescopes and try again, but they still can not agree on what they observed. She concludes that their telescopes "are false informers, and instead of

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6 "Producing Petty Gods: Margaret Cavendish's Critique of Experimental Science." (1997)

discovering truth, delude your senses" (27). She orders them destroyed, but they argue for keeping them:

> For were there nothing but truth, and no falsehood, there would be no occasion for to dispute, and by this means we should want the aim and pleasure of our endeavors in confuting and contradicting each other; neither would one man be thought wiser than another, but would either be alike knowing and wise. (28)

She accedes to their wishes, but tells them to keep their disagreements in their schools and "cause not factions or disturbances in state or government" (28). As we saw in her natural philosophy, Cavendish does not believe in artificial means of discovery, but permits the men to keep their toys so long as their disputes do not infringe on society.

The experimental philosophers then bring out their microscopes to entertain the Empress. After she views a flea, she is mainly concerned about those people who are "molested with them" and wonders if "their Microscopes could hinder their biting, or at least shew some means how to avoid them" (31-32). The philosophers tell her that it is not their job to answer such questions. This leads to Cavendish's last major objection against the mechanical arts, that of unprofitability. Unlike Hooke and the Royal Society, Cavendish did not see any redemptive powers in the mechanical science except in serving the self interest of a small select group of men.

Cavendish in the *Worlds Olio* and her verses referred to those men who

viewed themselves to be "petty gods."[7] Keller uses this phrase to show Cavendish's contempt for those who would assume an "Autocratic control of knowledge production" (464). Cavendish, in arguing for self-moving matter, believes that those who wish to be supreme over nature have lost sight of the fact that they are "part of her," and this makes them feel "God-like" (*Obs* 280). According to Keller, this characteristic of the men is socially motivated; Cavendish's reaction to it is to assume more radical position on materialism and infuse her matter with life (457). This permits her to show the connections in nature, to contend that certain boundaries do not exist and everything is part of the eternal whole. It leads to her belief that absolute knowledge is unattainable because of the connection of humans to the whole of nature and allows her to investigate the effects of the new science on society as a whole.

Cavendish does use the Empress for a direct attack on the mechanical philosophers use of artifice, but she is still an embodiment of Cavendish. Through creating the schools and assigning the different inhabits of the Blazing World to certain schools, she is in effect using her feminine creativity to construct the first of the multiple worlds. The first world, is a physical world and Cavendish uses the Empress to show the difficulties that arise when dealing with it.

After the Empress' conversations with the philosophers she turns to

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7 See *Poems and Fancies* pp. 21, 59, 70 and *Worlds Olio* pp. A7v, 84, 176.

politics and religion. She considered the religion of the world to be "defective, was troubled, that so wise and knowing a people should have no more knowledg of the Divine Truth" (60), and decided to set up her own Religion.[8] The Empress set about to built churches and to establish a "Congregation of Women" which she will lead herself. The people followed her faithfully, but she soon became concerned that they would grow tired of her religion and desert her to follow "their own fancies" (60). Using the technology available to her, she constructs two churches. To build her churches she had the earth mined of its diamonds, and requested a piece of fire-stone which provided heat to her world and a piece of sun-stone which gave light to the world for her second church. In order to accomplish the second task she "demolish[ed] one of the numerous Stars of the Sky" (61). When completed she had a chapel

> where the Fire-stone was, appear all in a flame, she had by means of Artificial pipes, water conveighed into it, which by turning the Cock, did, as out of a Fountain, spring over all the room, and as long as the Fire-stone was wet, the Chappel seemed to be all in a flaming-fire. (62)

Through "Art" and "Ingenuity" the Empress converted the whole world to her religion.

The imposing of the religion and the building of the churches, while it

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8 See Anna Battigelli, *Exiles of the Mind*, who believes that the Empress represents Queen Henrietta Maria and her promotion of her Catholicism to the British people.

seems to serve the inhabitants of the world, is actually a self-serving act that only benefits the Empress. Where Bacon's *New Atlantis* endorses paradise through science, Cavendish shows the dangers of this self promotion through science. Keller would argue that the Empress represents the mechanical philosophers that Cavendish is railing against. However, the Empress is Cavendish in spirit and the physical world that the Empress is creating is a parody of the utopian fictions common at the time. Ultimately, Cavendish, as the character of the Duchess, will advise the Empress to dissolve the philosophical society and allow the inhabitants to go back to their former government and former religion. In masculine utopian fictions the intrusion of an outside character would not have the influence Cavendish assumes. However, Cavendish is proving her point that even though the physical reality created is through masculine discourses of science; as a woman, the Empress can see the folly of the world she has created. Through the use of sense and reason, the Empress does not hesitate to return the world to its former ways.

The first two parts of the tale are satire of the mechanical science. The next section, though, continues Cavendish's connections of creativity to women and moves the creation of physical reality to the creation of interior multiple realities. Cavendish begins the third part of the tale, which she calls the "fancy," when she introduces immaterial Spirits who guide the empress in her project of writing a *Cabala*. The Empress, like Cavendish, wants to fashion a discourse that will live on. The spirits offer her a soul to be her scribe, explaining that "Platonic

Doctrine" allows a "conversion of souls" (88). Because she still exists within the discourse of the male scientists, she desires a soul of one of the ancient philosophers, but the spirits tell her that "they are so wedded to their own opinions, that they would never have the patience to be scribes" (89). Next she requests the soul of a contemporary philosopher. Again the spirits discourage her choice because these men are "so self-conceited, that they would scorn to be scribes to a woman" (89). Here the spirits echo Cavendish's beliefs about using ancient or modern philosophers to help in her work. According to Cavendish, the opinions of the modern philosopher "are patched up (with ancient philosophers)...others make mixtures of several Opinions: and others again take some of their Opinions, and dress them up new with some Additions of their own" (*Obs* 350). By avoiding ancient or modern philosophers, she can "show by the difference of their Opinions and mine, that mine are not borrowed from theirs" (*Obs* 351). Cavendish can freely create a discourse that incorporates her ideas and opinions. She reinforces this attitude when she makes her appearance within her own fiction.

The spirits convince the Empress that the Duchess of Newcastle would make a wonderful scribe because "she is not one of the most learned , eloquent, witty and ingenious, yet is she a plain and rational writer, for the principle of her writing, is sense and reason" (89). It is here that Cavendish enters as a fictional character and forms a bond with the Empress that becomes stronger as they live and work together. By inscribing herself in the discourse, she describes the world

through the female eye, and reacts to it accordingly. Cavendish fashions a discourse that is feminine because of her participation as a woman in that discourse. Through her active imagination and refusal to conform to standard language, Cavendish develops a female discourse with another female, not as other, but an active participant.

The women discuss what the Empress wants to write, and Cavendish convinces her not to imitate a previous work, but to "make a poetical or romantical Cabbala, wherin you can use metaphors, allegories, etc. and interpret them as you pleas" (92). In convincing the Empress to fashion something new, Cavendish forms a bond with another woman to write a collaborative philosophical history that speaks in female language. Together the Empress and Cavendish follow the advice of the spirits to disregard masculine philosophical discourse and create their own. She does not allow her discourse to run the same course as that of the masculine, and creates a world of fancy to explain her natural philosophy. In doing so, she rejects the idea that one can write a philosophical treatise that explains an absolute, because according to Cavendish one can only have a partial knowledge of the cosmos. In creating a work of fancy she shows the way for others to speak. Cavendish has done this in *Poems and Fancies* and *Philosophicall Fancies*, but she did it alone without the help of a female ally. With the Empress she has someone she can guide, showing that, even though she is not in direct contact with other women, she can still guide them with the example of her previous work.

Cavendish takes this one step further to emphasize her belief that everyone is capable of a creative process, but obstacles exist. One day the Empress notices that the Duchess is melancholy, and wishes to know why she is sad. "My melancholy," answered the Duchess, "proceeds from an extreme ambition...I would fain to be as you are, that is, an Empress of a world" (93). She thinks to conquer a world, but the spirits tell her that "conquerors seldom enjoy their conquest" (95). The Duchess does not mind being the conqueror, and even though the spirits warn her that it is not wise to take over a world completely, she still wants to try. Just as the male scientific community has taken control of society, Cavendish, too, wishes complete control. If she cannot join their ranks as an equal, she will conquer but with her imagination.

Cavendish is faced with a choice, to be an active or a contemplative person. The Duchess states that she would "rather die in the adventure of noble achievement, then live in obscure and sluggish security" (95). The spirits advocate a contemplative existence combined with active creation. This correlates to Cavendish's theory of the necessity of balance. However, while Cavendish herself leads the active life, she understands that others will not risk their "reputation and tranquility to conquer a gross material world" (97). Therefore, she advocates the creation of worlds through imagination, the first step towards the active life she, and others crave.

The spirits tell the Duchess that every human can "create a world of what fashion and government he will...a world of ideas, a world of atoms, a world of

light, or whatever his fancy leads him to" (96). They explain that in the material world one can only enjoy the part one inhabits, but

> by creating a World within your self, you may enjoy all both in whole and in parts, without controle or opposition; and make the World you please and alter it when you please. (97)

Many of the Duchess's attempts to create a world fail because she tries to frame it according to either an ancient or modern philosopher. She begins with Thales, then tries Pythagoras, Plato, Epicurus, and Aristotle. Failing with the ancients, she attempts to create a world using first Descartes then Hobbes. Both resulting in failure. Cavendish ignores her own advice and tries to shape her opinions to those of others. Just as she discovered that she could not enter the scientific community through conquest, she cannot join them by trying to adhere to their ideas. As we saw in all of her works, she reminds the readers that to use the opinions of others causes confusion. Even in the creation of her natural philosophy, Cavendish relies on her imagination to see things as they could be. Finally, the Duchess creates a world of her own: "composed of sensitive and rational self-moving matter" (100). Within *Blazing World* she has created a blazing world. At the same time the Empress is creating a world of her own. Up to this point in the text five separate worlds are depicted: the home world of the Empress, the Blazing World, the world of the Duchess and two worlds created by the women inside their mind, all female creations. *Blazing World* connects creativity to the physical reality. First she shows the folly of not using sense and

reason as a guide, then she reveals the importance of looking inward towards the imagination to create multiple worlds. She creates worlds of contemplation, and worlds of action all located inside oneself.

If she cannot convince females to join her in an outward endeavor, such as writing about natural philosophy, then she can get them to create worlds of fancy. By fashioning *Blazing World* on her philosophical observations, she can get other women to fashion worlds based on their understanding of nature and on their wit. In *Poems and Fancies* she finds that women's brains "work usually in a fantastical motion...and goes not so much by rule and method as by choice"(A3r). The motions of thoughts that women can claim as their own are their imaginations, their ideas. In her poem " Dialogue betwixt Wit, and Beauty," she states

> I can create Ideas in the Braine,
> Which to the Mind seem reall, though but fain'd.
> The Mind like to a Shop of Foies I fill,
> With fine Conceits, all sorts of Humour fell.
> I can the work of Nature imitate;
> And change my selfe into each severall shape.
> I conquer all, am Master of the Field,
> I make faire Beauty in Loves Wars to Yeild. (ll. 47-54 p.82)

Through her creation of self as writer, she can accomplish feats of adventure that are not available to her. She shows that you can bring the active life to your imagination.

Cavendish reacts to the world around her with her as a female. She subverts masculine Philosophical discourse by re-examining that philosophy in her writings, and she combines her view on nature with her fiction to show that

females can learn, understand, and act in the male world. Cavendish also creates a place constructed by a female. The inner world created by Cavendish can be seen as that space Irigaray wants to convince women to create, a space for women to come together and "escape from the spaces, roles, and gestures that they have been assigned and taught by the society of men" (164). By showing the way to create another world from within, one can return to the imaginary. Women can come together and explore possibilities that have been denied them.

In the "Epilogue to the Reader" of *Blazing World*, Cavendish says that her ambition is to be "authoress of a whole world" (159).[9] She has created in her natural philosophy and in Blazing World from the "Rational parts of Matter, which are the parts of my mind" (159). The two worlds she creates allows all those who inhabit them the freedom to create their own worlds. Through the creation of texts, and their publication she has become Empress of herself.

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[9] Page number is my own, the text does not have one.

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