

Chapter 4

Representations of Women in Relation to Science

The many scientific revolutions since the late sixteenth century have influenced both material civilization (more convenience and better utilities) and social organization (changes in social beliefs and values). It is the effect of science upon gender roles that I am concerned with here.

The scientific establishment is another institution that has influenced views about men and women and controlled people's behaviors. For the most part, science has been a male enterprise. Therefore, when we talk about science as an institution controlling men and women directly and through stereotypes, we are talking mainly about the control of women. Male-dominated science has been instrumental in shaping ideas about women's characteristics and abilities. (Richmond-Abbott, 1992 : 286)

Science has been a factor influencing male and female stereotypes. As men have had so many more opportunities than women to participate in scientific endeavor, science has often been considered a male enterprise. Men seem to control science. Among other things, men have managed scientific beliefs about gender, and it is noticeable that new scientific concepts concerning humans have often devalued women and positioned them as subordinate to men.

Frankenstein was written during the period of the Industrial Revolution (eighteenth to nineteenth centuries) which is said to have developed along with the scientific revolution and technological development (Stearns, 1998 : 56). Because its principle narrator is a male medical researcher, this story might be read as a text reflecting social beliefs and gender stereotypes in a male scientific mind, though, importantly, the novel was written by a female author. Around 1818, men had more opportunities in education, which brought them greater chances to study and participate in scientific research. While men were studying science, they were

simultaneously controlling its concepts and controlling society. Women were certainly affected by this.

The original novel of *Frankenstein* was written when science was of great social interest. Although as a woman Shelley did not have a science education, she must have been influenced by cultural changes caused by such strong social interest. Her work reflects a woman's ideas about the powerful effect of science in a male-dominated society. Furthermore, as *Frankenstein* is presented through male narrators, Shelley may indirectly present women's response to their exclusion from male-dominated scientific endeavor.

Branagh's film was made in the very different historical context of the late twentieth century, when science was not a new social issue. Advanced science and technology had by the late twentieth century become more broadly and deeply enmeshed in society. Moreover, the audience of Branagh's film was broader than the limited first readership of Shelley's story - her husband and male friends, who had some understanding of and interest in science. The filmmakers had to present concrete details of scientific experiments for all sections of the film audience - no matter how much the film audience were really interested in science. With more advanced technology in film production to make effective visual images of science and, probably, more scientific education and understanding of scientific concepts and processes among audiences in the late twentieth century, the filmmakers were able to present slightly more scientific information.

Women in the late twentieth century also had more opportunities in scientific education and work. Some of them studied or worked directly in science-related tasks, such as being nurses, doctors or researchers. With changes in women's education and work roles, the representations of women in relation to science or even of science itself in Branagh's film might be expected to reflect some advancement from the time of the novel. However, women in the film are similar to those in the novel in having limited roles and being dominant in traditionally "feminine" areas which do not involve science.

The present chapter will study factors influencing both the novel and the film in reflecting, and perhaps continuing, the tendency for women to be excluded from scientific endeavor. In my discussion of representations of women in relation to science in the novel, I will show how and why Shelley presented women's internalization of their positions as the outsiders of science through her hidden authorship, her female characters, and her fight for nature. I will also discuss the relationship between nature, women and the monster as the critical 'others' of scientific discourse. As for my study on Branagh's film, here I will present other aspects of the explicit exclusion of women from scientific endeavor, in a different historical context and medium. This will again include a discussion of how nature and women are positioned against science, and how the monster is used to criticize male-dominated science in the film. The study will also examine the importance of male power in the film industry in representing women in relation to science.

Representations of Women in Relation to Science in the Novel

When the original novel was written, women were not accustomed to expressing their ideas directly in many areas, including the male-dominated field of science. This condition might be a significant factor influencing Shelley in hiding her scientific knowledge behind male narrators. In this section, I will expose factors influencing Shelley to hide her scientific knowledge and her female authorship, to situate her female characters distant from scientific discourse, yet to indirectly affirm the significance of women through the presentation of nature (section 1). I will also show how women, nature and the monster are presented as the critical 'others' of the scientific endeavor, criticizing male scientific ambition (section 2).

1. Women's Internalization of their Exclusion from Scientific Endeavor

Since the late 1500's in western cultures, educated people have studied science and the general public has learned the power of science from the development of technology and industries. Studying science and the development of technology have

helped people understand the factors and processes of natural phenomena. However, the greater understanding of the secrets of nature has not stopped human ambition. *Frankenstein* might be read as a story representing science's use of fundamental concepts to instrumentally serve human ambition.

More specifically, this novel clearly displays the relationships between scientific knowledge and women. Science must have effects on people in society, including women. The way Frankenstein thinks about or treats female characters in the novel might reflect gender stereotypes and behavior in western societies. The particular element of this novel to be studied in this section is its female author's intention to hide her female identity and abilities behind her male narrators. She seems willing to allow her readers to misunderstand that it is a male work. This section aims to analyze the factors influencing Shelley to distort her authorship, which simultaneously exposes the circumstances of women's exclusion from scientific endeavor.

Shelley leaves her male characters to narrate her story through their male perspectives and even criticize their own scientific enterprise. Her indirectly critical narrative technique suggests that women in the early nineteenth century did not have authority to pass judgements on male work. While women in the nineteenth century had fewer opportunities in studying science than men, they may have perceived the influence of science from social changes determined by scientific developments in their society. Women have traditionally been believed to be outside of scientific endeavor, and to have less ability in science. In the nineteenth century, they were even believed to have smaller brains, unsuitable for creating or inventing advanced technology (Richmond-Abbott, 1992 : 286). Moreover, the stereotyping of women as passionate and irrational did not lead to an improvement in their opportunities in scientific tasks. Thus the people who had authority were almost always men. Consequently, as well as having direct power, men indirectly controlled society through scientific knowledge, and women learned to internalize as natural their exclusion from scientific endeavor.

It will be useful to analyze how the roles of Shelley's female characters in relation to science are presented through male consciousness. The ways Frankenstein and other male characters treat Elizabeth and other female characters may reflect Shelley's thoughts about women's significance in relation to science in men's minds in the nineteenth century.

Female characters in the novel are not explicitly excluded from scientific endeavor, but the message might be inferred from their restricted roles in limited spheres and their general absence from scientific endeavor. Shelley does not characterize her female characters in any relationship to or involvement with science. Elizabeth, the protagonist, has an obviously different character from Frankenstein in terms of scientific interest and this is highlighted in a simple contrast made through the narrative voice of Frankenstein:

Elizabeth was of a calmer and more concentrated disposition; but, with all my ardour, I was capable of a more intense application, and was more deeply smitten with the thirst for knowledge...she found ample scope for admiration and delight. While my companion contemplated with a serious and satisfied spirit the magnificent appearances of things, I delighted in investigating their causes. The world was to me a secret which I desired to divine. (Shelley, 1992 : 36)

While Frankenstein is interested in science or the cause of any natural phenomena, Elizabeth sees the world in terms of its beauty. Shelley creates men with the thirst for knowledge, but makes women distant from scientific interest. This clearly demonstrates women's diminished roles and significance in science at that time.

Throughout the story, female characters do not have scientific involvement. As mentioned in Chapter II and III, from the beginning, they are presented as representatives of familial relationship, warmth and love. Margaret, Captain Walton's sister, seems to be significant only as Walton's surrogate mother as he undertakes scientific exploration. Caroline and Elizabeth basically represent Frankenstein's family, and Agatha and Safie again reinforce women's roles in comforting and taking care of family members. This might have been a suitable

quality for the ideal woman in Shelley's own mind. Consequently, she created these female characters without any scientific interest or knowledge.

Yet this characterization is actually at odds with Shelley's own experience. Shelley, like other women in the early nineteenth century, did not have a chance to participate in science classes. But she might have perceived the power of science upon human thought from her experience as the child of an important intellectual with many well-educated friends. Hindle (1999 : xii) argues that Mary might have gained understanding of science and scientific enterprise from her father's acquaintances: "Mary Godwin would have listened keenly to her father's conversations with such people as William Hazlitt, Samuel Taylor Coleridge, Humphry Davy and Charles Lamb." Her experiences in childhood might have brought her better chances than other women to be acquainted with scientific discovery and ideas, so that she could recall and make them parts of her own imaginative creation.

Moreover, Shelley grew up with an intellectual mind, learning that "we are sent here to educate ourselves, and that self-denial, disappointment, and self-control, are a part of our education" (Hindle, 1991 : xii). Instilled with these values, Shelley got scientific information from reading Davy's scientific work. The work of Davy which might have influenced Shelley most, according to Mellor, is *A Discourse, Introductory to a Course of Lectures on Chemistry* (1802), which Shelley read before working on her *Frankenstein* (1995 : 109). Shelley seems, then, to have had effective preparation for writing about science, even if she never formally studied this branch of knowledge.

Shelley's diligent self-study in science might have brought her a source and inspiration for her *Frankenstein*, but her story's central idea of an artificial man was strongly determined by males in another way. *Frankenstein* was written during Shelley's vacation with her husband and their male friends in France. There, at Lord Byron's villa, Lord Byron suggested a ghost story competition, in which Shelley produced her *Frankenstein*. In her introduction to the 1831 edition of the novel, Shelley confessed that she got the idea of an artificial man as the basis for her plot

from her husband's conversation with his male friends, who were interested in scientific advancement:

They talked of the experiments of Dr. Darwin, (I speak not of what the Doctor really did, or said that he did, but, as more to my purpose, of what was then spoken of as having been done by him) who preserved a piece of vermicelli in a glass case, till by some extraordinary means it began to move with voluntary motion. Not thus, after all, would life be given. Perhaps a corpse would be reanimated; galvanism had given token of such things: perhaps the component parts of a creature might be manufactured, brought together, and endued with vital warmth. (Shelley, 1992 : 9)

While her companions might not have thought of an artificial man as a theme for their stories, Shelley utilized the strong social interest in science evident in her friends' conversations to make a story that was both topical and original.

Consequently, it might be said that Shelley effectively utilized male interest in science among her father's male scientist friends and her own male companions in constructing her description of science in her novel. She seemed to acknowledge scientific achievement as she used it as her main theme, but in fact she did not naively endorse the achievement of male science. She was deeply anxious about its possibly terrible consequences. However, with less acceptance of women's abilities in relation to science and her awareness of women's subordination in that area, Shelley could not express either her scientific knowledge or her anxiety directly. Consequently, she may have consciously or unconsciously presented them through male characters and voices to make her ideas and her story appear both reasonable and socially acceptable.

In talking about science, Shelley simultaneously criticizes the male-dominated activity through male perspectives, thus not breaking the unwritten social code not allowing women to criticize men. She did not have male narrators fight explicitly for a woman's point of view, she had them criticize their own achievement, effectively devaluing their success from within. From the beginning, Frankenstein speaks for Shelley in telling the readers that scientific success or human achievement does not always bring happiness, pride or fame; on the contrary, it could bring disaster. For

example, when Frankenstein learns that Captain Walton has the great ambition of sailing to the North Pole to discover new land and knowledge, he worries that Walton might be suffering from over-ambition, like himself. So he tries to warn Walton that excessive ambition and thirst for knowledge and success might bring him suffering. Shelley has Frankenstein tell his life story as a warning in the hope that Walton will change his mind:

‘I understand your feeling,’... ‘but you are mistaken, my friend, if thus you will allow me to name you; nothing can alter my destiny: listen to my story, and you will perceive how irrevocably it is determined.’... You seek for knowledge and wisdom, as I once did; and I ardently hope that the gratification of your wishes may not be a serpent to sting you, as mine has been. I do not know that the relation of my disasters will be useful to you; yet, when I reflect that you are pursuing the same course, exposing yourself to the same dangers which have rendered me what I am, I imagine that you may deduce an apt moral from my tale; one that may direct you if you succeed in your understanding, and console you in case of failure. (Shelley, 1992 : 30)

Frankenstein here seems to be the representative of Shelley, a woman, in criticizing male scientific ambition. Shelley appears to have him indirectly express her anxiety about possible negative consequences of male science. Walton, as a representative of the readers, should see those dangers and change his attitude.

Frankenstein further confesses that now he realizes that his thought in creating life, manipulating God’s power, is beyond humanity’s limited power and is dangerous for himself and society: “Learn from me, if not by my precepts, at least by my example, how dangerous is the acquirement of knowledge, and how much happier that man is who believes his native town to be the world, than he who aspires to become greater than his nature will allow” (Shelley, 1992 : 53). Frankenstein explicitly states that, like other scientists, he tried to overcome human limitations. He clearly shows that such scientific ambition could bring humans great disaster, insisting that humans should be aware of the limitations of their power and should exercise their power only in their limited sphere. Humans who understand their limited power would be happier than the ones dissatisfied with their human limitations. This seems to reflect and praise a typically female faith in harmony, and

simultaneously complains about male ambition. Frankenstein then reveals how ambitious he had been to manipulate the power of God:

A new species would bless me as its creator and source; many happy and excellent natures would owe their being to me. No father could claim the gratitude of his child so completely as I should deserve theirs. Pursuing these reflections, I thought, that if I could bestow animation upon lifeless matter, I might in process of time (although I now found it impossible) renew life where death had apparently devoted the body to corruption. (Shelley, 1992 : 54)

Frankenstein's scientific ambition reflects a desire to make himself the creator of the world's creatures - in other words, God, known in Christian religion as 'the Father.' The passage shows his strong ambition to replace the function of nature in creating lives, and it further shows that with this strong intention, Frankenstein neglects women's natural participation as the creators of life, as mothers. In his own mind, he pays attention exclusively to men's function as creators. This is the most striking example of a potentially destructive aspect of male scientific ambitions. Women's significance and viewpoint would be seriously diminished and even replaced by men's invention and production of humans. Shelley does not talk directly about this exclusion of women by scientific endeavor, but her story can be viewed as revealing a woman's anxiety through male narration and male-centred plotting.

Frankenstein's desire to have humans '*bless*' him as they bless God reflects '*hubris*'. Thrall and Hibbard (1884) remark of the use of the term '*hubris*' in literature,

hubris or hybris is overweening pride which results in the misfortune of the protagonist of a tragedy. It is the particular form of tragic flaw which results from excessive pride, ambition, and overconfidence. Hubris leads the protagonist to break a moral law, attempt vainly to transcend normal human limitations, or ignore a divine warning with calamitous results. The excessive ambition of *Macbeth* is a standard example of hubris in English drama. (Thrall and Hibbard, 1984 : 217)

Frankenstein suits the term '*hubris*' because his attempt to create life is really beyond what had been considered human limitations. Consequently, Frankenstein faces terrible tragedy in losing all his beloveds. In this sense, '*hubris*' seems to be a

typically masculine ‘flaw,’ possibly bringing negative consequences to the protagonist and society. It might be said, then, that Shelley’s plot, using an ancient tragic structure, serves as an indirect warning concerning the dangers of male-dominated science. Although her novel does not directly fight for women or praise females, she seems to convey that too much male scientific ambition hurts all humanity.

It has been argued that Walton’s attempt to reach the North Pole is similar to Frankenstein’s scientific quest in precisely these terms: “Sharing something of Frankenstein’s Faustian *hybris*, Walton is setting out on a process of scientific discovery at great peril to himself and others” (*Mary Shelley’s Frankenstein*, 1992 : ix). Labelling both Frankenstein and Walton with the term ‘Faustian’ has a negative connotation. ‘Faustian’ is used to describe a person behaving like *Faust*, selling his soul to the Devil in return for youth, knowledge and magical powers (Thorndike and Barnhart, 1986 : 778). This may imply that Frankenstein and Walton are both considered as men without souls, attempting to transcend human limitations. Walton might be considered to be affected by hubris in that he becomes obsessed with his quest for knowledge: “...how gladly I would sacrifice my fortune, my existence, my every hope, to the furtherance of my enterprise. One man’s life or death were but a small price to pay for the acquirement of the knowledge which I sought; for the dominion I should acquire and transmit over the elemental foes of our race” (Shelley, 1992 : 28). Humans, usually men, infected with hubris tend to eventually suffer from their own action. Importantly, although Walton is described as possessing some of the hubris of his sailors, he does not die because he changes his mind about travelling to the North Pole. Frankenstein, the scientist himself, eventually realizes that his success should not be praised or even accepted. His invention does not satisfy but frightens him. He is then aware of his limited power, which can only make a flawed piece of work, not the God-like perfection he had imagined. This is the clear moral implication of Shelley’s story.

It might be said, then, that while women’s exclusion from scientific endeavor is not explicitly remarked in Shelley’s *Frankenstein*, it may be discerned in various respects. Most obviously, it can be seen in female characters’ limited roles, their lack

of scientific interest and preoccupation with limited domestic tasks which are distant from science. Frankenstein and other male characters are not described as actively excluding women from their scientific world, yet the novel reflects that historical reality. Science was almost completely a male enterprise, and women in the early nineteenth century could not express their ideas about science directly and freely. Shelley is an example of informed women of the time who understood scientific concepts, who realized that such instrumental science was not entirely good for humanity, and who wanted to criticize scientific ambition. Yet, as a woman, she could not. What Shelley could do was to express her ideas through male voices and actions. She describes scientific desire, and then criticizes possible negative consequences of the attempt. Shelley describes scientific concepts and gives concrete scientific information quite well, but the main theme of her novel is not to praise such instrumental scientific attempts, but to criticize them. Considering the story as a whole, it is notable that Shelley spends most of the text depicting how instrumental science may bring damage to human society.

It is in these ways – the use of male narrators directly revealing negative consequences of too much scientific ambition, and tragedies caused by the male-dominated science - that *Frankenstein* speaks for Shelley and women, the “unspeakable” in male-dominated society in the nineteenth century (Medalia, 1999 : 23). Shelley’s hidden female authorship is an interesting example of how a work of literature may be used to imply or somehow convey female viewpoints. However, as I will show in the next section, the strategies employed by the female author to give a woman’s perspective are not limited to the use of male substitute voices or a tragic plot.

2. Women, Nature and Frankenstein’s Monster as Critical ‘Others’

Through Frankenstein’s point of view, Shelley seems to classify the work of human scientific ambition into two types – one aims to study and expose secrets of nature but the other desires to usurp the power of nature. Humans are ambitious for

scientific achievement as they hope that advanced science and technology will bring them a better life, but they may not think about some of the possible negative consequences. Birke and Henry (1998) note both sides – the advantages and disadvantages of science to humans:

On the one hand, scientific method and experimentation contribute to our ways of life, they have enabled powerful predictions that have contributed to the progress of technology and medicine, for example. On the other hand, of course, few or none of those have come to us unproblematically. (Birke and Henry, 1998 : 225)

Human attempts to utilize science might bring great benefit, but in some areas they may suddenly or gradually bring disaster. Some technologies present society with problems; for example, nuclear bombs or other weapons. Frankenstein's experiment may be classified as a prediction of what we now call reproductive engineering, which is presently causing social concern, as its disadvantages are still not clear. Shelley seems to be similarly anxious about the possible consequences of medical science. Such concerns have been raised since the early nineteenth century and have been more recently expressed by feminist essentialists. Feminists in this group focus on women's biological nature, granting women's natural, biological differences as a special area of value often opposed to male science (Nielson, 1990 : 237). While Shelley does not directly say that science must affect women's lives, she does claim that science would affect the work of nature and thus once again *implies* the possible effects on women. In this section, I will describe and analyze these relationships.

Victor Frankenstein is a female's representation of male scientific ambition neglecting the great power of nature. He studies scientific achievements through various branches of science. While he is studying science in Ingolstadt, he meets Professor Waldman, who, significantly, directs him to study the work of nature:

The modern masters...have indeed performed miracles. They penetrate into the recesses of nature, and show how she works in her hiding places...they have discovered how the blood circulates, and the nature of the air we breathe. They have acquired new and almost unlimited powers; they can command the thunders of heaven, mimic the earthquake...(Shelley, 1992 : 47-48)

Professor Waldman describes for Frankenstein the general scientists' attempts to reveal the secrets of nature. It might be here seen that male science is presented as opposing nature, but in fact there are also implications concerning women. As discussed in Chapter II, nature relates closely to women as the bearers of life, and is sometimes given feminine characteristics. Shelley also exposes this point in her novel but goes even further. Frankenstein refers to nature with feminine pronouns: "They [scientists] penetrate into the recesses of nature, and show how she works in her hiding places" (Shelley, 1992 : 47). It is notable that he designates nature through the feminine pronouns 'she' and 'her'. Not only Professor Waldman but also Frankenstein confirms scientists' perception of nature as female: "...while, with unrelaxed and breathless eagerness, I pursued nature to her hiding places (Shelley, 1992 : 54)". Interestingly, the terms 'penetrate' and 'pursue' that they use to portray their processes in taking over nature or feminine power also signify male sexual conquest. Sexual metaphor would not be accidentally used here. Frankenstein's enthusiasm - 'with unrelaxed and breathless eagerness' - to succeed in attacking nature may also imply male attitudes about sex. The relationship between male scientists and nature here, then, also implies women's position, related closely to sex in men's minds.

Professor Waldman's narration has a great effect on Frankenstein, further encouraging him to undertake an outrageous new experiment. Frankenstein not only wants to discover the secrets of nature, as scientists have traditionally done, but also seeks to usurp the power of nature. This is revealed in the following passage, in which the character expresses his aims: "So much has been done...more and far more, will I achieve... I will pioneer a new way, explore unknown powers, and unfold to the world the deepest mysteries of creation" (Shelley, 1992 : 48). Frankenstein aims ambitiously to explore a new form of human creation, which means that he is taking over the function and power of nature. His confession seems to imply that his real goal is, in fact, the absolute power which also further refers to male absolute dominance in sex. This might be interpreted as showing that male science indeed partly derives from the aggressive male instinct in relation to sex. It might be said

that both women and nature are pursued, dominated and marginalized by the male scientific drive.

Both women and nature are similarly treated as ‘the other’ in male-dominated society. Discussing this concept, Jackson observes that “The ‘other’...has been categorized as a negative black area – as evil, demonic, barbaric – until its recognition...as culture’s ‘unseen’” (Jackson, 1981 : 173). Although women and nature in *Frankenstein* are not directly and seriously compared to evil, they are still treated as invisible by the male scientific society depicted in the novel. Feminism has helped to reveal this ‘unseen’ situation of women in literature. Tong (1998 : 200), studying feminist ideas, examines the idea of women-as-other in patriarchal society in Helene Cixous’s feminist literary criticism: “Man is the self; woman is the other. Thus woman exists in man’s world on his terms...After man is done thinking about woman, what is left to her is unthinkable, unthought.” It is clear that female characters in the novel are not only the ‘unseen’, but they are also not thought of. As discussed in the previous section, female characters are presented as distant from scientific interest, and are generally set amid beauty in *Frankenstein*, giving them a mostly aesthetic significance. This is the result of man’s thought of women as “other.” Midalia (1999) claims that all female authors may be seen to reveal this “otherness”:

Female-authored texts are said to differ from male-authored texts both in context and in methods of writing, not only because women’s physical experiences differ from men’s but also because women often write out of that ‘other’ perspective of experience - that sense of being marginalised in and by the dominant culture. (Midalia, 1999 : 21-22)

Women’s works have a particular style in conveying the female authors’ identity. They may not be written in a particular style of writing, but reveal a particular external perspective.

However, Tong sees an important benefit for women of being ‘the other’:
 “The condition of otherness enables women to stand back and criticize the norms, values, and practices that the dominant culture (patriarchy) seeks to impose on

everyone... - in this case, women” (Tong, 1998 : 195). Tong thinks that otherness allows women to criticize male enterprises. Women may become outsiders looking at men and criticizing their behavior and thoughts from a privileged point of view. This seems to be similar to what Shelley does in her novel, in part through its implied connection between women and nature.

As mentioned, nature and women (together forming the universal feminine) have been believed across cultures to be the significant root of lives. But the scientists’ ambition may gradually weaken this belief. The first-person biography of Frankenstein shows the process of this weakening. At first, his view of nature is that of a romantic and idealistic young lover with a soul in a quest for connection:

It was the secrets of heaven and earth that I desired to learn; and whether it was the outward substance of things, or the inner spirit of nature and the mysterious soul of man that occupied me, still my enquiries were directed to the metaphysical. (Shelley, 1992 : 37)

Here Frankenstein initially seems to be a scientist with tender feelings of romance. He still ponders the distinctive value of the outer appearance and inner qualities of humans and things. Nature in his mind does not refer to an image of substance. He seems to believe in the ‘spirit’ and magnificent power of nature. However, such feelings and ideas seem to be weakened and lost through his obsession with scientific achievement. Nature becomes merely materials which do not matter: “Winter, spring, and summer passed away during my labours; but I did not watch the blossom or the expanding leaves - sights which before always yielded me supreme delight - so deeply was I engrossed in my occupation” (Shelley, 1992 : 56). Ambitiously, Frankenstein concentrates only on his experiment and neglects the nature that underlies his own life. Neglecting nature means neglecting his inner self and also his own biological and spiritual roots. The relationship between science or scientists and nature is shown in the process of weakening, and, significantly, as he loses interest in nature, he begins to turn away from his love for the woman in his life, Elizabeth. Nature and the feminine lose their spiritual aspects, become merely objects to the empirical mind.

In fact, most characters in the novel seem to be somewhat distant from nature, with the notable exception of the monster. The monster is always presented with or related to nature, and in this way acquires 'feminine' characteristics. Consequently, some critics, such as Florescu (1996) and Hindle (1991), have argued that the pitiful monster might indirectly represent women's subordinate position and Shelley's own suffering. If she could not directly criticize male enterprise through female perspectives, she might use the monster to represent women's exclusion in a patriarchal, scientific society. From the beginning, Shelley associates the image of the monster with the peace of nature: "I gradually saw plainly the clear stream that supplied me with drink, and the trees that shaded me with their foliage. I was delighted when I first discovered that a pleasant sound, which often saluted my ears, proceeded from the throats of the little winged animals..." (Shelley, 1992 : 103). The monster feels protected and peaceful ("supplied" and "shaded") within the mercy of nature. Nature provides him fundamental factors of living - water and food – and even the pleasure which he does not receive from any human, and he himself feels his soul vitalized by his natural surroundings: "My spirits were elevated by the enchanting appearance of nature..." (Shelley, 1992 : 115). The narrative suggests that the monster's mind possesses such a positive character because it is constructed as such while he is in nature. This seems to convey that nature raises complete and humane souls, even though the owner, the monster, was not naturally created.

However, his peaceful mind does not bring him happiness or social acceptance because people determine his value from his physical appearance. He must be hurt because of his created body and be rejected even by his own creator. Frankenstein wants to create a human, but he forgets that humans also need love and care. The feelings of the neglected monster show the consequences of an obsession with instrumental science:

I am thy creature, and I will be even mild and docile to my natural lord and king, if you wilt also perform thy part, that which thou owest me. Oh, Frankenstein, be not equitable to every other, and trample upon me alone, to whom thy justice, and even thy clemency and affection, is most due. Remember, I am thy creature; I ought to be thy Adam; but I am rather the fallen angel...Believe me. Frankenstein: I was benevolent, my

soul glowed with love and humanity: but am I not alone,
miserably alone? (Shelley, 1992 : 100)

Here, Shelley seems to say that the feminine is needed. Consequently, although Shelley does not directly say that women are significant to human society or instrumental science is devaluing women, she eventually conveys these messages indirectly through the suffering monster's expressions of desire for care, love and the missing female 'other'. Moreover, it is noticeable that the monster, perhaps because he is a *male* monster, can speak for himself, even though he is also marginalised, along with women and nature, as 'other'. The first-person pronoun 'I' here might represent the hidden voice of Shelley. In fact, this may be seen as another example of Shelley expressing her thoughts indirectly, through a male voice.

Confirming the idea that the monster is speaking for women as well as nature, Florescu (1996), suggests that the monster's oppression represents Shelley's suffering in being overlooked by her father:

...one psychological 'source' of the monster can be found in Mary's own loneliness and in the grievance she harboured against the man William Godwin who created her and then denied her love when she failed to be a substitute for his prestigious lost wife...the characterization of the monster, and the astonishing sensitivity to his rage, his loneliness, and his incapacity to love that Mary brought to this creation could only have come out of her direct experience. (Florescu, 1996 : 180)

The monster and Shelley are the same in being rejected by their own creators, their sole parents. Although Shelley had her husband as her counselor, she still needed paternal love and care from her widowed father. For this reason, she might have presented her own sufferings through the monster's desire for his creator's love. Hindle (1991) supports the possible psychological influence of Mary's personal experience on the monster's characterization, but cites a slightly different cause. Hindle argues that Godwin might have ignored his daughter because he could not accept her living with a married man: "...though Godwin demanded and accepted much money from Shelley (Percy), he could never accept the fact of his daughter's elopement with a married man and their life as 'vagabound' exiles on the continent" (Hindle, 1991 : xiii). Both Hindle and Florescu agree that Godwin's difficult

relationship with his daughter must have had some influence on Shelley, leading to the characterization of the monster. At the same time, being ignored, Shelley might automatically have moved back to what has traditionally been considered the woman's sphere – nature. It is in this way, then, and for these reasons, that the marginal positions of women, nature and the monster come together in *Frankenstein*.

Ultimately, although personal facts may have influenced to some extent her portrayal of the monster as an 'other,' Shelley's main desire seems to be to convey that scientists' ambitions to replace the power of nature would bring disaster both to humanity and, particularly, women. Gendered beliefs did not allow her to express her ideas directly and freely. Shelley's hidden authorship and her female characters' limited roles reveal women's exclusion from scientific endeavor and even from criticizing in that area. Her message in fighting for women therefore has to be indirectly conveyed through her argument for nature, advanced in part through the feminine personality traits of a monster. In this respect, it represents a clear example of a woman forced into indirect methods of criticism through literature.

Representations of Women in Relation to Science in Branagh's Film

Using a different medium, Branagh's film has a greater capacity to give visual images of concrete scientific experiments to its audience than the novel, but it still perpetuates some traditional ideas about women's relationship to scientific tasks. To some degree, women are still excluded as they were, but even more practically and explicitly.

Although the film was made in a different historical context from the novel, female characters in both texts are similarly underrepresented in relation to science. Women in the late twentieth century - probably at least half of the audience of the film - had more opportunities in education and work, but in the area of science they were still stereotyped as being subordinate to men. In this section, I will show how women tend to be excluded from science - as outsiders and research materials – in the film even as the film reflects social anxieties over scientific intervention in human

biology (section 1). I will also expose how the film, like the novel, utilizes nature imagery, the relationship between women and nature, and the voice of the monster in indirectly criticizing male science (section 2). This study will also expose ways in which male power in the film industry might influence representations of women in relation to science.

1. Science, Social Anxieties and the Situation of Women

In the late twentieth century, medical technology was advancing and many of the developments concerned women. In improving standards of living through medicine, scientists also controlled and arranged technology for humans. Many new advanced operations had been developed especially for women. Richmond-Abbott (1992 : 291) describes how historically men have utilized science in taking over control of women's lives:

From the eleventh century until contemporary times men slowly appropriated women's traditional role of attending births, labeling their own 'doctoring' as scientific while labeling midwifery as unsafe or even witchlike.... with the expansion of medicine in the eighteenth and nineteenth centuries, there was gender conflict over healing.... In contemporary times the birth process has been taken out of the hands of the family and midwives and medicalized so that it now usually takes place in the sterile atmosphere of a hospital with men in control and the women unconscious or at least immobilized.

Men have gradually replaced women's role in the reproductive process and childbirth with their 'safe' scientific technology. They have made people believe that women's health and human reproduction are in their hands. On the one hand, it may be good that women's health is a concern; but on the other hand, it may imply that men and scientists see women as little more than objective materials in the quest to achieve scientific success and dominance.

The great and potentially destructive influence of science on human lives has been an issue for feminists for some time: "...feminist critiques of the 1970s focused intensively on the destructive power of science, whether that be power over women,

over non-white people, over non-heterosexuals, over the environment, or over other creatures” (Birke and Henry, 1997 : 221). As discussed earlier, while science has brought social benefits, it has also brought an increase in the capacity for destruction, most obviously in the case of weapons. Consequently, some feminists have sustained attention on the possible negative consequences of the various branches of science. Hanmer (1997 : 349-350), studying female reproduction, confirms Birke and Henry’s observations on the subject of feminism and science, further discussing the feminist concern with reproductive issues and with how science and technology gradually impose upon women’s reproductive biology:

In the early 1970s in Britain, women formed groups around reproductive issues in order to provide advice and practical services in relation to pregnancy testing, contraception, abortion and childbirth. The aim was to gain control over our bodies... it became clearer how science and technology were being used to disempower growing numbers of women by extending interventions initially justified ‘in exceptional circumstances only’ to routine use.

These women formed groups to protect their roles and their bodies from male control. They realized that they had continually been robbed of control over their own lives - from useful medical aids (for example, pregnancy-testing kits or contraceptive pills) to technological advancements in the birthing process. These feminists continued to fight for more public concern about women’s right in relation to their own bodies, and to raise awareness about the disadvantages and advantages of male science controlling human reproduction.

Arguably, the most significant field of science in directly determining the future of humanity is biotechnology: “a group of technologies which uses processes in, and products from, living organisms for our benefit. The processes may actually take place in living organisms as such, or may be industrial processes based on the principles of biological processes in nature” (Yuthavong and Gibbons, 1994 : 1). Mills (1993 : 132) similarly observes the influence of science on human lives: “It is a world in which the pervasive organization of society can be characterized as ‘bio-technical power’ – the modern(ist) concern with control of and upon the body and the contribution that those processes have made to human subjectivity.” Human society

is increasingly the product of science, especially biotechnological science, redefining the boundaries of 'humanity' in the area of reproduction. This is an area of scientific activity thematized in Branagh's *Frankenstein* of special significance to women.

Feminists studying biotechnology, such as, Shulamith Firestone (1971), Mary O'Brien (1974), and Gena Corea and Susan Ince (1987), have remarked how women come increasingly under male control through medical intervention in the reproductive process. Hormonal contraceptive pills, hormonal implants and vaccination against pregnancy are technologies developed to control reproduction. It can be argued that these scientific interventions actually empower women by giving them the ability to manipulate their own biology. However, the most advanced technologies - artificial insemination, embryo experimentation, surrogacy for women, and even sex selection - go further than this (Hanmer, 1997). It is noticeable that most of these technologies have been developed to increase human fertilization, but the issue of sex selection is a manipulation of a slightly different order, aiming as it does to scientifically control the *qualities* of new life. It represents an attempt to remove more of the reproductive process from the uncertainties of nature and women, to give science, and thus men, more control and power to 'create' life. It is that contemporary issue that seems to be alluded to when in the film Victor remarks excitedly, "We can design a life. We can create a being who might be better than us, stronger than us and even more civilized than us." The film goes beyond the novel in this respect, having the protagonist clearly state his extra objective in creating an artificial man, his desire to design and improve the qualities of humans both in physical and mental respects. He may not explicitly desire to replace the power of God as in the novel but this is his aim in effect, and arguably that of reproductive science in general.

Frankenstein's use of the verb 'design' is significant here, since it suggests not the simple physical construction of a body which he actually achieves, but the idea of manipulation of nature at a more fundamental level; in other words, genetics and cloning. Cloning, which emerged late in the twentieth century, is the most recent and

the most controversial step in this direction and one with special significance in relation to the *Frankenstein* story:

Cloning is probably one of the most futuristic and uncertain areas of Reproductive Engineering.... This situation presents a major contrast to sexual reproduction, where the offspring are genetically different from both parents.... Here, we come to consider the *Frankenstein* story, the great concern of many of the would-be prophets who plead for the pass of legal prohibitions against genetic research “before it’s too late.” (Karp, 1976 : 195-213)

Cloning brings different results from sexual reproduction as its product would be genetically similar to the parents. Here, *Frankenstein* is directly related and its message warning people of possible dangerous consequences is again exposed. Although Karp himself does not think that reproductive engineering will necessarily bring problems, he remarks the great anxiety involving reproductive engineering in the society. Notably, the name “Frankenstein” has become a common cultural reference for such scientific attempts to create life in this way. It is evident, for example, in an article entitled “Frankencell Sparks Debate” in the *Bangkok Post*, December 11th, 1999: “The research effort, jokingly referred to as ‘*Frankencell*’ by researchers at the Institution for Genomic Research where the work was conducted, was designed to determine the minimum set of genes needed to build a living organism” (7). It is in this context of growing social concern over scientific intervention in life processes that the film of *Frankenstein* was produced. It can be seen, then, as an expression of cultural anxieties.

In fact, *Frankenstein* is one of various films in the late twentieth century featuring the scientific theme of reproductive engineering, such as the Thai film *Cloning* (1998) and the American film *Gattaca* (1996). Many films have explored the idea of robots or cyborgs, which are a combination of human and machine. The artificial men in *Universal Soldiers* (1995) presents the idea of an ideal robot ‘in the image of man, that never tires or makes a mistake’ (Jordanova, 1989 : 112). This idea was earlier seen in *Metropolis* (1927) and has since been shown in numerous films. It comes from the human dream of a perfect body with special abilities, a theme famously explored in Aldous Huxley’s novel *Brave New World* (1932). Additionally,

recently *The Sixth Day* (2001) presented an aspect of cloning relating to crimes. It implies that cloning could become a tool of the rich or even criminals in achieving their goals. Like *Frankenstein*, it exposes social anxieties concerning the possible negative consequences of this area of science.

In this sense, science as it is portrayed in *Frankenstein* is not merely a problem for women, but for humans in general. However, because of their centrality in the reproductive process, women must be seen to have a special interest. This seems to be expressed towards the end of Branagh's film, when the female protagonist is shown to be regenerated by the male as nothing more than a resource for scientific projects. It is noticeable that the film here diverges from the novel, in which Elizabeth is not killed in order to become material for the monster's bride, nor resurrected to serve Frankenstein's romantic love. In this respect, the film may be seen to go further in criticizing the possible negative consequence, particularly for women, of this kind of instrumental science.

Branagh's film also works like the novel structurally in indirectly criticizing male science and highlighting its potential damage through the dramatic portrayal of consequences in a tragic ending. Everyone dies. Nobody is happy with Frankenstein's experiment, even himself. The film proceeds tragically to Elizabeth's suicide, which might convey women's passive resistance to science mistreating the human body. The end of the film might imply that male science is too materialistic to be aware of possible bad results. It may even allow the viewer to think about the female viewpoint. But while the film works to portray how human science affects human lives, and perhaps particularly the lives of women it does not end with explicit demands for a 'feminist' solution and does not return to the mother issue, perhaps because (as mentioned in previous chapters) the filmmakers must avoid making this popular product a "feminist" film. The film neither praises male science nor considers "female" solutions.

In fact, women in the film remain explicitly and practically marginalized by male science. Frankenstein, representing male scientists, clearly shows that women and their emotional expression are subordinate to scientific success. Male scientists

tend to treat women as outsiders, observers and intruders. In this respect, the film could be seen to simply reflect historical realities. In fact, women have traditionally been held back in the scientific field. Birke and Henry (1997 : 223), studying women's roles in developing science and technology, observe of the history of women's lesser participation in scientific development, "...women have been as hidden from the history of science as they have been elsewhere." We do not have much information about women's roles in science and technology because history, also dominated by men, has not mentioned it. Women's roles in relation to science seem to have been overlooked. I wish to examine here how Branagh's *Frankenstein* film relates to this tendency.

Science, we can say, has been 'gendered.' Kellor (1985), studying women's roles in relation to human scientific achievement, observes:

Science, as a way of looking at the world, is conceptually gendered; the distancing stance of objectivity, for example, is stereotypically associated with masculinity in western culture. Not surprisingly, then, men have long outnumbered women in the research activities of science and technology. (Kellor, 1985 : 56, quoted in Basow, 1986 : 134)

While women have been accepted in certain areas outside scientific discourse, they have been hidden in the history of science. People do not think about women scientists other than Marie Curie, who has been portrayed as a remarkable exception rather than a model of women's capacities. Therefore, people, including women themselves, have become familiar with seeing women excluded from scientific matters. At present, women's situation in this respect is not as terrible as it was, but women are still typically placed as only observers, or at best the partners, in scientific endeavor. They are not totally accepted even in the study of science: "In medical sociology,... training, and work situations of medical professionals, except for nurses, have excluded women" (Lorber, 1975 : 97). Women are not equally accepted in societies in relation to science. Even if they might get work or are enabled to study science, they are still subordinated to men. The lesser opportunities women receive in studying science also reduces the social acceptance of their ability in science.

It was remarked earlier that science gives humans both advantages and disadvantages, and the film also points this out. It presents the positive impact of medical science on human lives in the fighting of the cholera epidemic, a real historical problem in Europe; however, the film seems to pay less attention to this than to the negative consequences, including those that might be expected to affect women. Branagh's *Frankenstein* presents a scientist's life and his attitudes towards people and society in the eighteenth century. Branagh chose to keep his film at least apparently realistic in presenting society in the eighteenth century, but there is evidence that the filmmaker was also influenced by the continuation in the twentieth century of traditional gender stereotypes and beliefs. Though Branagh changed some details of the original novel to suit the film production and the modern popular audience, elements concerning science which Branagh changed or added make no suggestion that women might have a more active role to play in science and its social effects.

The character of Frankenstein is most notable in this respect. He does not let Elizabeth disturb his experiment, does not accept any concern or any help from her, and obviously treats her as an outsider. The first such scene depicts Elizabeth visiting Frankenstein in his laboratory, where he seems to concentrate exclusively on his experiment, and she says to him, "Victor, you are completely obsessed." Her remark not only conveys her concerns about him, but also suggests women's thoughts about men in terms of men's obsession with work. She asks him to go out and have a rest, but Frankenstein rejects her, verbally positioning Elizabeth as an outsider through his words, "Go away, I'm busy." He seems to treat her not only as an outsider, but also an annoying child, a distraction from his scientific endeavor. While the film does not necessarily support such a condition, the attitude expressed through Frankenstein is a clear and typical representation of women's exclusion from scientific practice.

In the same scene, Elizabeth is further presented negatively from the male characters' point of view when she acts like a child playing with his laboratory equipment and making a mess. Although she does not cause any damage to Frankenstein's experiment, Frankenstein seems to be afraid that her innocence is

harmful to his work. His sense of threat is expressed in his verbal response: "Put it down, put it down. It's not to play with. Put it down." Here, for him, Elizabeth is clearly a disturbance. Again, the film does not actively condone such gender role-playing, but nor does it directly question it.

The next scene further confirms the gender stereotypes. Frankenstein, Elizabeth, Justine and William take a trip to the mountaintop together. There, they perform an experiment with the electricity in lightning. In this scene, Frankenstein is obviously the man in control. He instructs the others to prepare the experimental equipment. Simultaneously, he controls them, telling them not to be too excited about the scientific exercise, thus asserting the power of 'male' reason over 'female' emotions and expressivity. Elizabeth, like Justine and William, is excluded from scientific knowledge. So when she sees the coming lightning clouds, she seems to be frightened and wants to escape. She runs around and keeps asking Frankenstein what they should do - "*What are we going to do?*" - a familiar image of female helplessness and women's need for male guidance. Her ignorance of scientific explanations for natural phenomena is also expressed through her facial expressions. She stares in bewilderment and wonder and keeps gaping. These images suggest that she is 'naturally' alien to scientific discourse. The difference between Frankenstein's and Elizabeth's roles in the scientific activity presented in this scene reflects their different positions in relation to scientific knowledge and practice.

Another scene conveying women's exclusion from scientific endeavor is that in which Elizabeth comes to see Frankenstein in Ingolstadt, as he has not contacted his family for a long time. Elizabeth has a chance to meet him at his home and laboratory, which is full of his experimental materials, including human bodies. The appearance of Frankenstein as well as of his domicile, in which work and home are not separated, implies his strong dedication to his work. Elizabeth cannot accept his conditions, and wants to see his experiment, the cause of Frankenstein's bad appearance. She runs to the door of his laboratory and wants to open it. Immediately and clearly, Frankenstein treats her as an outsider, wanting to protect his invention. He grasps her wrist and flings her away. Moreover, he seems to completely exclude

her from his scientific tasks by rejecting all of her concern and her offer of help, as shown in their dialogue:

Elizabeth : Let me help you.

Frankenstein : No.

This scene implies that women's concerns and significance may be less important to men than scientific achievement. From a male perspective, women may seem to be very distant and unable to understand their scientific ambition.

The scene further confirms traditional social beliefs about men's and women's different personalities, particularly in relation to science. While Elizabeth is presented against a background of female domestic products (as mentioned in chapter III), Frankenstein is framed by images of scientific knowledge: pages of anatomical sketches and portraits of famous scientists. This setting and these 'props' reflect the opposing stereotyped images of men's scientific endeavor and women's domestic confinement. Again, women are explicitly excluded from scientific endeavor, treated as only outsiders of male science.

Branagh might understand both the subordination of women to men in relation to science and social anxiety over advanced reproductive technology, but he does not explicitly fight or speak for women or directly present social concern, probably because he needed to make his film a popular film for the broader audience. What Branagh could do in his film, though, is indirectly criticize instrumental male science through devices similar to those in the novel. I will examine these in the following section.

2. Science and the Otherness of Women, Nature and the Monster

As discussed earlier, Shelley's novel seems to suggest that science may bring humans both the benefits of a better life and the disadvantages of new disasters. This message is continued through Branagh's film because the film was also made amidst social anxieties concerning reproductive engineering, an area of scientific

advancement with special significance for women. However, the possible negative consequences of this branch of science particularly for the traditionally 'feminine', are presented only implicitly in the film to avoid a big social debate. However, the film, like the novel, does present the message indirectly to some degree through an implicit connection between women, nature and the monster. In this section, I will describe and analyze how the film presents the otherness of women, nature and the monster in relation to male-dominated science.

I will begin by returning to the scene involving the electricity experiment on the mountaintop. This is an important scene, pleasing the audience with the beautiful surroundings, while conveying the relationship between humans and science, and even directly showing the connection between nature and women. This scene dramatically contrasts images of an extensive surrounding mountaintop, enormous mountains, and expansive blue sky against a few small human figures. The audience may gradually, unconsciously perceive the vast difference of scale between the natural surroundings and the humans, which implies their different degrees of power. They may witness the human fear of unpredictable and uncontrollable nature through Elizabeth's, Justine's and William's attitudes. It is noticeable that the scene has Frankenstein, women and children as its main focus. Although women are not presented as having such great power as nature, they seem to be set particularly close to nature. In this scene, in which humans are all happy in nature, nature and women seem to play the same role as the source of happiness. The electricity experiment in this scene is not for fulfilling Frankenstein's scientific ambition, it is just for pleasure. This scene might suggest that nature and women similarly bring peace and happiness to humans and in this sense could be seen to have positive implications at the same time that it marginalizes women in relation to science.

In the same scene, the various shots help the audience understand the advantages of science in bringing humans to discovery of the secrets of nature. Frankenstein is not afraid of the sudden and horrible natural phenomenon. He treats it as a normal event that is scientifically controllable. Moreover, he even shows that he can utilize it. Suddenly, after the experiment, the characters and the backgrounds of

the sky and the mountains are portrayed together in a medium, and then a close shot. Consequently, with the changes in shot types, characters are presented more closely and larger in relation to the sky and the mountains. While the long distance between humans and nature in the earlier long shot may have conveyed the different degrees of power of nature and humans, here the more 'human' scale suggests the influence of science. It seems to say that with successful scientific endeavor, humans may approach the power of nature. Advancing shots in this scene work very well in conveying the advantages of studying and understanding science. The combined effect of this scene, as discussed above, suggests the possibility of harmony between science, women and nature.

There are other scenes that work to relate women to nature - through, importantly, not with science - such as the scene of Carolyn's asking Frankenstein to take a rest, presumably out in nature from his long study. Likewise, the lightning happening at the same time as William's birth and Caroline's death would seem to establish a connection between women and nature. As discussed in chapter II, women and nature have traditionally been considered to be related closely to each other and this connection is also raised as the main focus of essentialist feminists, reminding people of women's significance by returning to "natural" feminine characteristics and roles as human life-givers and nurturers (Nicolson, 1990 : 152).

It might be said, though, that nature in Branagh's film is not used explicitly to convey women's significance, but is implicitly connected with women's struggle against male scientific ambition. Women's and nature's significant roles as the roots of life are not completely neglected in Branagh's *Frankenstein* but it does little to establish a conscious connection between the two, which would effectively remind the viewers of the significance of women. The film especially does not work in this respect after these scenes at the beginning. It merely seems to convey that science might interrupt or destroy natural cycles of life and the untouchable power of nature, but it does not overtly discuss the affects on women or women's potential effects on science.

However, like the novel, the film has the monster indirectly represent women's ideas and express women's anxieties about possible negative consequences of male-dominated science. The monster is presented with a special relationship to women, or at least the feminine. He possesses the typically female characteristics of sensitivity and expressiveness. He is shown as very sensitive, and in this sense as 'feminine', through various scenes in which he cries: after being rejected and hurt by the cottagers, after Frankenstein's death, and at Frankenstein's funeral. He expresses his feelings freely and totally when he gets angry, sad or disappointed. He loves music and also likes to talk, insisting on communicating with Frankenstein, much like Elizabeth. Such a female characteristic is shown when the monster meets Frankenstein and talks about his terrible experiences - being abandoned and rejected and living alone in the forest. He declares his feelings about Frankenstein's experiment and wants Frankenstein to disclose himself as well. This behavior echoes Elizabeth's asking Frankenstein about the experiment and his secret. For these combined reasons, the monster's mind seems to be in important respects like a woman's. In this sense, the rejected monster may represent the feminine, excluded from male science. Whether this special sympathy with the feminine and nature is a residence in the borrowed brain or whether it is developed through his relationship with nature is not made clear – like the novel, this is not a text of psychological realism. The monster has this identity with the feminine and nature as a filmic narrative device.

Importantly, Branagh also relates the monster to nature and lets him convey what might be considered a 'feminine' criticism of destructive male science. In the novel, while Frankenstein is created as a scientist who strongly aims to dominate nature, the monster is identified closely with nature. Shelley has the monster criticize male science and indirectly remind the reader of the significance of both women and nature from a woman's perspective. Similarly, the monster is an important tool representing the power of nature in the film. It is noticeable that he is almost always presented with nature imagery. He has nature as his safe home, wanders alone in the embrace of nature, begins his revenge in nature, and eventually returns his life to

nature. He seems to be the living representative of nature in criticizing and taking revenge on Frankenstein in his destructive action.

After being abandoned by his creator and rejected by people, the monster escapes to live in the woods. The peace of nature is presented in the first scene in which the monster arrives in the forest and walks across a small stream. Here the audience perceives calmness in nature through portrayals of lives in the forest. There are two white geese in the stream and birds singing sweetly, which imply happiness in nature. This scene clearly shows the different tones of selfish human scientific society and peaceful nature. In the peace of nature, the monster feels better and adapts himself to life with nature. Later the monster perceives friendliness in a beautiful song from a cottage. He expects to live happily with the seemingly merciful cottagers in his hidden place. However, he finally finds that nature is more suitable for him after he is again rejected by the cottagers.

Again, the monster is presented as close to nature. It is noticeable that he prefers wandering alone in the distant snowy valley to Geneva, maybe, to escape from humans. In these extensive snowy mountains, ordinary people must be fearful of the great, uncontrollable and unpredictable nature, but nature here does not even disturb the monster. Consequently, the monster seems to be a part of nature. Thus, when the monster utters "Geneva" the scene seems to imply that it is not the monster who is coming to take revenge on Frankenstein but nature.

When the monster arrives in Geneva to take revenge on Frankenstein, he lives again in the forest (nature). After killing William and accusing Justine, he hides himself in the forest and no one can find him. Nobody except Frankenstein knows of his existence, and he exposes his being to his enemy. The viewers may again perceive his relationship to nature when he asks Frankenstein to meet him in the North among the ice. The film shows Frankenstein climbing a huge ice wall. The greatness of the mountain is revealed as the camera zooms out from Frankenstein. Compared to the vast mountain, Frankenstein is very small, only a tiny spot on the

earth. This scene seems to imply that humans are only part of a greater nature over which they cannot hope to win.

During his talk with Frankenstein, the monster tells about his lonely life far away in nature, and also asks Frankenstein the most significant question: “*Have you ever been concerned about the consequences of your actions?*” Because of his identification with nature throughout the films, he clearly speaks in the name of nature, and indirectly criticizes Frankenstein’s male scientific ambition from this perspective. At the same time, because the monster has been shown to embody ‘feminine’ characteristics, he may also be seen as representing women.

In fact, the monster and women eventually come together to criticize instrumental male science when the monster gives Justine’s corpse to Frankenstein as the raw materials for reconstructing his bride:

Frankenstein : Why her?

The monster : *Materials*, remember? Nothing more, your *words*.

The monster’s statement mocks professor Waldman’s words earlier in the film, “This experiment requires appropriate raw materials,” which Frankenstein applies to his experiment and records in his journal. The film seems to be ironically satirizing Frankenstein’s scientific rejection of notions of a human soul. Although the monster is an artificial man from a scientific experiment, his ‘feminine’ personality has feelings and cares about other people. On the other hand, Frankenstein, a human from natural reproduction, never thinks about the possible negative consequences of his experiments. The monster seems to be criticizing Frankenstein’s lack of feelings and even speaking for the feminine in criticizing male science. Here the film works similarly to the novel in indirectly criticizing male scientific ambition through the character of the monster rather than directly through a female voice.

Eventually, the monster’s death, like Elizabeth’s, is a return to nature, which reconfirms his relationship to a natural order. He cannot reach Frankenstein and even makes Frankenstein very angry with him by killing all Frankenstein’s loved ones.

After Frankenstein dies, he finally burns himself together with Frankenstein, his 'father'. It is notable that the monster and Elizabeth similarly suicide with fire suggesting a degree of identification. In both cases, fire seems to present the elimination from nature of such destructive science. Consequently, it might be said that both the monster and the female protagonist represent nature in condemning the ambitious scientist.

However, it should be noted that no explicit connections are made in the film. In the end, although the film implies women's significance in relation to natural human reproduction in its added scenes of giving birth and in developing the link between women and nature in other early scenes, it does not present a strong and consistent argument. Branagh does not directly and explicitly continue Shelley's suggestion of the close relationship between women and nature as the root of life. Nevertheless, it can be seen that nature is in some way used to remind viewers of the significance of the 'feminine', though indirectly, through the medium of the monster. Importantly, through the work of nature imagery and the 'feminine' characterization of the monster, Branagh's *Frankenstein* is able to indirectly criticize male science from external perspectives. This indirect approach again avoids a feminist confrontation in the film, which would be a problem for a popular film such as this.

Conclusion

Both the novel and the film reflect social anxieties concerning the destructive capacities of science. Female characters in both the novel and the film are presented as being excluded from this male-dominated science, but in different ways. Women in the novel may not be practically or explicitly excluded, but they are always in limited domestic areas. They do not have any chance to participate in scientific experiments or even enter scientific laboratories. They do not have any scientific knowledge or even interest in science. Surprisingly, they are different from their creator, Shelley, who was so interested in science that she could make it a part of her work and draw on some of her own scientific knowledge. Shelley's *Frankenstein* is

an expression of a woman who is socially excluded from scientific involvement, who could only express her identity and ideas through male narrators.

On the other hand, women in the film are portrayed a little differently. They have some chances to enter male laboratories and observe scientific experiments. Yet, they are still only the outsiders or observers. They are even sometimes practically excluded from the experiments. Consequently, it might be said that historical changes in relation to women's roles in science do not cause the film to present women in more active roles in this area. The added scenes of scientific experiments and details do not better women's position in relation to science. Indeed, it suggests that men's ideas of women's significance and abilities concerning science in the late twentieth century, may be biased. But whether the film confirms traditional sexist beliefs or not, it certainly does not *challenge* them.

Male filmmakers often convey male attitudes to women's roles in their film. Women may have been more accepted in participating in scientific progress at the end of the twentieth century. But mostly, they were still viewed like Elizabeth, as observers, even intruders. However, with limited opportunities in society both in the nineteenth and the twentieth centuries, both the novel and the film work in some way to convey what might be called a 'feminine' perspective on destructive male science through the indirect use of nature and the monster (as well as through a tragic plot). They present nature and the monster as critical 'others' affected by scientific matters. Consequently, it might be said that although women in both texts are presented quite negatively in relation to scientific endeavors and do not directly criticize male-dominated science, both achieve a rather limited expression of a 'feminine' point of view through this indirect method.