Frankenstein and Science Fiction?

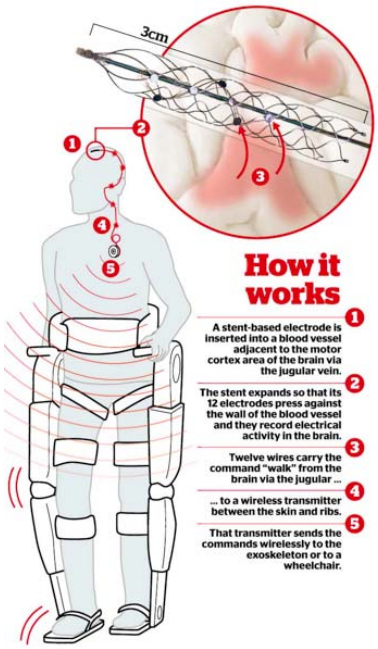
Visionaries of the future: Mary Shelley

(Web resource adapted for Olympiads School):
http://futuristablog.com/visionaries-of-the-future-mary-shelley/)

Mary Shelley (1797 -1851) made her debut as a writer in 1818 with the worldwide renowned novel *Frankenstein*. She became, according to experts, the first ever-true science fiction writer. Her story about Dr Frankenstein and his monster could be interpreted as a story of technology gone out of control. But she also asked us: is it wrong for science to create life?

Although *Frankenstein* is nowadays known as one of the most famous horror stories and horror movies, there are several reasons why the story may be considered a science fiction story:

- Mary Shelley based her story on scientific breakthroughs and thus gave a plausible account of the science of her time
- It gave a humanistic critique of that science
- And it gives a prediction of what might happen if the ways of science and technology are not controlled. She asks her readers: "What if?"

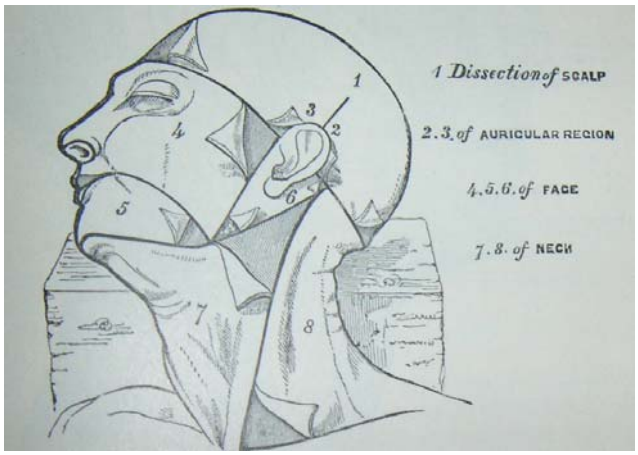


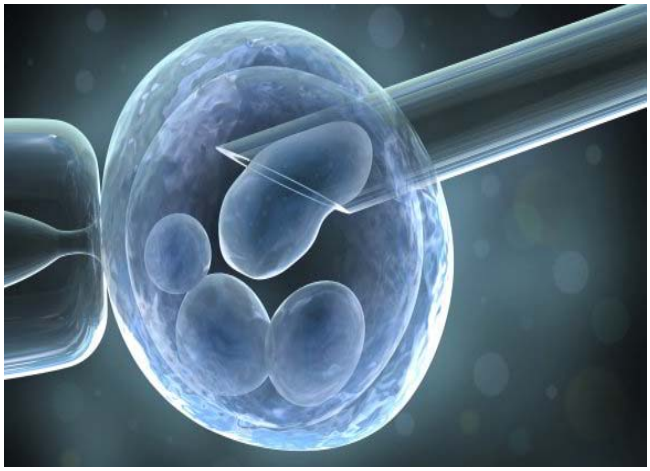
A Bionic Spine

The science of Shelley's time inspiring her to write *Frankenstein* was based on the work of the controversial Italian scientist Galvani, who was convinced that life force was identical to electricity. In Shelley's book, Dr. Frankenstein creates a man-like creature out of dead body parts and animal bones. He then succeeds in bringing this creation to life by forcing an enormous amount of electricity through its body. This idea of regenerating the dead can still be found in today's science, for example experiments with electrodes stimulating the spinal cord of paralysed patients.

Another link to the science of Shelley's time is Dr. Frankenstein's collecting of dead body parts and animal bones for his scientific experiments. In the 19th century, doctors who wished to study anatomy would hire people to dig up freshly buried corpses in graveyards.

Also, there is the aspect of 'reviving' dead body parts. Dr. Frankenstein brings 'dead' meat back to life. Nowadays, even after the brain and heart have stopped functioning, organs and tissue (skin, bones) can be harvested and given a 'second life' through transplantation.





Another link, of course, can be made to discoveries like the human genome project, which studies how life is created on the molecular level. This might give scientist the comprehension to manufacture life synthetically. Another example is that of PGD testing on embryos. It is now used for monitoring for health defects, but might go way beyond that; to determine height, weight, skin color, athletic capabilities and other characteristics.

Shelley based Dr. Frankenstein's work on the science of the time, but also provided a humanistic critique of that science. She asks her readers some questions that could still apply to medical scientists today.

In her novel, Shelley refers to the idea that we can bring people back from the dead. And also to the idea that we could have more control over our own faith: what if we didn't have to die? If man can recreate life, what is there to stop man from unleashing something far more powerful than himself? This question is found in many works of science fiction and nowadays more and more common in the debate concerning the ethics of creating human-like robots.

Natalie Portman acting in *Ex Machina* (2014)

An aspect of Mary Shelley's story that is often neglected in modern renditions of her book is the fact that the creature Frankenstein created is highly intelligible and self-aware. His creator, Dr. Frankenstein, casts him out. He tries to befriend humans, but they all get scared and run away. He becomes alienated and thus turns into a monster. But Shelley suggests that it's the people who turn him away who are the true monsters, because of their behaviour towards him.

Dr. Frankenstein's monster eventually returns to the man who created him and demands of him to construct a companion. Briefly Dr. Frankenstein feel responsible for his creation, but halfway through he stops. The thought of his two creations procreating and possibly creating a new race terrifies him. The question we can imagine Shelley asking is, "If humankind creates a new species, are we willing or able to take responsibility for it?" Dr. Frankenstein starts out with the best intentions, to conquer death and thus alleviate suffering. But he doesn't think through the consequences of his discovery.

All in all, Shelley truly made us think about the future science holds for us. And although Shelley's work is almost 200 years old, she asked us *what-ifs* that are still relevant today.

REFLECTION

Does Shelley's Frankenstein remind you of any other science fiction novel you have read or science fiction movie you have seen? Explain the similarity by emphasizing how they both offer a "humanist critique" of science.