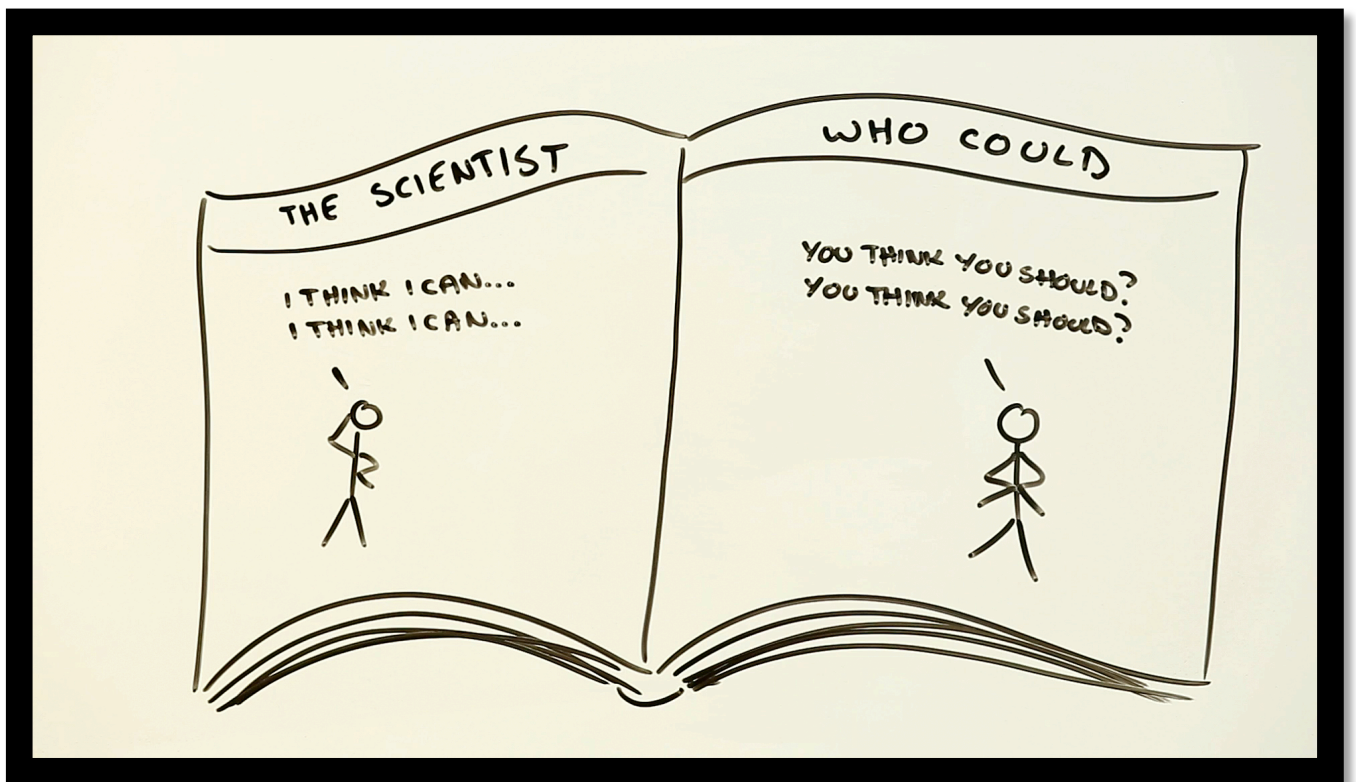


SCIENCE & FICTION



Introduction

This course on science & fiction can be read as a stand-alone topic in English classes in the Danish Gymnasium – or as a supplement in collaboration with Biology, Philosophy and Social Studies. The central issue of the course is a discussion of the role of science in our world and ultimately how fiction depicts this in various ways. The course is divided into four sections that, besides offering insights into a specific topic, train academic skills such as rhetorical analysis, theory on science fiction and analysis of a novel. Finally, the students will write an essay in which they employ their knowledge and skills. Give the students time to read Huxley's novel by handing it out in due time – perhaps some weeks before the actual course begins. Happy trails!

Section 1 – opening up the discussion!

- Read through texts 1-4.
- Text one is a presentation of gene drives that lay out a basic understanding of the concept and its uses. Texts 2-4 are argumentative texts that relate to the ethical dilemma of using gene drives.
- Make rhetorical analysis of texts 3 and 4 (for example, using Stephen Toulmin's model for argumentation). What are pros and cons using gene drives? How do the texts argue for their case?
- Class discussion – do you agree with the texts? Why, why not? (This discussion could also be structured in various other ways – in small groups, or as a debate club, etc.)

Section 2 – knowing about genes (optional)

- Read all or selected texts from the chapter 'Genes and Destiny' in *World in Motion* by Lars Ulrik Tambjerg-Ravn and complete the questions at the end of each text.
- The purpose of this section is to study genes more thoroughly, but if you are working with the Biology teacher on this subject this section might be left out.

Section 3 – What is Science and what is Science Fiction?

- Read texts 5-6. The purpose of this reading is to reflect upon how science was 'invented' and how it plays a role for man – this is done via the analytical tasks at the end of both texts. A discussion of what science means to us, and how we use it and think about it could be made at the end of the read and perhaps broaden the perspective on the initial discussion in section 1.
- Read texts 7-9. The purpose of reading here is to get to know and define characteristics of the science fiction genre before embarking on a sci-fi work. Many students have

knowledge about the genre and have certainly watched many movies within the genre, but make the students point out main claims about the genre in the text to get a more academic definition to work with later.

Section 4 – Jurassic Park and Brave New World

- These two works will serve as examples of science fiction and the purpose of using these is both to work with the sci-fi genre ourselves – and apply the theory obtained in section 3 – and to see how the role of science is portrayed here.

Brave New World – group work

1. Scientific allusions

Brave New World makes reference to various scientific forerunners of the 20th century – for example: Sigmund Freud, Ivan Pavlov, Henry Ford and Thomas Malthus. Look these up on the Internet and find out how these scientific references are present in the novel.

Is Huxley positive in his reference to these scientists?

2. Propaganda

In the novel, the values and morals of society are communicated through propaganda. Make yourself acquainted with basic propaganda techniques through these websites:

link 1:

<http://www.aacps.org/aacps/boe/instr/curr/comed/es/webquest/persuade/per2.html>

link 2:

<http://quizlet.com/5435505/7-types-of-propaganda-techniques-flash-cards/>

Now, find examples of the different propaganda types in the novel and discuss their effect.

What is Huxley's point about propaganda?

3. Characters

Zoom in on Bernard Marx, Mustapha Mond and The Savage.

What do each of these characters represent in novel. Which roles do they play? What are they determined by? How do they develop? How do they argue for their view on the

world? Which of the characters represent Huxley's voice?

4. Message & Sci-fi as genre

How does *Brave New World* fit with the genre of Sci-fi? Use the texts on science fiction and see if you can apply them to the novel as a whole.

What is Huxley's message in this novel? Incorporate your answers from the previous questions to make a detailed interpretation of this.

5. Perspective

Put the novel into perspective with other science fiction that you know. How are they similar and different?

Jurassic Park – Argumentative Essay

The central ethical dilemma of the 1993 Steven Spielberg film, *Jurassic Park*, hinges on the question of whether man should employ his knowledge of genetics to revive a species that had become extinct as a result of natural processes. Your task is to write an argumentative essay in which you answer this question: *To what extent should man manipulate genetic information and for which reasons?*

Points of evaluation:

- How well does your essay incorporate knowledge from our topic of science and fiction?
- How well does your essay use Stephen Toulmin's model in its argumentation?
- Word count: app. 700-1000 words

List of contents

Non-Fiction

Text One: 'Turning Point Kevin Esvelt', Vijeeven Katraman, *Nature*, August 4, 2016

Text Two: 'Cuba's epic battle with Zika', Sara Reardon, *Nature*, August 18, 2016

Text Three: 'The Extinction Invention', Antonio Regalado, www.technologyreview.com, April 13, 2016

Text Four: 'Regulate gene-editing in wild animals', Jeantine Lunshof, *Nature*, May 14, 2015

Theory

Text Five: 'The Ascent of Man', J. Bronowski, BBC, 1973 in *World in Motion*, Lars Ulrik Tambjerg-Ravn, 2004

Text Six: 'What is Science?', Samir Okasha, *Philosophy of Science: A Very Short Introduction*, Oxford University Press, 2002, in *World in Motion*, Lars Ulrik Tambjerg-Ravn, 2004

Text Seven: 'Defining Science Fiction', Christopher McKitterick, <http://www.sfcenter.ku.edu/SF-Defined.htm>

Text Eight: 'The Literature of Change', Christopher McKitterick, <http://www.thefreelibrary.com/The+Literature+of+Change.-a0225794210>, 2010

Text Nine: 'Planet Ivy – Science fiction: Ignore its preachings at your peril', Samuel Richardson, <http://planetivy.com/filmandtv/59868/science-fiction-ignore-its-preachings-at-your-peril/>, 2013

Chapter on 'Genes & Destiny' from *World in Motion*, Lars Ulrik Tarmbjerg-Ravn, 2004

Fiction

Text Ten: *Brave New World*, Aldous Huxley, Chatto & Windus, 1932

Movie: *Jurassic Park*, Steven Spielberg, 1993