

Glossary – Shakespeare and the Elizabethan Age

actor	Schauspieler
actress (not in Elizabethan times)	Schauspielerin
aside	beiseite gesprochener Text
blank verse	Blankvers
play	Schauspiel, Drama
drama	Drama
tragedy	Tragödie
comedy	Komödie
history	Historiendrama
romance	Romanze
Elizabethan age/era	elisabethanisches Zeitalter
enter	tritt auf (Regieanweisung)
exit; exeunt	geht ab; gehen ab
fatal flaw	verhängnisvolle Schwäche (des Tragödienhelden)
groundlings	stehende Zuschauer im elisabethanischen Theater
hero	Held
heroine	Heldin
Jacobean	aus der Zeit James I.
Master of the Revels	für Theater zuständiger Beamter
medieval	mittelalterlich
the Middle Ages	Mittelalter
performance	Vorstellung
to perform	vorführen
playhouse	Theater
playing company	Theatertruppe
troupe	
The Lord Chamberlain's Men	(berühmte Truppen der Shakespeare-Zeit)
The Admiral's Men	
playwright	Bühnenautor
dramatist	
Renaissance	Renaissance
scenery	Kulisse
soliloquy	Monolog/Selbstgespräch
stage	Bühne
stage props	Requisiten
wit	Geist, Witz

Visions of the Future

Utopia and Dystopia

Keywords:

Utopian literature: a fictional text dealing with an ideal (future) society.

Dystopian literature: a fictional text dealing with a future society in which human freedom is severely limited. A dystopia often criticizes our present-day society by exposing trends and tendencies towards totalitarian control.

Extrapolation: here: fictitious description of elements of a future society on the basis of present day phenomena and developments. The writer criticizes his or her own society by demonstrating what certain trends may lead to or what point society has already reached.

School Classics – Background Knowledge

The three novels presented here are so well known (not only) in English-speaking countries that you may encounter references to any one of these works in numerous texts. They will be presented here in the order of their first publication.

Aldous Huxley: *Brave New World*

Written in 1931, set in the distant future (26th century)

Generally known elements

- total control of society by in-vitro fertilization, artificial laboratory breeding, “cloning” of work force, and conditioning
- society strictly divided into Alpha, Beta, Gamma, Delta and Epsilon people with Alphas constituting the ruling class and Epsilons constituting a slave-like work force
- natural reproduction outlawed, sex as pure entertainment, monogamy regarded as unnatural and immoral
- people kept happy by means of a drug called “soma”
- religion replaced by a strong belief in technology and science

Extrapolation of developments of 20th century society in *Brave New World*

- belief in science, technology and progress
- misuse of science
- political and economic control and manipulation
- mass production and mass consumption
- decline of religion and values
- decline of educational standards
- drugs

- mass entertainment
- sensationalism

George Orwell: 1984

Written in 1948, hence about a future society

Generally known elements

- **Big Brother:** constant surveillance, "Big Brother is watching you."
(Orwell's Big Brother: origin of the name of the popular present-day TV show)
- **Newspeak:** invention of a new, simplified form of the English language to manipulate thought, complex (i. e. critical) thinking cannot be put into words anymore
Examples:
 - words like *goodthink*, *oldthink*, *crimethink*: simplify expressions of thought, make them imprecise, one-dimensional, eventually devoid of meaning
 - euphemisms like *Miniluv*, *Minipax*, *Minitru*: sound positive, conceal their true meaning (Ministry of Love = police, Ministry of Peace = war, Ministry of Truth = propaganda)
 - **rewriting of history:** books and newspapers are manipulated

Extrapolation of elements of 20th century society in 1984

- intrusion in people's privacy, spying on people: (Nazi Germany, Soviet Union)
- propaganda, misuse of mass media (Nazi Germany, Soviet Union)
- psychological torture

Ray Bradbury: Fahrenheit 451

Written in 1953, set in the future

Generally known elements

- **451 degrees Fahrenheit:** the temperature at which paper starts to burn
- society marked by entertainment, speed, restlessness and superficiality: extremely fast driving, multi-screen television at high volume with very shallow programmes, constant exposure to sound and advertising (individually by the wearing of ear-plugs or collectively by loudspeaker announcements)
- critical thought impeded as books are forbidden
- the firemen's job: to burn books

Extrapolation of elements of 20th century society in Fahrenheit 451

- burning of books (Nazi Germany)
- atomic bomb (Hiroshima)
- rise of television and audio media, effect on reading
- speeding-up in all areas of life: transport, communications, work, production, consumption
- dominance of entertainment
- decline of education

Science Fiction

Science fiction is a genre of fiction dealing with imaginary content such as future settings and futuristic science and technology.

As opposed to fantasy, its imaginary elements are largely possible within scientifically postulated laws of nature.

The settings for science fiction are often contrary to known reality, but most science fiction relies on potential scientific explanations or solutions to various fictional elements. There is no magic involved.

Elements of Science Fiction

- a setting in the future
- a setting in outer space (e. g. spaceflight), in other worlds, or in remote regions of the earth (underground, bottom of the sea)
- characters that include aliens, mutants, androids, or humanoid robots
- technology that is futuristic (e. g. ray guns, teleportation machines, humanoid computers, space ships, artificial planets)
- scientific principles that are new and have overcome known laws of nature, for example time travel, wormholes, or faster-than-light travel
- new and different societies, especially post-apocalyptic worlds
- paranormal abilities such as mind control, telepathy, telekinesis, and teleportation

There is considerable overlap between utopia/dystopia and science fiction.

However, one may say that science fiction is a lot more concerned with futuristic science and technology, which is central to the story, whereas utopian/dystopian narratives rather put their focus on society. Thus the element of extrapolation plays a central role in dystopian films and novels.

As an example, the films *Star Wars* or *Alien* do not really draw on extrapolation from today's society. The novels *Fahrenheit 451* and *Brave New World* or the film *Gattaca* do so extensively.

Classic Science Fiction Narratives

These classics are so well known (not only) in English-speaking countries that you may encounter references to any one of these works in numerous texts.

Mary Shelley, *Frankenstein* (1818)

Dr. Frankenstein brings to life a creature made of dead body parts and is then repulsed by what he has done. The creature becomes lonely and violent after being rejected by its creator, and turns against him.

H. G. Wells, *The Time Machine* (1895)

This story has popularized the concept of time travel, using a machine that allows an operator to travel to whatever period of history he wants. It has inspired countless science fiction stories, the most popular probably being the Hollywood production *Back to the Future*. The term "time machine", coined by Wells, is now universally used.

H. G. Wells, *The War of the Worlds* (1898)

The story of an invasion of late Victorian England by Martians. The story has become particularly famous because of its adaptation in the 1938 radio broadcast that was narrated and directed by Orson Welles. It led to widespread panic by listeners who thought the invasion was real.

20th and 21st century science fiction novels and films are so abundant that there is no use listing any of them here. For your final exam, make sure you are familiar with the texts you studied.

Glossary – Utopia and Dystopia

anti-individualist	anti-individualistisch
anti-utopian	anti-utopisch
authoritarian	autoritär
brainwashing to brainwash	Gehirnwäsche (durchführen)
dissent	abweichende Meinung haben
dissenter	Andersdenkender
dystopia	Anti-Utopie, Dystopie
extrapolation	Übertragung, Ableitung
fiction	Dichtung, erzählende Literatur
fictitious	fiktiv, erfunden
fictional	literarisch
future	Zukunft, zukünftig
futuristic	futuristisch
hierarchy	Hierarchie
imaginary	erfunden
individualist	Individualist, individualistisch
indoctrination	Indoktrination/Indoktrinierung
oppression	Unterdrückung
restriction	Einschränkung
surveillance	Überwachung
totalitarian	totalitär
utopia	Utopie

Ethical Issues of Scientific and Technological Progress

Science

Keyword:

Genetics: field of study dealing with the way living organisms inherit features from their ancestors. These features are called traits. Traits are e. g. a person's eye-colour or height.

- Genetic information is carried by a molecule called DNA which is copied and inherited across generations.
- DNA is widely known as the "double helix" and looks like a twisted ladder. It is made up of nucleotides which are the rungs of the ladder. There are four types of nucleotides (A, T, G and C). The order of the nucleotides determines the genetic code of an organism.
- Genes are segments of DNA which provide information that an organism needs so that it can build or do something. They are like sentences spelled out by means of the "letters" of the nucleotide alphabet.
- The complete set of genes in a particular organism is known as a genome.
- Genes are copied each time a cell divides into two new cells. It is through a similar process that a child inherits genes from its parents, when a copy from the mother is mixed with a copy from the father.

Genetic engineering

Putting a new piece of DNA into a cell can produce a new trait. For example, crop plants can be given a gene from an Arctic fish, so they produce an antifreeze protein in their leaves. This may prevent frost damage. Other crops can be given genes including a natural insecticide, which will protect the plant.

People with genetic disorders can be treated by means of gene therapy. The idea is to replace a malfunctioning gene with one that functions properly.

Important steps in genetic engineering

- 1953: discovery of double helix by Watson and Crick, Cambridge, UK
- 1973: blend of unrelated organisms
- 1973: production of human protein insulin
- 1981: blend of species
- 1980s: work with human genes
- 1986: open-air experimentation with plants
- 1996: commercial cultivation of genetically modified plants
- 1996: cloning of mammals (Dolly)
- 2003: sequencing of the human genome
- 2009: first transgenic primates
- 2013: use of cloning to create human embryonic stem cells

Applications of GMOs (genetically modified organisms)

- biological and medical research
- production of pharmaceutical drugs
- experimental medicine (e. g. gene therapy)
- agriculture (e. g. golden rice)
- The **widest application** exists for crops resistant to herbicides or for producing pesticides from within.
- In 2014 1,815,000 sq km throughout the world were cultivated with GMO crops. The largest share of GMO crops planted globally is owned by Monsanto Inc.
- 18 million farmers planted biotech crops in 2015, 54% of them are small farmers from developing countries.¹

Transgenic microbes

Bacteria were the first organisms to be modified in the laboratory. These organisms are now used for several purposes, and are particularly important in producing human proteins for use in medicine.

Genetically modified bacteria are used

- to produce insulin to treat diabetes,
- to produce clotting factors to treat haemophilia,
- to produce human growth hormone to treat various forms of dwarfism,
- to facilitate crop growth in some soils or prevent crop pests.

Transgenic animals

Transgenic animals are used

- as experimental models to test genes whose function is unknown,
- for the production of human hormones such as insulin.

Transgenic mice are used to study diseases and test treatments. Mice can be grown with the same genetic disorders that occur in human beings.

First genetically modified pet: the GloFish is a patented brand of genetically modified (GM) fluorescent zebra-fish with bright red, green and orange fluorescent colours.

Transgenic plants

Transgenic plants have been engineered to

- resist pests, herbicides or harsh environmental conditions,
- improve product shelf life,
- increase their nutritional value,
- produce bigger yields, thus making farmland more efficient.

"Terminator" Technology: GM plants do not yield seeds. This means that farmers have to buy new seeds every time.

¹ <https://isaaa.org/resources/publications/pocketk/16/default.asp>

Designer Babies (Reprogenetics)

The colloquial term “designer baby” refers to a baby whose genetic makeup has been artificially selected to ensure the presence or absence of certain characteristics, especially with regard to the sex of the child.

Cloning

Cloning is the creation of an organism that is an exact genetic copy of another. This means that every single bit of DNA is the same between the two.

Dolly: (July 5, 1996 – February 14, 2003) a female sheep (ewe), was the first mammal to be cloned from an adult body cell. She lived until the age of six, when she developed severe diseases, which has led to speculation that a clone may be born with the genetic age of the organism from which it was cloned.

Ethics

Biotechnology in agriculture

Pros	Cons
higher productivity	genes can end up in unexpected places
more efficient land use	genes can mutate with harmful effect
more ecological farming (no ploughing, no fertilizing, no insecticides, no pesticides)	“sleeper” genes could be accidentally switched on, active genes could become “silent”
solution to problem of famine in the world	interaction with wild and native populations: negative impact on birds, insects and soil
higher quality of food	transfer of allergenic genes
longer shelf life	GM products in the food chain
rehabilitation of damaged land	transfer of antibiotic resistance
	loss of farmers’ control over material; “terminator” technology prevents sustainable farming → dependence on big corporations

Reprogenetics

Pros (once it is safe)	Cons
parents have a right to choose	technology is not safe yet
moral obligation to give children the best life possible	bioethical codes condemn experiments with human beings
will lead to improvement of the whole species	“super humans” may look down on normal people

	“imperfect” human beings would be discriminated against
	rich people would be at an advantage
	the human gene pool may be damaged
	“New Eugenics”: people are designed to suit the needs of society
	people may be thought of as products
	human beings should not play God

Sex selection

Pros (once it is safe)	Cons
parents have a right to choose	preferences in patriarchal cultures lead to demographic imbalance
in some cultures male offspring are important to provide support for old age	members of the unwanted sex may be discriminated against
theory that having sisters (as opposed to brothers) enhances adults’ quality of life	the child may not be loved if sth. goes wrong and it is not of the desired sex
	parents fulfil their own wishes, disregarding the rights of the child
	human beings are not allowed to play God

Human Cloning

Pros	Cons
medical reasons: resource of bone marrow or replaceable organs	cloning is inherently evil, an intrusion into human life
infertile couples may have children	a person who wants to clone himself/herself is self-centred
	cloning in order to produce superior beings is eugenics and eugenics is discriminatory
	using a human being as a resource for “spare parts” is unethical
	reproduction by means of cloning might have long-term consequences for human relationships
	children may be thought of as products
	Hinduism: What about the person’s karma?
	dictators may become immortal

Glossary – Ethical Issues

achievement of scientists	Errungenschaft/Leistung der Wissenschaftler
artificial insemination	künstliche Befruchtung
development	Entwicklung
DNA (deoxyribonucleic acid)	DNA/DNS
double helix (DNA)	Doppelhelix, DNA
error rate	Fehlerrate
genetic disorders	genetische Funktionsstörung
genetic engineering	Gentechnik, Genmanipulation
genetic fingerprint	genetischer Fingerabdruck
genetic make-up, genetic constitution	Erbgut
genetic modification (GM)	genetische Veränderung
heredity, inheritance	Vererbung
inherit	erben
insecticide	Insektizid
in-vitro fertilization	In-vitro-Befruchtung
laboratory	Labor
to modify modification	modifizieren, verändern Modifizierung
molecule	Molekül
to mutate mutation	mutieren Mutation
non-polluting	umweltfreundlich
organ donor	Organspender
to pass on	vererben
pesticide	Unkrautvernichtungsmittel, Pestizid
progress (no article, no plural)	Fortschritt
reproductive cloning	Klonen von Menschen
research (into)	Forschung
research facility	Forschungseinrichtung
resistance	Resistenz
stem cell	Stammzelle
technology	Technologie, Technik
test-tube baby	Retortenbaby
therapeutic cloning	therapeutisches Klonen
transgenic	transgen (genetisch verändert)

Studying and Working in a Globalized World

With the world constantly becoming smaller due to globalization, it has become much easier to spend some time in a foreign country for educational reasons, both during one's time at school and/or as part of studies at a university or vocational training. Some future employers consider it an essential aspect of a prospective employee's CV (résumé) to have spent some time abroad, very often in an English-speaking country.

Benefits for oneself

- getting a personal insight into other cultures
- improving one's foreign language skills
- experiencing different educational systems
- contributing to one's personal development, e.g. to become more independent, self-confident, adaptable to different situations
- making new friends
- improving one's career opportunities
- broadening one's horizon on various levels

Studying and working abroad also has benefits for employers. A growing number of companies tend to employ people who have studied abroad, as these prospective employees are said to possess key job skills, e.g. cultural empathy, excellent foreign language skills, self-organization, adaptability, open-mindedness and flexibility.

Volunteerism and voluntourism

In the last couple of years **volunteerism** has become more popular. It means that a person volunteers to use his/her time and skills to contribute to a community without receiving any payment. An increasing number of people combine being a volunteer with spending some time abroad. There are various ways in which one can contribute to a community, e.g. humanitarian aid or teaching at a local school in a rural village. Volunteerism should not be confused with **voluntourism**, which can generally be defined as a combination of volunteering and sightseeing.

Voluntourism is a neologism based on the words "volunteer" and "tourism" and has been criticized as counterfeiting the original idea of volunteering.

Some of the arguments critics put forward against voluntourism are that it is not truly beneficial for communities, since "voluntourists" only spend a relatively short time in the communities in question and therefore often do not truly immerse. In addition to that, they are said to enjoy all the benefits of an ordinary tourist, e.g. staying in hotels far above the living-standard of the community they are helping, while not being really prepared for their placements. Whereas in the past charities and NGOs were mostly in charge of matching volunteers with the right projects, some major travel agencies now also specialize in offering placements for "voluntourists" against payment.