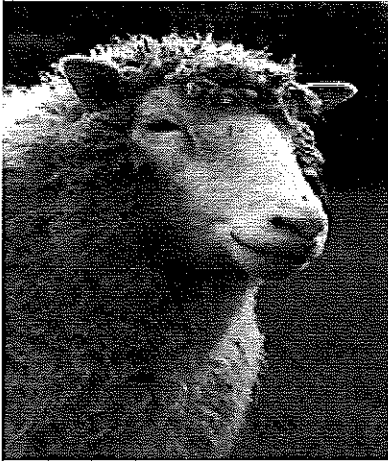# ஃ AnimalResearch.Info

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Cloning Dolly the sheep

Dolly the cloned sheep© The Roslin institute

Dolly the sheep, as the first mammal to be cloned from an adult cell, is by far the world's most famous clone. However, cloning has existed in nature since the dawn of life. From asexual bacteria to 'virgin births' in aphids, clones are all around us and are fundamentally no different to other organisms. A clone has the same DNA sequence as its parent and so they are genetically identical.

Several clones had been produced in the lab before Dolly, including frogs, mice, and cows, which had all been cloned from the DNA from embryos. Dolly was remarkable in being the first mammal to be cloned from an adult cell. This was a major scientific achievement as it demonstrated that the DNA from adult cells, despite having specialised as one particular type of cell, can be used to create an entire organism.

How Dolly was cloned

Animal cloning from an adult cell is much more difficult than from an embryonic cell. So when scientists working at the Roslin Institute in Scotland produced Dolly, the only lamb born from 277 attempts, it was a major news story around the world.

To produce Dolly, scientists used an udder cell from a six-year-old Finn Dorset white sheep. They had to find a way to 'reprogram' the udder cells - to keep them alive but stop them growing – which they achieved by altering the growth medium (the 'soup' in which the cells were kept alive). Then they injected the cell into an unfertilised egg cell which had had its nucleus removed, and made the cells fuse by using electrical pulses. The unfertilised egg cell came from a Scottish Blackface ewe. When the research team had managed to fuse the nucleus from the adult white sheep cell with the egg cell from the black-faced sheep, they needed to make sure that the resulting cell would develop into an embryo. They cultured it for six or seven days to see if it divided and developed normally, before implanting it into a surrogate mother, another Scottish Blackface ewe. Dolly had a white face.

From 277 cell fusions, 29 early embryos developed and were implanted into 13 surrogate mothers. But only one pregnancy went to full term, and the 6.6 kg Finn Dorset lamb 6LLS (alias Dolly) was born after 148 days.

What happened to Dolly?

Dolly and her lamb, Bonnie© The Roslin institute

Dolly lived a pampered existence at the Roslin Institute. She mated and produced normal offspring in the normal way, showing that such cloned animals can reproduce. Born on 5 July 1996, she was euthanased on 14 February 2003, aged six and a half. Sheep can live to age 11 or 12, but Dolly suffered from arthritis in a hind leg joint and from sheep pulmonary adenomatosis, a virus-induced lung tumour that is common among sheep which are raised indoors.

The DNA in the nucleus is wrapped up into chromosomes, which shorten each time the cell replicates. This meant that Dolly's chromosomes were a little shorter than those of other sheep her age and her early ageing may reflect that she was raised from the nucleus of a 6-year old sheep. Dolly was also not entirely identical to her genetic mother because the mitochondria, the power plants of the cell that are kept outside the nucleus, were inherited from Dolly's egg donor mother.

Why clone sheep?

Dolly the sheep was produced at the Roslin Institute as part of research into producing medicines in the milk of farm animals. Researchers have managed to transfer human genes that produce useful proteins into sheep and cows, so that they can produce, for instance, the blood clotting agent factor IX to treat haemophilia or alpha-1-antitrypsin to treat cystic fibrosis and other lung conditions. Inserting these genes into animals is a difficult and laborious process; cloning allows researchers to only do this once and clone the resulting transgenic animal to build up a breeding stock.

The development of **cloning technology** has led to new ways to produce medicines and is improving our understanding of development and genetics.

Since Dolly

Since 1996, when Dolly was born, other sheep have been cloned from adult cells, as have cats, rabbits, horses and donkeys, pigs, goats and cattle. In 2004 a mouse was cloned using a nucleus from an olfactory neuron, showing that the donor nucleus can come from a tissue of the body that does not normally divide.

Improvements in the technique have meant that the cloning of animals is becoming cheaper and

more reliable. This has created a market for commercial services offering to clone pets or elite breeding livestock, but still with a $100,000 price-tag.

The advances made through cloning animals have led to a potential new therapy to prevent mitochondrial diseases in humans being passed from mother to child. About 1 in 6000 people is born with faulty mitochondria, which can result in diseases like muscular dystrophy. To prevent this, genetic material from the embryo is extracted and placed in an egg cell donated by another woman, which contains functioning mitochondria. This is the same process as used in cloning of embryonic cells of animals. Without this intervention, the faulty mitochondria are certain to pass on to the next generation.

The treatment is currently not permitted for use in humans. However, the Human Fertilisation & Embryology Authority in the UK has reported that there is general support in the public for legalising the therapy and making it available to patients.

Read about more breakthrough advances in science made through animal research in our timeline

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- **Year:** 1996
- **Scientist(s):** The Roslin Institute
- **Animal(s):** Sheep
- **Countries:** United Kingdom
- **Research field(s):** Anatomy and development, Cell biology, Genetics, Medical technologies
- **Medical application(s):** Basic research

Australian 3D printers on track to print body parts

http://www.abc.net.au/news/wa/

Australian scientists say they have found a way to grow human body parts using 3D printing technology.

The University of Wollongong's Centre for Electromaterials Science is opening a research unit at Melbourne's St Vincent's Hospital where 3D printing will be used to reproduce tissue material.

The bio-fabrication unit scientists have already begun animal trials to reproduce skin, cartilage, arteries and heart valves.

What is 3D printing?
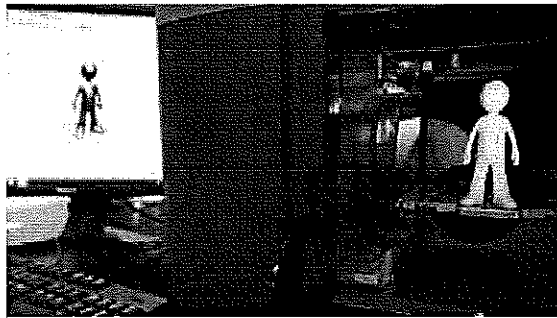
- Allows objects to be created using a computer, software and a 3D printer
- The printer builds the object up layer by layer
- Living cells can be printed using bio-ink to build tissue and organs
- The technology has also been used to make buildings and even guns

Professor Mark Cook says the process could eventually do away with the need for organ transplants.

"It's possible to print devices and structures that can be implanted in human bodies, and these devices can have cells grown on them so that bodily functions can be replicated on these very tiny devices," he said.

"In the future, these sorts of devices will be able to recreate parts of people's joints and bones, conceivably, in the future, even organs."

The Australian technique incorporates the living cells into the actual layered printing process, with a 95 per cent survival rate for the cells.

Team leaders say they anticipate the new tissues will be cleared for use in humans within three to five years.

And they say they plan to move on, eventually, to finding ways of using the technique to print more complicated parts like kidneys and livers.

The centre's director Professor Gordon Wallace says scientists will be recreating complete organs in a decade's time.

"Our ability to print living cells and biopolymers and spatially distribute those in a 3D structure of course sparks the imagination," he said.

"You could see how we could eventually be able to print organs using 3D printing technology."

First posted Fri 3 May 2013, 12:39pm AEST

CULTURAL SUBSETS

Cultural Subsets

There are many, many different cultures throughout the world. Interestingly, we are all typically part of several cultures at the same time. For example, someone who lives in the U.S. could be part of the national culture, in addition to the distinct culture of the South, a religious community, a heritage group and more. In this lesson, we are going to focus on identifying different subsets or categories of cultures that can exist within a larger one and also discuss how these subsets are viewed.

Subcultures

First, it's important to understand the concept of a subculture. A **subculture** is a unique culture shared by a smaller group of people who are also a part of a larger culture. A larger culture often contains many subcultures, and an individual can be part of several of them. Each subculture has distinct norms and customs that aren't a part of the broader culture in which it is enveloped. Think of the Amish, or bikers, or hippies or Whovians. Each of these groups has unique cultures, yet they all exist within the broad culture of the United States.

High Culture vs. Popular Culture

There are so many subcultures in America that it would be extremely difficult to identify all of them. And, though some subcultures are basically like an open group that anyone could join, others are only available to some members of a society. For example, the term **high culture** is used to describe a subculture shared by the elite in a society. In fact, many associate the word 'culture' with high culture - someone who attends the ballet and collects museum-quality artwork is often considered 'cultured.'

High culture isn't considered to be better by sociologists - just interestingly different from **popular culture**, which is the dominant subculture shared by the majority of a society's population. The elements of popular culture have mass accessibility and appeal. For example, high culture includes expensive restaurants that serve caviar and play classical music. This isn't typically appealing to the bulk of citizens in the U.S. On the other hand, popular culture includes cheap fast-food restaurants that serve hamburgers and play top 40 pop music. These restaurants are so appealing that they are everywhere you look.

Multiculturalism

Of course, our entire country does not consist only of high culture and popular culture. It's well known that we have immigrants from many countries who bring their culture with them and make our population quite diverse. Have you ever heard that America is like a melting pot? It could be said that our national culture is a blend of many cultures. They are like soup ingredients that, once mixed together, contribute to the whole and are difficult to separate from each other.

Yet, **multiculturalism**, which is the view that cultural differences should be respected and celebrated, is on the rise in the U.S. In contrast to the melting pot metaphor, multiculturalism promotes diversity through the recognition and continued celebration of separate cultures that co-exist peacefully. Rather than creating one culture from aspects of other cultures, multiculturalism focuses on the preservation of separated individual cultural traditions and customs.

Counterculture

Multiculturalism seems like a welcoming, inclusive sentiment, but the inclusion may not extend to countercultures. A **counterculture** is a type of subculture, which strongly opposes one or more elements of the dominant culture. In other words, those who share a counterculture reject conventional values or behavioral norms accepted by the majority in a society. For example, polygamists believe in marriage to more than one person. This contradicts the value - and even law - of the dominant American culture. Many people react very negatively to the culture of polygamists and other countercultures as well.

Lesson Summary

In summary, a **subculture** is a unique culture shared by a smaller group of people who are also a part of a larger culture. A larger culture often contains many subcultures, and each subculture has distinct norms and customs that aren't a part of the broader culture in which it is enveloped.

There are so many subcultures in America that it would be extremely difficult to identify all of them. However, the term **high culture** is used to describe a subculture shared by the elite in a society. High culture isn't considered to be better by sociologists - just interestingly different from **popular culture**, which is the dominant subculture shared by the majority of a society's population. The elements of popular culture have mass accessibility and appeal.

Perhaps more than any other country, we have a great diversity of people and backgrounds. **Multiculturalism** is the view that cultural differences should be respected and celebrated. In contrast to the melting pot metaphor, multiculturalism promotes diversity through the recognition and continued celebration of separate cultures that co-exist peacefully. Although that may seem like a welcoming, inclusive sentiment, it may not extend to any **counterculture**, which is a type of subculture that strongly opposes one or more elements of the dominant culture.

In sociology, and cultural studies, a **subculture** is a group of people within a culture that differentiates themselves from the larger culture to which they belong. The term *subculture* has become deprecated among some researchers, who prefer the term **co-culture**, in order to avoid the connotations of inferiority associated with the "sub-" prefix.[1][2] While exact definitions vary, the *Oxford English Dictionary* defines the term as "a cultural group within a larger culture, often having beliefs or interests at variance with those of the larger culture."[3]

Definition

As early as 1950, David Riesman distinguished between a majority, "which passively accepted commercially provided styles and meanings, and a 'subculture' which actively sought a minority style ... and interpreted it in accordance with subversive values".[4] In his 1979 book *Subculture: The Meaning of Style*, Dick Hebdige argued that a subculture is a subversion to normalcy. He wrote that subcultures can be perceived as negative due to their nature of criticism to the dominant societal standard. Hebdige argued that subcultures bring together like-minded individuals who feel neglected by societal standards and allow them to develop a sense of identity.

In 1995, Sarah Thornton, drawing on Pierre Bourdieu, described "subcultural capital" as the cultural knowledge and commodities acquired by members of a subculture, raising their status and helping differentiate themselves from members of other groups.[5] In 2007, Ken Gelder proposed to distinguish subcultures from countercultures based on the level of immersion in society.[6] Gelder further proposed six key ways in which subcultures can be identified through their:

1. often negative relations to work (as 'idle', 'parasitic', at play or at leisure, etc.);
2. negative or ambivalent relation to class (since subcultures are not 'class-conscious' and don't conform to traditional class definitions);
3. association with territory (the 'street', the 'hood', the club, etc.), rather than property;
4. movement out of the home and into non-domestic forms of belonging (i.e. social groups other than the family);
5. stylistic ties to excess and exaggeration (with some exceptions);
6. refusal of the banalities of ordinary life and massification.[6]

Identifying subcultures

Members of the seminal punk rock band Ramones wearing some fashion symbols of the punk subculture such as Converse sneakers, solid black leather jackets, and blue jeans.

The study of subcultures often consists of the study of symbolism attached to clothing, music and other visible affectations by members of subcultures, and also the ways in which these same symbols are interpreted by members of the dominant culture. According to Dick Hebdige, members of a subculture often signal their membership through a distinctive and symbolic use of style, which includes fashions, mannerisms, and argot.[7]

Trekkies (or fans of Star Trek) are a subculture; they share specific understandings and meanings that those outside their subculture may not understand.

Subcultures can exist at all levels of organizations, highlighting the fact that there are multiple cultures or value combinations usually evident in any one organization that can complement but also compete with the overall organisational culture.[8] In some instances, subcultures have been legislated against, and their activities regulated or curtailed.[9] Youth subcultures have been described as a moral problem that ought to be handled by the guardians of society within the post-war consensus.[9] British youths in the post-war era were labeled as troublemakers by members of the dominant culture.

Subcultures' relationships with mainstream culture

It may be difficult to identify certain subcultures because their style (particularly clothing and music) may be adopted by mass culture for commercial purposes. Businesses often seek to capitalize on the subversive allure of subcultures in search of *Cool*, which remains valuable in the selling of any product.[10] This process of cultural appropriation may often result in the death or evolution of the subculture, as its members adopt new styles that appear alien to mainstream society.[11]

Potato chip packages featuring hip hop sub-cultural designs in a case of mainstream commercial cultural merging

Music-based subcultures are particularly vulnerable to this process, and so what may be considered a subculture at one stage in its history—such as jazz, goth, punk, hip hop and rave cultures—may represent mainstream taste within a short period of time.[12] Some subcultures reject or modify the importance of style, stressing membership through the adoption of an ideology which may be much more resistant to commercial exploitation.[13] The punk subculture's distinctive (and initially shocking) style of clothing was adopted by mass-market fashion companies once the subculture became a media interest. Dick Hebdige in his *Subculture: The Meaning of Style* argues that the punk subculture shares the same "radical aesthetic practices" as Dada and surrealism:

Urban tribes

In 1985, French sociologist Michel Maffesoli coined the term *urban tribe*. It gained widespread use after the publication of his *Le temps des tribus: le déclin de l'individualisme dans les sociétés postmodernes* (1988).[15] Eight years later, this book was published in the United Kingdom as *The Time of the Tribes: The Decline of Individualism in Mass Society*.[16]
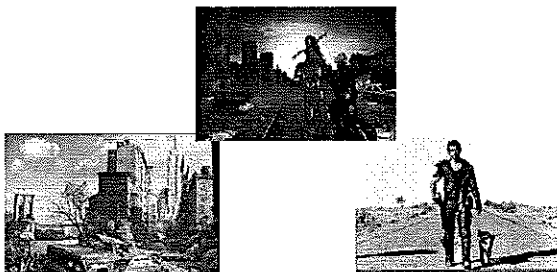
According to Maffesoli, urban tribes are microgroups of people who share common interests in urban areas. The members of these relatively small groups tend to have similar worldviews, dress styles and behavioral patterns. Their social interactions are largely informal and emotionally laden, different from late capitalism's corporate-bourgeoisie cultures, based on dispassionate logic. Maffesoli claims that punks are a typical example of an "urban tribe".[17]

Five years after the first English translation of *Le temps des tribus*, writer Ethan Watters claims to have coined the same neologism in a *New York Times Magazine* article. This was later expanded upon the idea in his book *Urban Tribes: A Generation Redefines Friendship, Family, and Commitment*. According to Watters, urban tribes are groups of never-marrieds between the ages of 25 and 45 who gather in common-interest groups and enjoy an urban lifestyle, which offers an alternative to traditional family structures.[18]

VIEWING RETRIEVAL CHART

FILMS	Central ideas and attitudes that are foreshadowed	Film language used to shape viewer response to these ideas and attitudes	How the context of science fiction shapes the reader's understanding of future societies.
MINORITY REPORT			
MINORITY REPORT QUOTES			
THE ISLAND			
THE ISLAND QUOTES			
QUOTES			

Post-Apocalyptic Worlds:
Surviving Together and Apart

Lesson Aims and Objectives:

- To explore Post-apocalyptic and dystopian texts

- Investigate the themes each text raises and the relevance to contemporary society

- Develop ways of taking the texts into the classroom to stimulate analysis of texts.

Introduction:

- moving beyond the disaster films
- trend in Young Adult fiction

- why?
  - escapism
  - moving away from issue-based fiction

- What are the general themes of post apocalypse fiction?

Definitions:

- Dystopian fiction: a work of fiction describing an imaginary place where life is extremely bad because of deprivation or oppression or terror

- Post-Apocalyptic fiction: a work of fiction set in a world or civilization after a potentially existential catastrophe or disaster

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THE FUTURE

- How do you see the future? If you were someone living in the salad days of the '50s and '60s, there were promises of interstellar exploration, flying cars, high tech lifestyles, and meaningful medical breakthroughs. We'd cure all diseases, live like royalty within our own slick scientific reality, and never once worry about modern maladies like hunger, war, or death. This is Utopia, the perfect portrait of a supposed shape of things to come. Yet for every optimist there's an opposite, a pessimistic perspective that's part luddite, part ludicrous. It's not a fear of technology that inspires these people, but where said advances will take us. Eventually, they believe our "U" will turns into a Dystopia, a horrible place where the End Times dictate our destiny.

- So within this Judgment Day dynamic, this proposed post-apocalyptic wasteland of warning signs and threats, what would be the worst? Put another way, what would be the best way for a situation set on making humans the last act of a universal staging to work? If texts have taught us anything, it's that there are lots of likely scenarios, from angry plant life to thought police persecuting the masses. In all cases, like the one presented in the recently released *Warm Bodies* (now on DVD and Blu-ray) the once bright future has turned shockingly sour, bringing about a dispirit finale to our time on the planet.

GENRES OF POST APOCALYPTIC FICTION

- Warning (ignored)
- Cataclysm
- Barbarism
- Courage
- Civility
- Re-evaluation
- Transformation
- Recovery
- Demise

- Apocalyptic fiction is a sub-genre of science fiction that is concerned with the end of human civilization. This apocalypse is typically portrayed as being due to a potentially existential catastrophe such as nuclear warfare, pandemic, extraterrestrial attack, impact event, cybernetic revolt, technological singularity, dysgenics, supernatural phenomena, divine judgement, runaway climate change, resource depletion, ecological collapse, or some other general disasters. Post-apocalyptic fiction is set in a world or civilization after such a disaster. The time frame may be immediately after the catastrophe, focusing on the travails or psychology of survivors, or considerably later, often including the theme that the existence of pre-catastrophe civilization has been forgotten (or mythologized). Post-apocalyptic stories often take place in a non-technological future world, or a world where only scattered elements of technology remain.

- The genre gained popularity after World War II, when the possibility of global annihilation by nuclear weapons entered the public consciousness. However, recognizable apocalyptic novels had existed since the first quarter of the 19th century, when Mary Shelley's *The Last Man* was published.[1]

Christian Eschatological Imagery

- Christian eschatology is a major branch of study within Christian theology. Eschatology, from two Greek words meaning *last* (ἔσχατος, last) and *study* (λογία, lit. discourse), is the study of the end of things, whether the end of an individual life, the end of the age, or the end of the world. Broadly speaking, Christian eschatology is the study of the destiny of humankind as it is revealed by the Bible, which is the primary source for all Christian eschatology studies.

- The major issues and events in Christian eschatology are death and the afterlife, Heaven and Hell, the Second Coming of Jesus, the Resurrection of the Dead, the Rapture, the Tribulation, Millennialism, the end of the world, the Last Judgment, and the New Heaven and New Earth of the world to come. Eschatological passages are found in many places in the Bible, both in the Old and the New Testaments. There are also many extrabiblical examples of eschatological prophecy, as well as church traditions.

The Book of Revelation

- The Book of Revelation, often known as Revelation, Apocalypse,[1] or by a number of variants expanding upon its authorship or subject matter, is the final book of the New Testament and occupies a central part in Christian eschatology. Written in Koine Greek, its title is derived from the first word of the text, *apokalypsis*, meaning "unveiling" or "revelation". The author of the work identifies himself in the text as "John" and says that he was on Patmos, an island in the Aegean, when he "heard a great voice" instructing him to write the book. This John is traditionally supposed to be John the Apostle, although recent scholarship has suggested other possibilities including a putative figure given the name John of Patmos. Most modern scholars believe it was written around 95 AD, with some believing it dates from around 70 AD.

- The book spans three literary genres: epistolary, apocalyptic, and prophetic. It begins with an epistolary address to the reader followed by an apocalyptic description of a complex series of events derived from prophetic visions which the author claims to have seen. These include the appearance of a number of figures and images which have become important in Christian eschatology, such as the Whore of Babylon and the Beast, and culminate in the Second Coming of Jesus Christ. The obscure and extravagant[2] imagery has led to a wide variety of interpretations: *historicist* interpretations see in Revelation a broad view of history; *preterist* interpretations treat Revelation as mostly referring to the events of the apostolic era (1st century), or—at the latest—the fall of the Roman Empire; *futurists* believe that Revelation describes future events; and *idealist or symbolic* interpretations consider that Revelation does not refer to actual people or events, but is an allegory of the spiritual path and the ongoing struggle between good and evil.

The Book of Revelations

- Revelation chapter 14 (NIV)
- Then I saw another angel flying in midair, and he had the eternal gospel to proclaim to those who live on the earth—to every nation, tribe, language and people. 7 He said in a loud voice, "Fear God and give him glory, because the hour of his judgment has come. Worship him who made the heavens, the earth, the sea and the springs of water."
- 14 I looked, and there before me was a white cloud, and seated on the cloud was one "like a son of man" with a crown of gold on his head and a sharp sickle in his hand. 15 Then another angel came out of the temple and called in a loud voice to him who was sitting on the cloud, "Take your sickle and reap, because the time to reap has come, for the harvest of the earth is ripe." 16 So he who was seated on the cloud swung his sickle over the earth, and the earth was harvested.
- 17 Another angel came out of the temple in heaven, and he too had a sharp sickle. 18 Still another angel, who had charge of the fire, came from the altar and called in a loud voice to him who had the sharp sickle, "Take your sharp sickle and gather the clusters of grapes from the earth's vine, because its grapes are ripe." 19 The angel swung his sickle on the earth, gathered its grapes and threw them into the great winepress of God's wrath. 20 They were trampled in the winepress outside the city, and blood flowed out of the press, rising as high as the horses' bridles for a distance of 1,600 stadia

The Road

- by Cormac McCarthy

- published 2006

- awarded Pulitzer Prize for Fiction, 2009

- film adaptation 2009

- What relationships are explored in the extract?

The Road

- In a New York Review of books article, author Michael Chabon heralded the novel. Discussing the novel's relation to established genres, Chabon insists The Road is not science fiction' although 'the adventure story in both its modern and epic forms ... structures the narrative, ultimately it is as a lyrical epic of horror that The Road is best understood."

PREDICTION

Read through the following statements and decide whether you agree or disagree with each statement. Place an A or D in the first column to indicate what you think.
Show your understanding of before reading the novel and after reading the novel. Did your opinions change, why or why not.

1. At the heart of most people exists hope and love.
2. I would do anything, including murder, to protect the ones I love.
3. If the world as we know it was destroyed and I was still alive, I would do my best to survive.
4. Apocalyptic writing focuses on the end of days.

PRE-READING ACTIVITIES.

- What do you think is the significance of the road in the novel?
- Read the paragraph that ends page 4 and continues on page 5.
  - When does the story take place?
  - What things indicate the time period?
  - What is the "ashen daylight"?
  - What is the child's significance?

PRE-READING ACTIVITIES.

- Read the paragraph that ends page 5 and continues on page 6.
  - What is the significance of having a mirror?
  - If you could take only five items with you to a deserted island, what would they be and why?
- Write your version of the ending of the world. How would it happen? Who would survive? What would happen?

SETTING

One can determine in the third paragraph that the setting for this novel is post-apocalyptic. Three of these sentences from that paragraph does give us a hint at the setting, but a fourth one doesn't. Which one does not?

A. When it was light enough to use the binoculars he glassed the valley below.

B. The soft ash blowing in loose swirls over the blacktop.

C. The segments of road down there among the dead trees.

D. Then he just sat there holding the binoculars and watching the ashen daylight congeal over the land.

DO SOMETHING WITH YOUR ANSWER: Within this same paragraph, we get a good idea about the main characters. What effect does the setting have on these two characters?

- How do the characters interact with their environment? How does their outlook/attitude change? What is gained? What is lost?

Relationships

- the heart of dystopian / post-apocalyptic visions of the future
- the human element
- ways of commenting on the past whilst presenting a view of the future (memories and flashbacks are common narrative devices)
- our relationships juxtaposed with, and placed onto, new landscapes
  - how do we (humans) cope?
  - what has changed?
  - what boundaries have been blurred/crossed?

The Road

- 'He' / 'Papa' / 'the child' / 'the boy'
- Bleakness of the landscape is a mirror for their loneliness — their relationship is all that is left: 'each the other's world entire' (p.4)
- No other reason for living: 'So I could be with you' (p.9)
- Comment on our present (their past) — supermarket / Cola / newspapers: 'It's because I wont ever get to drink another one, isn't it?' (p.23)
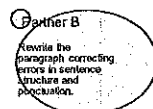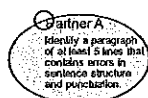- 'Creedless shells of men' (p.28)

STRUCTURE: How is *The Road* written?

- short sentences / paragraphs mirror the bleakness — pared down speech the poetic writing shows there's can be beauty, if not in the landscape
- Why does Cormac McCarthy not utilize standard conventions in regards to sentence structure and punctuation?

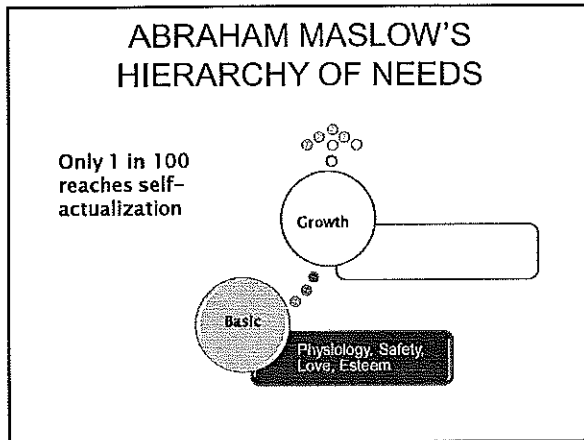Partner A — Identify a paragraph of at least 5 lines that contains errors in sentence structure and punctuation.

Partner B — Rewrite the paragraph correcting errors in sentence structure and punctuation.

ABRAHAM MASLOW'S HIERARCHY OF NEEDS

Only 1 in 100 reaches self-actualization

Growth

Basic

Physiology, Safety,
Love, Esteem

NEEDS PYRAMID

Self-actualization
needs: to find
self-fulfillment and
realize one's potential

Not original to Maslow

Aesthetic needs:
symmetry, order, and beauty

Cognitive needs: to know,
understand, and explore

Esteem needs: to achieve, be
competent, and gain approval and recognition

Belongingness and love needs: to affiliate
with others, be accepted, and belong

Safety needs: to feel secure and safe, out of danger

Physiological needs: hunger, thirst, and so forth

APPLICATION FOR *THE ROAD*

- Consider the father and son. Provide examples of how each character functions at least 3 levels. In what level do you think each character functions the most? Explain your reasoning. How does your analysis confound Maslow's theory?

themes

- Death
- Paternal love
- Good versus Evil
- Trust
- Faith and Doubt
- Survival and Resilience
- Narration: Naming and the Authority of Memory
- http://www.gradesaver.com/the-road/study-guide/section11/

STYLE

CHARACTERS

- Protagonist: the boy – why? Write ten dot points of why – Give me a good quote here
- The man – ten points why give me a good quote here
- Flat: Ely, family,
- Stock: obvious predictable: road agents
- Round: wife,
- Antagonist – road agents

POV

- Changes third and first – why
- Man talks to his wife in his dream
- WHY DOES THE POV CHANGE
- So Papa can link the past to the present, it also highlights the fact that the boy was born post apocolyptic and therefore has no knowledge of the previous life.

VALUES AND ATTITUDES

- Survival/Life
- Family/Love
- Trust
- Humanity
- Religion
- Compassion
- Future Earth – to serve as a warning

SYMBOLISM

- The boy symbolising hope and Jesus, so it's an analogy of the Bible.
- The skulls symbolising death
- Eli symbolic as a prophet
- The fire – symbolism of humanity
- The road symbolises their spiritual journey, as Jesus travelled along a spiritual journey.
- Weather/ash – represents death
- Bunker – symbolises hope for the future so it's similar to purgatory, which gives you a direction of where the future will lie.
- Trout – swimming maps and mazes, journey as well. Finished, but there is still history there. Symbolic of the Father's journey, he went through the mazes and maps of the road, he still has his history, but he is now deceased. Also Jesus used trout to feed the thousands from the sermon on the mount.
- Christ/Hero journey – symbolising hope in diversity.
- Candle symbolises way to light the future, give them hope.
- Basement people – symbolises savagery people go through to survive

READING THEORY

- Gaps and silences: inferred that the baby was eaten, it's inferred that the Mother committed suicide
- Foreground and privileging: inferred that there was a massive world disaster, such as all out nuclear war
- Dominant and resistant readings: It is an alternative reading, as it has a less common ending but is still acceptable to the values of the reader and society.

1   Everyman

Medieval morality play – possibly originally Dutch and late 15th century. It's structure is very different from more modern theatre such as Shakespeare and Marlowe, however both of these playwrights have borrowed themes from Everyman. It is pure allegory based on the Christian ethics of morally correct behaviour, akin to morality play cycles such as the German Oberamagau which is still performed today.
Obviously, at this time, everyone believed in God – religion was the major ideological means of control so a play on how people should reflect on their behaviour would be a major point of learning.

Plot – the basic overall message is to tell people that they need to remember their maker (God) and be fearful of what will happen if they lead an ungodly life. There are various monologues involving the Messenger, God and Death before Death introduces the character Everyman who has led a sinful and wild life so far.

Obviously the 'Everyman' name is meant to resonate with the audience as it could be any one of them. This is one of the archetypal characters in literature.

Death challenges Everyman to take a long journey with him and take the book of reckoning which will balance Everyman's good and bad deeds. Everyman is not prepared for this and reluctantly starts his journey.

Fellowship, Kindred and Cousin joins Everyman (who is looking sad) but none are prepared to join him on his journey. Similarly, Goods (wealth), Knowledge, Discretion, Strength, Beauty and Five Wits all fall away. The only companion that accompanies Everyman on his final journey is Good deeds.

A very simple message in that good deeds are the only thing that matter morally.

Points of intertextuality

The symbolism of the journey. – see note at the end of The Pilgrim's Progress
The archetype of 'Everyman'

1   **"Ye think sin in the beginning full sweet Which in the end causeth the soul to weep."**

2   **A pilgrimage he must on him take Which he in no wise may escape."**

<u>2   The Pilgrim's Progress</u>   John Bunyan 1678

Christian allegory.

Plot: Two parts – we are only looking at Part 1 (Sparknotes for this bit)

The story is framed as a dream. The narrator dreams of a man named Christian, who is tormented by spiritual anguish. A spiritual guide named Evangelist visits Christian and urges him to leave the City of Destruction. Evangelist claims that salvation can only be found in the Celestial City, known as Mount Zion.

Christian begs his family to accompany him, unsuccessfully. On his way, Christian falls into a bog called the Slough of Despond, but he is saved. He meets Worldly Wiseman, who urges him to lead a practical, happy existence without religion. Refusing, Christian is sheltered in Goodwill's house. Goodwill tells Christian to stop by the Interpreter's home, where Christian learns many lessons about faith.

Walking along the wall of Salvation, Christian sees Christ's tomb and cross. At this vision, his burden falls to the ground. One of the three Shining Ones, celestial creatures, hands him a rolled certificate for entry to the Celestial City. Christian falls asleep and loses his certificate. Since the certificate is his ticket into the Celestial City, Christian reproaches himself for losing it. After retracing his tracks, he eventually finds the certificate. Walking on, Christian meets the four mistresses of the Palace Beautiful, who provide him shelter. They also feed him and arm him. After descending the Valley of Humiliation, Christian meets the monster Apollyon, who tries to kill him. Christian is armed, and he strikes Apollyon with a sword and then proceeds through the desert-like Valley of the Shadow of Death toward the Celestial City.

Christian meets Faithful, a traveler from his hometown. Faithful and Christian are joined by a third pilgrim, Talkative, whom Christian spurns. Evangelist arrives and warns Faithful and Christian about the wicked

town of Vanity, which they will soon enter. Evangelist foretells that either Christian or Faithful will die in Vanity.

The two enter Vanity and visit its famous fair. They resist temptation and are mocked by the townspeople. Eventually the citizens of Vanity imprison Christian and Faithful for mocking their local religion. Faithful defends himself at his trial and is executed, rising to heaven after death. Christian is remanded to prison but later escapes and continues his journey.

Another fellow pilgrim named Hopeful befriends Christian on his way. On their journey, a pilgrim who uses religion as a means to get ahead in the world, named By-ends, crosses their path. Christian rejects his company. The two enter the plain of Ease, where a smooth talker named Demas tempts them with silver. Christian and Hopeful pass him by.

Taking shelter for the night on the grounds of Doubting Castle, they awake to the threats of the castle's owner, the Giant Despair, who, with the encouragement of his wife, imprisons and tortures them. Christian and Hopeful escape when they remember they possess the key of Promise, which unlocks any door in Despair's domain.

Proceeding onward, Christian and Hopeful approach the Delectable Mountains near the Celestial City. They encounter wise shepherds who warn them of the treacherous mountains Error and Caution, where previous pilgrims have died. The shepherds point out travelers who wander among tombs nearby, having been blinded by the Giant Despair. They warn the travelers to beware of shortcuts, which may be paths to hell.

The two pilgrims meet Ignorance, a sprightly teenager who believes that living a good life is sufficient to prove one's religious faith. Christian refutes him, and Ignorance decides to avoid their company. The

travelers also meet Flatterer, who snares them in a net, and Atheist, who denies that the Celestial City exists. Crossing the sleep-inducing Enchanted Ground, they try to stay awake by discussing Hopeful's sinful past and religious doctrine.

Christian and Hopeful gleefully approach the land of Beulah, where the Celestial City is located. The landscape teems with flowers and fruit, and the travelers are refreshed. To reach the gate into the city, they must first cross a river without a bridge. Christian nearly drowns, but Hopeful reminds him of Christ's love, and Christian emerges safely from the water. The residents of the Celestial City joyously welcome the two pilgrims. In his conclusion to Part I, the narrator expresses hope that his dream be interpreted properly.

Points for intertextuality:

The journey – the pilgrimage itself is important – is an act of realisation and rebirth. Yes the destination – heaven is important as the reward for spiritual growth, but it is the journey that enables spiritual growth, reassessment of sins committed and commitment. The pilgrim can only progress morally through making the journey.

"Here is a poor burdened sinner. I come from the City of Destruction, but am going to Mount Zion, that I may be delivered from the Wrath to come."

Sleep – when the characters sleep, they are in danger through loss of direction and spiritual bankruptcy. This is when they are most threatened by moral dangers which they cannot prevent.

The wilderness – biblical overtones – the Israelites wandered through it for forty years before finding the promised land (Old Testament) and Christ's forty days and forty nights in the wilderness (New Testament). It's a place of despair and hardship and so journeying through it successfully develops spiritual growth.

1   Humans are seldom content with the way things are; they often aspire to something better.

2 The makers of film anticipate viewers' likely responses as part of the process of construction.

3 Texts often present provocative ideas about identity.