Theory of Knowledge

For the IB Diploma

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Application of the ‘Think TOK’ process

In this section, we put together the different parts of the Think TOK process explained in Section 2, showing you how you can use Think TOK to analyse real-life situations in a way which will get you high marks in the presentation and essay.

We’ve selected some real-life situations that, once analysed using Think TOK, produce some fascinating knowledge questions. As the section unfolds, however, you’ll find that we have done less and less analysis: the idea is that you should, by the time you reach the end of the chapter, be able to use Think TOK to analyse real-life situations for yourself.

Because we start off with real-life situations, and then use Think TOK to produce knowledge questions, we’re doing what you need to do in your presentation: working from real-life situations to knowledge questions. In the essay, you need to do the opposite: you start with a knowledge question (which you’ll usually find in the essay title), and then use real-life situations to analyse it. To do this, you can still use the Think TOK process – just the other way around.

Here’s a reminder of the Think TOK model:

**Exploration phase**

- **Knowledge claims**: Identify knowledge claim(s) made in the RLS. Ideally these should relate to knowledge rather than subject content.
- **Ways of knowing**: Consider the justifications upon which the claims rest. Which way(s) of knowing help create the knowledge claims identified and in what way?
- **Personal and shared knowledge**: What role does personal/shared knowledge play or what implications does it have on our approach to the KCs?
- **Knowledge framework (AOKs)**: A comparative exploration of related AOKs based on their scope, language, historical development and methodology.

**Real-life situation**

Select an RLS from the media or from your own personal experiences.

**Knowledge question**

Generate knowledge question(s) from any of the terms or concepts identified in the exploration phase.
The “faith healer” parents of an Oregon teenager who died due to a lack of medical care will be required to contact a doctor when any of their other six children are sick for more than one day, according to the terms of their probation. Russel and Brandi Bellew were sentenced to five years of probation on Tuesday after they pleaded guilty to negligent homicide in the death of Brandi’s biological son, Austin Sprout, 16. An autopsy found Austin died of an infection caused by a burst appendix.

The couple, along with their six surviving children, belongs to the General Assembly and Church of the First Born, which eschews modern medicine. The group takes its belief from a New Testament passage in the Gospel of James that says the sick should be prayed over and anointed with oil, according to Rick Ross, an expert on cults. “They take this verse out of context and take it to mean this is the only thing you can do while sick,” Ross said. “In their mind they see it as a choice not between the church and saving the life of their child, they see it as a choice between God and me.”

Bob Schrank, an attorney for Brandi Bellew, said despite the couple’s beliefs, they are “committed to complying with their conditions of probation.” In December, Sprout became ill with cold and flu-like symptoms. Instead of getting him medical attention, the couple chose to pray. Sprout died five days before Christmas. “According to the group and its leaders, if someone goes to the doctor for medical care, they have gone against God,” said Ross. After an autopsy, the Bellews were arrested in February and were barred from speaking to each other since they were co-defendants in the case, Schrank said. “[Russel] was allowed to come to the home to visit the kids but [Brandi] couldn’t be there. The rule was they couldn’t have contact,” Schrank said.

Schrank said the Bellews, who did not offer a statement in court, are “great parents” and “at least 20” people sent letters vouching for them. In August, prosecutors met with members of the Bellews’ church to discuss state child neglect laws and to let them know choosing not to seek medical care for a child would not be tolerated, the Eugene Register Guard reported. Prosecutor Erik Hasselman told the newspaper congregants seemed to be receptive. “This is not a denomination that feels that its faith is at odds with the laws of the community,” he said.

The case is one of many in which parents have been held criminally responsible for neglecting to seek medical attention for their children. Earlier this year, an Oklahoma woman was found guilty of second degree manslaughter and sentenced to two-and-a-half years in prison. Prosecutors said Susan Grady, who belongs to the Church of the First Born, chose to treat her 9-year-old son’s diabetes complications with prayer. He died days later. Last year, Dale and Shannon Hickman, an Oregon couple who belonged to the church, were sentenced to 75 months in prison after they failed to seek medical care following the birth of their premature son at home. The baby died nine hours later.
Knowledge claims extracted from real-life situation

- Faith appears to be an unreliable basis for medical treatment.
- Faith acts as a strong justification for action (or inaction).
- The state considers parents who neglect seeking medical attention for their ill children to be criminally responsible. Secular society sees them as having acted unethically.

Ways of knowing

Which way[s] of knowing could these claims find their justification in? Why?

**Faith:** The couple believes that their faith will cure their child.

**Emotion:** Their emotional attachment (proximity) to their faith makes it difficult to accept rival claims.

**Reason:** Evidence in the form of statistics or registered complaints of negligent parents with the authorities proves that faith is not a solid basis upon which to base medical care.

**Intuition:** The journalist and wider audience intuitively feel that the Bellew’s are in the wrong.

Personal and shared knowledge

What role does personal and shared knowledge play? How does it affect the claims made?

**Personal:** The Bellews’ personal experiences of their faith reassured them that they were correct in practicing faith healing.

**Shared:** Their knowledge is reinforced and supported by the claims made in their religious congregation (Church of the First Born).

**Shared:** The wider community condemns the Bellews based on its understanding of medicine and/or the ethical obligations of parents.

Knowledge framework (main AOK)

How does the knowledge framework for this AOK helps us to analyse the RLS?

**Scope:** Faith in a particular religion aims to give a sense of purpose and meaning to people's lives. It is taken very seriously in certain communities where it constitutes a bedrock of their identity.

**Language:** The language of religion tends to be vague, and may contain archaisms which lend it a degree of authority. Scriptural records may add another level of authority.

**Historical development:** Impact of scientific knowledge on beliefs grounded in religious knowledge. In the context of this real-life situation, the conflict between the first-born church members’ religious belief about the healing power god and the development of medical science.

**Methodology:** The role faith plays in the rejection of an established and universally accepted authority of medical science.

Links between main AOK and related AOKs

**Natural sciences:** Inventions and discoveries in the natural sciences that conflict with beliefs and moral codes in religions or with indigenous knowledge systems.

**Ethics:** There seems to be a conflict between ethical values promoted by religion and those of secular society. In this case, secular society would deem favouring a religious belief over the health of a child to be unethical.

Knowledge questions

1. What role do reason and intuition play in the rejection or acceptance of ethical values or moral codes?
2. How far is it possible to remain rational with regards to faith and beliefs?
According to Virgil's Aeneid, Book II (trans. A. S. Kline)

"After many years have slipped by, the leaders of the Greeks, opposed by the Fates, and damaged by the war, build a horse of mountainous size, through Pallas's divine art, and weave planks of fir over its ribs: they pretend it's a votive offering: this rumour spreads. They secretly hide a picked body of men, chosen by lot, there, in the dark body, filling the belly and the huge cavernous insides with armed warriors."

Contemporary historians and even a geophysicist have since questioned the truth of the Trojan Horse narrative. The historian Michael Wood, for example, proposed that the Trojan Horse may have actually been a battering ram in the shape of a horse (Michael Wood, In Search of the Trojan War, BBC Books, 1985). The geophysicist Amos Nur, after examining the geological evidence of a number of Bronze Age settlements, argued that it was a series of earthquakes that brought down the walls of Bronze Age cities, including Troy [Ellen Licking, 'Earthquakes Toppled Ancient Cities,' Stanford Report, November 12, 1997]. Dr. Elizabeth French of Manchester University, however, argued against any claims that an earthquake may have brought the walls of Troy crushing down as no evidence for it exists on the site currently identified as Troy [http://www.youtube.com/watch?v=W3PonH30aIB].

Trojan Horse aside, there is even speculation as to the very existence of a war between the Greeks and the Trojans. In spite of the archaeological evidence of a fire ravaging Troy, it is impossible to determine whether it was actually caused by the war mentioned in the Homeric epic. Even Wood himself, in both his book and accompanying TV series, argues that ultimately it is impossible to claim definitively that a war did occur in the first place. We are only left, therefore, with the possibility that it could have happened but not the certainty that it did.

So what are historians left with then in their pursuit of truth and accuracy? Perhaps, Michael Wood summed it up best:

"Such ideas agree so well with Homer, but of course they too, in the end are only speculation and I perhaps like all those who examined the question before me have only found what I wanted to find. That has always been the attraction of the search for there can never be a final word on history's greatest riddle, only the perceptions of each generation which reinterprets Homer's tale in the light of its own beliefs and its own needs" [Michael Wood, In Search of Troy, BBC TV Series]
Knowledge claims extracted from real-life situation

- Poetry may not be a reliable source of historical evidence.
- Despite the presence of archaeological evidence, it is unlikely we will ever know for certain whether the events described in Homer and Virgil were real.
- Historical writing can be influenced by what the historians want to find and by the context and needs of the society in which they live.

Ways of knowing

**Imagination:** It could be argued that a large part of history involves ‘filling in the gaps’ or speculation. The evidence is often linked together by means of what is imagined as feasible rather than what is definitively true.

**Memory:** What degree of oral poetry (or oral traditions) is memory recall and how much imaginative reconstruction? Can one’s memory be deemed a credible source for historical writing?

**Emotion:** People find it hard to let go of fascinating fictions, even in the face of overwhelming evidence.

**Reason:** The archaeological evidence can be used to both support and counter the Homeric story.

**Language:** Poetry (and poetic license) is often viewed as belonging solely to the realm of fiction which diminishes its degree of objectivity thus making it an unreliable source.

Personal and shared knowledge

**Personal:** Confirmation bias (finding what we want to find) seems to affect historical writing, particularly when emotions are engaged (for example, sense of nostalgia).

**Shared:** Certain stories and narratives are repeated so often by each successive generation that they acquire the status of a truism.

**Shared:** The archaeological evidence upon which histories are based can often suggest multiple possibilities making varied interpretations also feasible and valid.

Knowledge framework (main AOK)

**Scope:** History claims to be a discipline that produces an accurate record of the past based on verifiable evidence yet to what extent is this actually true?

**Language:** What is the difference between ‘a’ history of something and ‘the’ history of it? Why has the latter been abandoned in modern historiography? What implications does this have on the discipline as a whole?

**Historical development:** How much of a spillover does the society and time in which the history is written have on the final product? Is history written by the victors as the tradition would have us believe?

**Methodology:** What constitutes a ‘fact’ in history? What constitutes reliable evidence? How do historians go about determining the reliability of sources? Also, is history also a matter of creative reconstruction and therefore just another fiction?

Links between main AOK and related AOKs

**Natural sciences:** Is there speculation in the natural sciences and if so, what is its nature? Does the scientific method preclude or reduce the degree of speculation?

**Arts:** Is there such a thing as a definitive interpretation of a work of art? Can we ever speak of certainty in art criticism or is this not appropriate to this discipline?

Knowledge questions

1. To what extent can we speak of certainty when it comes to claims made in history?
2. Would the existence of speculation preclude the attainment of knowledge in either history or the natural sciences?
An Australian publishing house was forced to apologise today for a book that encourages girls to play the didgeridoo, an instrument that in Aboriginal culture is usually reserved for men. Aboriginal academics accused HarperCollins of “extreme cultural insensitivity” over its decision to include instructions on playing the didgeridoo in an Australian edition of a British bestseller, The Daring Book for Girls.

Traditionally, women do not even handle the long, tubular instrument, which has been part of indigenous culture for thousands of years, and is played at funerals and initiation ceremonies. Some Aboriginal people believe that girls who break the taboo will be infertile. Mark Rose, head of the Victorian Aboriginal Education Association, said that HarperCollins had committed “an extreme faux pas” by publishing a chapter on didgeridoo playing. “I wouldn’t let my daughter touch one,” he said. “I reckon it’s the equivalent of encouraging someone to play with razor blades. I would say pulp it.”

In Britain, where the activity manual and its companion volume, The Dangerous Book for Boys, were originally published, both have been bestsellers. In the US, the two books have been on the New York Times bestseller list for months. HarperCollins Australia, which will release its version of the girls’ book next month, has replaced some of the original content with material aimed at the local market, such as the rules of netball and instructions on how to surf.

Shona Martyn, the company’s publishing director, initially defended the didgeridoo chapter, saying she was not convinced that all Aboriginal people would be offended by it. But today she bowed to pressure, issuing a statement apologising “unreservedly” for any offence caused, and saying that the chapter would be replaced when the book was reprinted.

Dr Rose, who spoke out after an advance copy of the book was circulated, told ABC radio today that the ignorance of the general public was also to blame. “I would say, from an indigenous perspective, [it was] an extreme mistake, but part of a general ignorance that mainstream Australia has about Aboriginal culture,” he said. Dr Rose said that, in indigenous culture, there was “men’s business” and “women’s business”. He said: “The didgeridoo is definitely a men’s business ceremonial tool. We know very clearly that there’s a range of consequences for a female touching a didgeridoo. Infertility would be the start of it.”

His views were echoed by an indigenous author, Anita Heiss, who is chair of the Australian Society of Authors. “I haven’t seen the book, but that sort of stuff, had it been written by an indigenous person, or had they actually spoken to an indigenous person … clearly that chapter wouldn’t have been in there,” she said. “It’s cultural ignorance, and it’s a slap in the face to indigenous people and to indigenous writers who are actually writing in the field.”

The didgeridoo, believed to be the world’s oldest wind instrument, is made from tree trunks and branches naturally hollowed out by termites. Traditionally made and played only in northern Australia, it is now found across much of the country, largely because of tourist demand. While most Aboriginal cultures consider it a man’s instrument, not all believe that women should never touch or play it.
Knowledge claims extracted from real-life situation

- The evidence upon which an indigenous belief rests may not cohere with the evidence as presented by the natural sciences.
- There is an assumed truism in the article that cultural insensitivity is unethical and that cultural differences should be respected whatever their nature.
- Expert opinion differs on its assessments.

Ways of knowing

**Perception:** Could you consider this taboo truth or is it just a myth? How would an indigenous Australian perceive this?

**Language:** Does the language employed by Dr Rose and others in defense of the taboo affect the way you view the whole incident?

**Language:** Does language perfectly delineate meaning? Is it clear, for example, what is meant by “men’s business” and “women’s business”?

**Reason:** What types of evidence would be required to validate the claims made by advocates of the didgeridoo taboo or to defend the publishers?

**Emotion:** To what extent does one’s emotional proximity to an issue affect their perspective of it?

Personal and shared knowledge

**Personal:** One’s personal experience may negate or further reinforce the claims made by indigenous beliefs.

**Shared:** The collective wisdom of a society often acts as a bedrock of identity formation making it difficult to disentangle truth from superstition.

**Shared:** What constitutes an expert in the field of indigenous knowledge?

Knowledge framework (main AOK)

**Scope:** Indigenous knowledge often helps a society form judgements about its own identity. It is also responsible for shaping roles and responsibilities of members to each other and their surroundings. How significant is this role in identity formation, and by extension, how much of a role does it play in how we approach alternative claims?

**Language:** Oral narratives (creation stories, fables etc) often form the backbone of indigenous cultures and it is through these that codes of conduct and behaviour are defined. Have indigenous narratives been relegated to the status of fairytales or can they still speak of truths?

**Historical development:** What role does indigenous knowledge have in a contemporary world? How are concepts such as taboos viewed by modern viewers?

**Methodology:** Is the transmission of culture through an oral means a reliable source of knowledge? To what extent is an oral testimony a valid means of attaining knowledge? What are the implications of both Unitarian and Analyst schools of thought with regards to the generation of oral traditions?

Links between main AOK and related AOKs

**Human sciences:** Ethnological narratives (such as creation stories) reflect a society’s attempt to explain the world around them and thus forms an integral part of their knowledge. Can human nature become knowable through such narratives?

**Natural sciences:** The evidence provided by the natural sciences may conflict with the claims made by indigenous knowledge systems. Should they be dismissed outright for not agreeing with the scientific approach?
How do I know what you mean?

A white horse is not a horse

And in that case, I really have very little idea what you mean at all!

The ancient Chinese philosopher Gongsun Lon (c.325–c.250 BCE) once showed ‘for certain’ that a white horse is not a horse. If Gongsun was right, then it’s very difficult to know whether we really understand each other, even when we think we do. This was his argument.

1. When we say ‘horse’, this word covers horses of all colours and sizes — brown horses, black horses, grey horses, and so on.
2. When we say ‘white horse’, we are not talking about horses of these other colours.
3. But ‘horse’ means horses of all colours!
4. So, when we talk about ‘white horse’, we mean something which contradicts the meaning of the word ‘horse’.
5. So, a white horse is not a horse.

This argument has puzzled philosophers for a long time. Some, such as Christoph Harbsmeier, have even suggested that the argument is so odd that Gongsun may have been joking. But, given that the argument is actually quite straightforward (once you’ve got your head around it — it doesn’t contain any incomprehensibly long words or strange concepts), the debate it has caused is striking.
Language is like a game, and we all know the rules

The exceptionally influential twentieth-century philosopher Ludwig Wittgenstein thought that philosophers before him had got it all wrong. In his great work, the *Philosophical Investigations*, Wittgenstein argued that words did not have solid, fixed or permanent meanings, and that, if you thought they did, you would end up in seriously hot water.

Wittgenstein didn’t write about Gongsun’s non-horse white horse, but if he had, it’s a fair bet that he would have said the whole argument was based on a mistake. In Gongsun’s view, ‘horse’ and ‘white’ have fixed meanings that make ‘white horse’ (unexpectedly) mean something very different from ‘horse’. But this is clearly nonsense. The reason, according to Wittgenstein’s logic, is that ‘horse’ has a different meaning depending on the context in which we use it. Sometimes, we use ‘horse’ to mean all horses; other times, we use ‘horse’ to mean a particular horse (for example, ‘my horse’) or a particular colour of horse (for example, a white horse). In the same way, sometimes I use the word ‘game’ to describe patience (a card game that has one player), and other times to describe football (a ball game with two teams and, usually, a clear winner at the end of the match). Patience and football have nothing much in common, but I still use the word ‘game’ to describe them without any trouble, because the word changes its meaning depending on how we use it.

When we have a conversation, we know what the other person means, and if we don’t, we can always ask for clarification. And the fact that we are able to hold intelligible conversations is evidence that this system works.

*The meaning of a word is its use in the language.* – Ludwig Wittgenstein, *Philosophical Investigations*
How do I know why things happen?

It might seem obvious but it isn’t

How do I know that the sun will rise tomorrow? How do I know that when I take a bite of that tasty-looking apple, it will taste like an apple — and not like a peanut? How do I know that the roof of this building won’t suddenly cave in and bury me in a pile of rubble? Generally, we might be tempted to answer ‘because it’s obvious.’ Or, if we’re being a little more philosophical, we might say something like, ‘The sun has risen every day I can remember, so it’s bound to rise again tomorrow.’ But neither of these answers really goes far enough. Are we justified in thinking that just because the sun has risen every day we can remember, it’s bound to do so tomorrow? And if we don’t believe this, then what can we believe? Anything?

Religions have often claimed to know the answer to this question, whether they answer ‘karma’ or ‘the will of God’ in response to the questions above. But this has been hotly disputed, from philosophers like the Scot David Hume (pictured on the right) in the eighteenth century, to the Austrian Sir Karl Popper (pictured on the left) in the twentieth.
The religious answer

**Theistic religions (and in particular Christianity, Judaism and Islam)** have a very clear view of why things happen: because God – in some way or another – has caused them to happen. Whether it’s the creation of the world (shown above in the famous picture by Michelangelo), or anything else, God has willed it, and that’s why it happens. Believers in these faiths disagree on the level of control God exerts over individual actions, but they agree that in the end, God’s will lies behind the universe and its physical laws.

**Indian religions (including Hinduism, Buddhism, Jainism and Sikhism)** have a different answer: karma. According to these faiths, all living beings are caught up in the cycle of Samsãra. In the Samsãra cycle, we are all born, live, die, and are then reborn forever, until, that is, we are able to escape by being particularly religious (for example, attaining Nirvana through meditation in Theravada Buddhism). Our rebirths are controlled by the unchanging and eternal laws of karma, which decide what we are reborn as – whether it’s animal, human, or god. No god or thing has instituted the laws of Samsãra and karma: they just exist, and govern every aspect of our lives. Together, they explain why things happen in the way that they do.