

## TOK WOK CHEAT SHEET: Imagination

### TOK Definition/Explanation:

Imagination is the ability to form a representation of something which is not present to the senses. The word Imagination can be used to encompass 'both mental images and the entertaining of possibilities' (Van de Lagemaat, 2015: 225)

### Key Related Vocabulary:

- Creativity: the ability to generate ideas or produce artefacts which are original, surprising and valuable
- Curse of knowledge: the difficulty that a very knowledgeable person may have in understanding the mind of a novice
- Egocentric bias: the tendency to look at everything from our own point of view and think that our beliefs and preferences are the correct ones
- Empirically possible: consistent with the laws of nature
- Fantasy: an escapist form of imagination that is only distantly connected with the real world
- Logically possible: can be described without involving a contradiction
- Realistic imagination: imagination which is informed and guided by the relevant facts
- Thought experiment: an experiment carried out in one's imagination rather than in the world

### Key Concepts Explained:

**Fantasy:** 'The distinguishing feature of fantasy is that it is not connected - or only distantly connected - with the real world. A common type of fantasy is what we might call the dream of effortless achievement in which we fantasise about ends without thinking about the concrete steps that must be taken in order to achieve them i.e. gaining 45 points in your IB Diploma.... At best fantasy can nourish the imagination and help to push back the borders of the possible; but at worst, it can lead to escapism and a refusal to engage with reality (Van de Lagemaat, 2015: 225-226).

**Realistic Imagination:** 'Most productive uses of imagination are realistic in the sense that they are constrained by reality. Consider inventions: when Alexander Graham Bell (1847-1922) invented the telephone, he didn't simply fantasise about talking to distant people; rather his imagination was constrained by what was practically possible. Similarly, Thomas Edison's (1847-1931) invention of the light-bulb was the result of a subtle interplay between imagination and reality (Van de Lagemaat, 2015: 227).

**Creativity:** 'Strictly speaking creativity is best thought of as a subset of imagination in the sense that while creativity requires imagination, one can imagine all kinds of things without being particularly creative. What distinguishes creative imagination from run-of-the-mill imagination is originality. A creative idea is novel in the sense that it hasn't been thought of before, and it is often surprising in the sense that it could not have been predicted in advance... It must also have some kind of value - such as being interesting, beautiful or fruitful (Van de Lagemaat, 2015: 227).

### Related Real Life Situations<sup>1</sup>:

- **How did our legends really begin?** Are the similarities in mythological stories across many cultures purely coincidental or do they reveal a common origin? If these myths, which share commonalities across geographical regions, have survived over 3000 generations does this call into question the strength of 'Chinese Whispers' in communication? [<http://www.independent.co.uk/arts-entertainment/books/features/how-did-our-legends-really-begin-9634148.html>]

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<sup>1</sup> Dunn, Michael. Real life situations and KQs for imagination (11th June 2013). theoryofknowledge.net. <http://www.theoryofknowledge.net/ways-of-knowing/imagination/real-life-situations-and-kqs-for-imagination/> Last accessed: 13th August 2015

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- **How do both intuition and imagination fuel rational scientific discovery and creativity?**  
Frederich August Kekule's discovery of the ring-like structure of a benzene molecule is purported to have come to him in a dream when he imagined a serpent biting its own tail [<http://humantouchofchemistry.com/biting-ones-own-tail-the-history-of-benzene.htm>], while the idea for an air-conditioning machine is allegedly to have come to Willis Carrier when he engaged in deep meditative thought ad he walked along a train platform.
- **What is more important for an understanding of theoretical physics: imagination or reason?**  
The contemporary debate in theoretical physics around the existence or non-existence of an event horizon, which purportedly is the invisible cover surrounding a black hole, has fuelled the debate over to what extent 'imagination' should be allowed to influence scientific discussion[<http://www.independent.co.uk/news/science/stephen-hawking-there-are-no-black-holes-9085016.html>].

### Related Knowledge Questions:

How, if at all, can fiction contribute to our knowledge of the world?

Can we imagine something that isn't possible?

How does imagination relate to empathy?

How can imagination distort historical truth?

How does the role and reliability of imagination in providing us with knowledge differ according to the different areas of knowledge?

### Brief overview of how this WOK is used in Areas of Knowledge:

Imagination plays a major role in a number of AOKs but, in particular, the Arts, Natural Sciences and Ethics. Romanticism was an artistic, literary and intellectual movement from the late 18th century to mid-19th century which elevated the primacy of imagination in artistic creations. Galileo's use of thought experiments (conducted in the mind harnessing the power of imagination) concerning the speed at which objects fall resulted in him refuting Aristotelian physics. In addition, one's ability to imagine walking in the shoes of another, may lead to a more empathetic mindset amongst individuals. This can entail regulating our behaviour in a more ethical manner.

HOW/WHEN DOES IT HELP CREATE KNOWLEDGE?	WHY/WHEN SHOULD WE BE WARY OF USING IT TO CREATE KNOWLEDGE?
<b>Imagination as a surrogate for experience:</b> Imagination can both intensify and extend our experience.	<b>Illusory patterns:</b> projecting our private fantasises onto objects and as a result seeing patterns in data/information/images that doesn't exist i.e. seeing the face of Satan in the smoke coming out of the WTC
<b>Imagination as a support for judgment:</b> Judgment usually involves comparing the actual with the possible - and possibility lies in the realm of imagination	<b>Seductive images:</b> the obsession with how our public image is perceived has led to a growing divergence between how we imagine people and how they are in reality
<b>Imagination as a guide to possibility:</b> you acquire knowledge when you discover is something is possible or not. Imagination can be a useful guide to what is possible although it is not infallible.	<b>Imaginary fears:</b> our imagined futures can be clouded in fantasy and distorted by bias