

# Module 2 Lesson 1 - final transcript and srt

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## SUMMARY KEYWORDS

reality, appearances, eddington, heraclitus, nature, phenomena, plato, appearance, democritus, hides, mathematical, science, senses, isaac newton, idea, sentence, generalities, translation, emptiness, greek language

## SPEAKERS

Michel Bitbol, Professor

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### M Michel Bitbol, Professor 00:06

So, my talk is precisely titled "Appearance & Reality" as it should be, but I must deliver a preliminary warning. The distinction of appearance and reality plays an important role in both Buddhism and science. But it seems to me Buddhism and science give this distinction two very different, almost opposite meanings. In the standard philosophical approach of science, reality is - so to speak - "beyond appearances": reality is hidden behind the appearances and yet cryptically manifested by these appearances. Reality can then be revealed, if one the decyphers the "code", usually the mathematical code, through which appearances indirectly express reality. By contrast, in Buddhism, reality escapes us: not because it's hidden, but because it is, so to speak, to glaringly obvious to be seen. Reality escapes us not because we do not know the "code" of appearance, but because we superimpose our codes, our concepts, and our labels, onto the fresh presence of what appears. So this is the opposition I would like to make in this talk.

### M Michel Bitbol, Professor 01:28

Okay, here is a nice picture of the way the West is conceiving the opposition between appearance and reality. Appearance is, so to speak, "the scene", and reality is "the backstage". So, someone here is, so to speak, going through the theatre set, and discovering the machinery that is explaining all these appearances: the sky, the sun, the trees, and so on. Reality is supposed to be behind the scene. It is supposed to be independent of the spectator, it is also supposed to be object-like: it's made of objects, it's made of cogs and wheels, it is made of mechanisms.

### M Michel Bitbol, Professor 02:24

So, this idea of two very opposite ways of conceiving reality and appearances, is likely to be inherited from Plato's philosophy. There were two worlds, according to Plato: the world of sensible things and the world of intellectual things. But sensible things, according to Plato, are

just copies of intellectual things. They are copies of ideas, as he said. The particulars that are seen by the senses, only exist according to Plato through their participation to ideas, to generalities, to concepts. And the archetype of these generalities, or concepts that are more real than apparent sensible things, are mathematical forms. Mathematical forms are supposed to represent a superior kind of reality. According to Aristotle, who followed Plato, at least on this point, not on all the points, science only bears on generalities: science is an exposition of generalities and by way of these generalities and concepts, it discloses the true nature of reality.

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Michel Bitbol, Professor 03:52

This idea of the two worlds was entertained for so many centuries and maybe millennias, and one finds an echo of that in the famous metaphor of Eddington's two tables in 1928. According to Arthur Eddington, there are two tables: the ordinary table and the scientific table. The ordinary table is coloured: it has an appearance, it's apparently permanent and substantial. Colour is an appearance, permanent and substantial are inferences from these appearances, but wrong inferences from these appearances. Instead, the scientific table, he [Eddington] said, is mostly emptiness. And sparsely scattered in that emptiness are numerous electric charges: the electrons, the protons and so on, rushing about with great speed. Of course, one must be careful at this point. Sometimes some Buddhists jump on this word "emptiness" and say "Look, Eddington had understood the Buddhist emptiness namely shunyata". But this is not the case: here, emptiness is just an absence of something in space, it's not the lack of our own being. Whereas, when Eddington speaks of these electric charges and their velocity, they are supposed to have some kind of intrinsic existence. (Then there was a critic of intrinsic existence, even of particles, but this comes much later, after Eddington.)

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Michel Bitbol, Professor 05:43

This prejudice inherited from Plato, about the opposition between an intelligible reality and the sensible appareants, is so powerful and so influential that it triggered many misunderstandings, including those about Greek philosophers, who were previous to Plato. For instance, there is this very famous quote by Heraclitus, who lived in the fifth century before the Christian Era. He said (in Greek): ἡ φύσις κρύπτει τὰ ἀφανή, ἡ ἀφανὴς ἀποκαλύπτει τὰ φανή. What does this mean? According to the standard translation, very much inspired by the dualism of Plato, "Nature loves to hide" is the right translation of this Greek sentence. And here one has the impression that Heraclitus said that there is something "secondary" about nature to be disclosed, why not by signs? This Platonic interpretation of Heraclitus' sentence was proposed initially by Philo of Alexandria, in the first century of our era. According to him, the veil of sensory appearances hides the intelligible reality of nature. This is the programme of science to unveil this veil that hides us, that hides the intelligible reality of nature.

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Michel Bitbol, Professor 07:23

There are other interpretations that are very similar, that can be called the "hermeneutic" interpretations of this sentence by Heraclitus: the idea that nature is a mysterious book written in, say, mathematical or maybe esoteric symbols that we must decipher. Now, Pierre Hadot, a French philologist and philosopher of the 20th century, noticed that this translation of the

sentence of Heraclitus is erroneous, because it relies on the knowledge of the Greek language that dates much later than Heraclitus himself: it dates five centuries after Heraclitus. So if, according to Pierre Hadot, one uses the conventions of the Greek language of the time of Heraclitus not of later acceptance of the Greek language, one finds the following translation, which is very different: instead of "nature loves to hide" we have "what is born tends to die". It's completely different, and it connotes impermanence rather than the idea of a permanent separate.

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Michel Bitbol, Professor 08:53

And this was taken over by many thinkers, especially of the time of German Idealism at the beginning of the 19th century, especially Goethe, who said that nature gives everything generously, it has neither cold nor veil. There is no veil of appearances below or beyond which there is something like an intelligible reality. Everything is here in the appearances, and we just have to be thankful to them. And maybe the reason why it was so difficult to replace the right translation, you know, of Heraclitus' sentence is given by nature. The eternal becoming is terrifying, he said, namely, impermanence is terrifying. It takes an amazing energy to transform this effect (namely the effect of terror in front of impermanence) into its opposite, namely into an impression of sublimity and delighted astonishment in front of the wonderful display of what we call appearances.

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Michel Bitbol, Professor 10:15

Another age old misunderstanding is about Democritus. Usually people quote only this sentence that comes from the ninth aphorism of Democritus. According to this aphorism sweet exists by convention, bitter by convention, colour by convention. Appearances are just conventional. Atoms in void alone exist in reality. So the reality is beyond the appearances and it's made of little shapes, called atoms: rushing across the void. But if now one reads another fragment by Democritus, the picture is much different. In fact, this fragment of Democritus is a dialogue between the intellect and the senses, between the intellect that usually claims to reach reality and the senses that only access the appearances. The intellect sees: colour exists by convention, sweet by convention, data by convention, and atoms and void exists in reality. But the senses reply: "Ah, you miserable mind, you get your evidence from us, the senses, and you try to overthrow us? We should not forget that all our conceptions of the world beyond the appearances such as abdomen, for instance, are inferred from our reasoning based on appearances." So, if appearances were completely not to be trusted, then we could deduce nothing.

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Michel Bitbol, Professor 12:08

At the time of the birth of science, this realisation became even more accurate, according to Isaac Newton, we should not formulate a hypothesis about the nature of the world, the nature of reality, the nature of gravitation, for instance. We should just reason about phenomena. And what does arise from this reasoning about phenomena? According to Newton, just mathematical laws, that connect earlier phenomena to later phenomena. I.e., no insight into something deeper than phenomena is given - just the order, just that. And some philosophers

of the 18th century drew important consequences from this reflection about the new conception of science, due to Isaac Newton. For instance, there are people like George Berkeley, David Hume, and so on, but here I will focus on Immanuel Kant.

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Michel Bitbol, Professor 13:12

Kant tried to ask us: is objective, identical to real? Usually, we oppose objective reality, to subjective feelings and appearances. But is objectivity necessarily opening us to reality? Are two words almost synonymous? According to Kant, it's not the case. Objective means: just universally, inter-subjective connections between phenomena - connections that can be shared by any subject whatsoever, but which is not necessarily independent on the fact of being seen, apparently, by subjects. As for reality, it means "in itself" ("an sich"), which means independent of subjects. So objectivity and reality, according to Kant, were two very different things. And Isaac Newton was dealing (by his celebrated mechanics) with phenomena and they're in universal, inter-subjective connection, but not about something that is completely independent of subjects.

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Michel Bitbol, Professor 14:37

Okay, so, then much later, Edmund Husserl, the German creator of the philosophical discipline called "phenomenology", made an opposition between two German words that sound almost the same but do not have the same meaning. The two German words are "Real" and "Reel". "Real" means: "similar to things", because one thing is called "res" in Latin. So, there is the mode of "Reality of Things". Now, there is another mode of reality, which is even stronger than the mode of "Reality of Things", and this is what Husserl called "Reel". What is this mode of existence that is more obviously real than the things given to observation? Husserl thought that what is absolutely there, absolutely existent, are not "the things" - because the things can always be doubted: maybe they are a dream, maybe they are a hologram, and so on. But there is something that is beyond doubt, which is that they appear: their appearance, the lived experience of them. This is obviously there, and you cannot doubt it, because if you doubt it, then the doubt becomes "the thing" - which is most obvious.