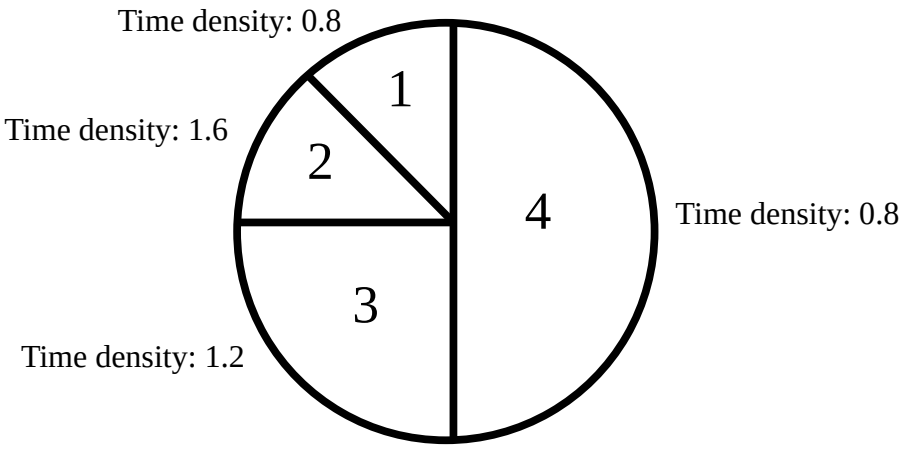
Joker Duality in The Yuga Time Cycle

by Sven Nilsen, 2022

In this paper I show that time density in the Yuga time cycle from ancient Hindu cosmology is based on an elegant mathematical trick about ratios that combines story telling with insights about cognitive bias to create an elaborate illusion, a joker duality, which unites two different psychological projections of time. The conclusion is that the Kali period might be thought of as the same as the Krita period, but from two very different perspectives.



The periods in the Yuga cycle uses a trick with ratios such that the time density in the Kali period (1) returns to the same time density in the Krita period (4).

In the paper "The Joker"[1], I described a mathematical universe where messages are not taken seriously. The reason to communicate through a such mathematical universe, is to "point to" something deeper that can not easily be explained in a straight forward way.

One common trick in comedy is to set up the expectations of the audience before the punchline. The Yuga time cycle in ancient Hindu cosmology might have been originally a joke, which humour was lost through history when people started taking it seriously. I have to admit, this the first day I ever looked into the Yuga time cycle, so either I am hopelessly ignoring the "serious" message here, or I got lucky and spotted the pattern early. I found this out by trying to investigate to what degree people perceived the time density as changing between the periods. I got the hint from a video[2] by Alan Watts that used the division of the circle above, but seemingly without Alan Watts knowing this trick. I do not know anything about the "correct" way to divide the cycle into time periods.

The Yuga time cycle[3] basically says that there is a long period of time called "Krita" where things are good, followed by decreasing periods of time where things get worse and worse. In the last period, called "Kali", time is perceived as happening faster that usual and things are bad. When things are at their worst, time itself is reborn and the cycle starts over.

However, what if the Yuga time cycle was constructed as a mathematical joke, illustrating how perception of time changes from which perspective one is using?

Humans have a cognitive bias when guessing the missing number in this sequence:

8, 12, 16, .., 8, 12, 16, .., 8, 12, 16, ...

Most people think that the missing number will be greater than 16, or perhaps less than 8.

However, in this case, the missing number is 8. The same sequence divided by 10:

0.8, 1.2, 1.6, 0.8, 0.8, 1.2, 1.6, 0.8, 0.8, 1.2, 1.6, …

The sequence measures time density for each period in the Yuga cycle when divided up on a circle the way Alan Watts did it. Time density says how fast a watch hand would move around the circumference when the numbers `4, 3, 2, 1` are assigned to `1/2, 1/4, 1/8, 1/8` circle segments. If the entire circle was divided into equal periods of weight `1` each, then the time density would be `1` everywhere.

In the historical Yuga cycle, a full cycle took 4 320 000 years (12 000 divine years, where 1 divine year equals 360 normal years). However, the length of the cycle does not matter in this interpretation, so I used `4, 3, 2, 1` as weights.

Reinterpreting the Yuga cycle using this division of varying time density, one can think about the Kali period as a reflection of the Krita period. The rebirth of the cycle of time does not happen at the end of the Kali period, but instead it kind of “overlaps” the Krita period. The difference is that the same time period is perceived from two very different perspectives.

In mathematics, we call opposites, like Kali and Krita, for “dualities”[4]. Since the Yuga time cycle might be interpreted as a mathematical joke, it can be thought of as containing a “Joker Duality”.

A Joker Duality might be thought of as two opposites that turns out to be the same, but viewed from two different perspectives. This idea is common in mathematics and in Alan Watts’ philosophy. Perhaps Alan Watts knew this and used it as an easter egg?

References:

[1] “The Joker”
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[2] “Alan Watts Lectures | Time”
Youtube
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[3] “Yuga Cycle”
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[4] “Duality (mathematics)”
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