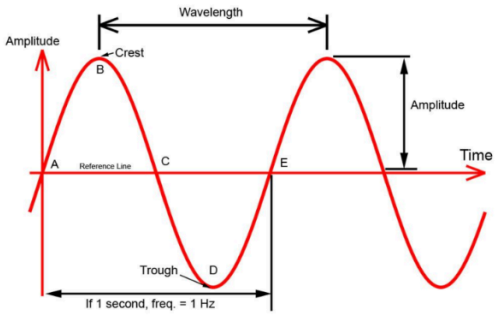
All cultures – societies – reach a pinnacle.
They are born, they rise, they climax, they descend, they complete.

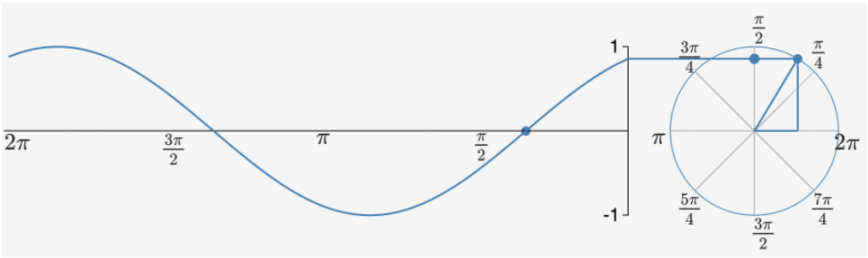
This statement can be visualized, can it not?

How about as follows:

Point A = Birth
Point B = Rise (½ to Peak)
Point C = Peak
Point D = Descend
Point D = Complete cycle



Infinity can be found here:



The Circle's Circumference/Perimeter:

$C = 2\pi r$ *with r = radius*

Such is the cyclic movement of the wave – it forms cycles. Circles.

This may be basic for many.

But notice this thought:

You were given 5 points — and from these 5 points, you can construct a visualization – one that is fundamentally represented by mathematics.

But what exactly does that mean? How does one construct a visual relationship from 5 points?

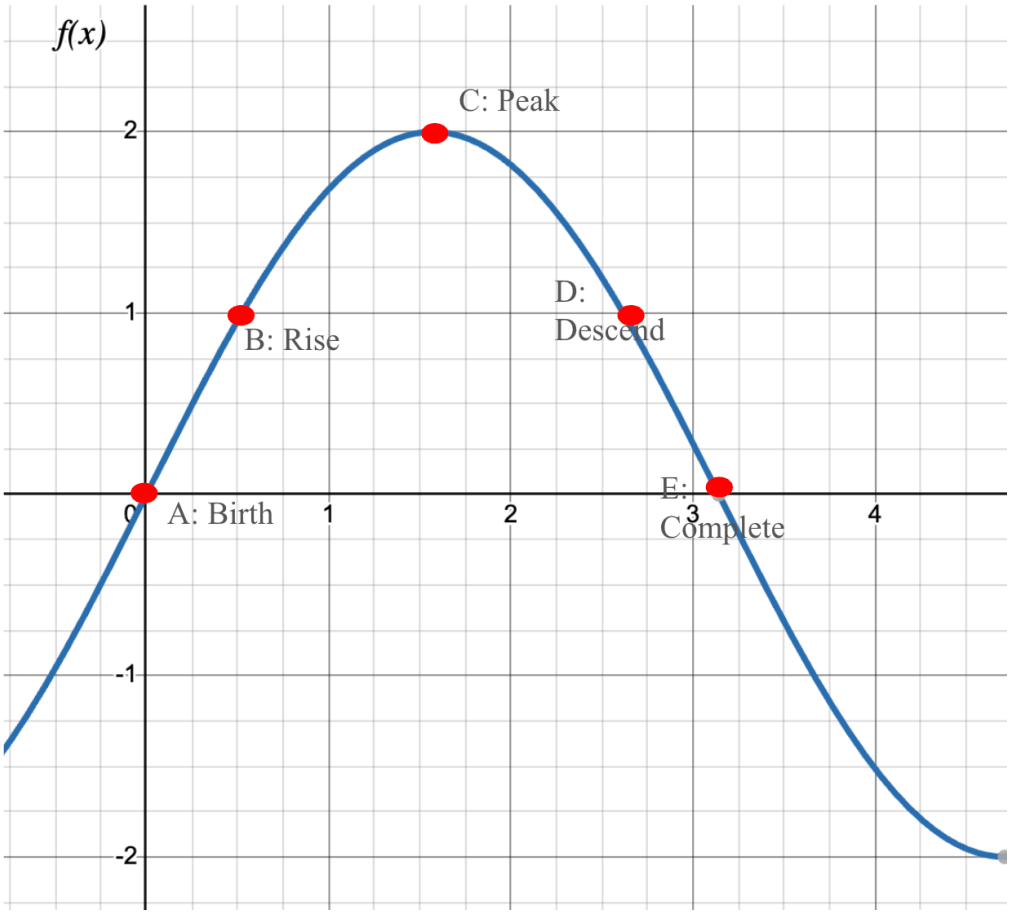
<u>How exactly do these points relate, and to what??</u>

The first thing that comes to mind is <u>TIME</u>, do you agree?

Birth is at t = 0, with no "energy", and then at PEAK we think of it as t MAXIMUM POINT – we would probably consider this at the half-way point and therefore "half-life", and then back down to energy = 0 at some time t.

So now we have marked that time is on the x-axis, and something we called "energy" being on the y-axis.

But then a brave student might say:
Wouldn't the following be a better visualization, since you described a hill?? Why are you giving me a wave…?



Now you can understand that you can model one idea, two different ways.
Although really, these two are obviously related.

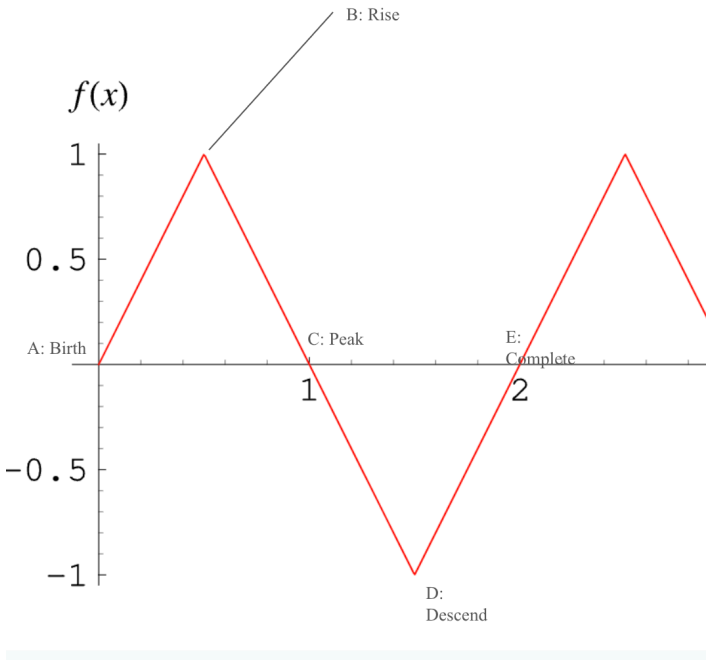
Notice how the complete lies just past the number 3 — its at pi = 3.1415….. Infinity.

When the wave goes back upward, when would it cross the axis again (that is, when will "Complete" happen?)?

If Birth = 0 goes to Complete = approx. 3.14 —- we moved 3.14 units on the x-axis.
*Then If the New birth is NOW the old Complete at 3.14 –then add another 3.14 = 6.28. And this is 2*PI. (two times pi).*

But why the wave?

Why not this image? :



Does this wave not increase to the next point in a steady manner?
Imagine moving on this line – increasing from point A to point B.
It's just a steady ride up.

Now imagine going upward from A to B on the "circle"- graph (i.e. the "wave").

How would it feel?
Actually imagine it: what would it be like?

Would it not be like a roller-coaster ride?
You start slow, quickly increase and as you get to the top you slow down again.

Slow, quickly speed up, slow down again – what's happening?
Our speed is changing, is it not?

At each "point" between points A and B that we have identified, we are changing our speed.

There is a special word for this that you would learn in a calculus class: derivative.

It is the rate of change of some variable (like speed).

How fast speed is changing is called acceleration.
And so we can say that a change in speed is a change in acceleration.

The derivative of speed is acceleration.
This entire story, in symbols can be represented as

$$\frac{dy}{dx}$$

⇐ *how much y is changing with respect to x.*

So imagine I drive 2 meters, every second:

$$\frac{2 \text{ meters}}{1 \text{ SEC}}$$

Resemblance is clear.

But this a speed.

That is because speed is a derivative of POSITION
– how fast is it moving with regards to how fast time is changing.
Just like acceleration is a derivative of speed
– how fast is the speed changing with respect to time.

Anyway, back to cultures and societies.

Christianity, Quantum Theory, and Marxism – what do these all have in common?

These are all models.

Not these ones.
Focus buddy, focus…

It's always all about focus, really.

Anyway. Where was i?

Oh yeah– models.

Christianity, Quantum Theory, and Marxism, are all "ways of imagining" our reality.
They are "models of our reality".

This brings me to what I believe is the heart of Science:

To understand the idea of "Science" is to understand the idea of Models.

It is a higher form of consciousness, a higher form of awareness.

One is now aware that the model I may live by, is merely one of many models.

And then the rebellious mind asks: how can I be sure that this model– your model or my model– is the correct one?

The answer: we can't.

We can only make observations, and after analyzing the data ('scientifically' is by the scientific method, but we gather data naturally, just by being) and then we proceed to create a model that seems to explain it all.

But every model will eventually come to an end.

They may, oftentimes, hold true–but only within some context.
For example, Newton's laws are approximations for speeds that are very small.
That is, our earthly speeds, for example 300 m/second
–which is quite fast as you may know for a 21st century being –
Is 0.00000001 % of light speed, where the physical laws will only work with the model known as Einstein's Theory of Relativity.

$$\frac{300\,\mathrm{m/s}}{3\times10^{8}\,\mathrm{m/s}}\times100 = 0.0000001\%$$

Science is the methodical way by which we observe and get data.
It is an "observation" of our "observations" (of our observational methods, moreso).

Anyway, back to cultures and societies.

The specific model, which I am strongly convinced by – but am not attached to it! – is the Marxist analysis of Society and Civilization.

This is a scientific theory, who's evidence and data is Our own history.

It is unfortunate, and i will even say dangerous, that the vast majority of our species have not yet come to a collective understanding of what this theory is.

But i am tired now and i want to go to sleep.
So I will continue talking about marxism later. Good night.