James Sirois

Non-Academic

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Why Math is Transcendental

Mathematical truths have no substance so we cannot simply say they exist. On the other hand they can be discovered and order reality and so we cannot simply say they do not exist. The mathematical truths transcend the categories of both existence and non-existence.

They were not created and have always been true and always will be. They are true at all times and are changeless. Thus they transcend time.

They are true everywhere and nowhere. Thus they transcend space.
      James Barton

These eloquent statements provide the catalyst which allow for a derivation which could serve to prove why mathematics is transcendental. To start, we measure many *finite* things everywhere in the material existence we experience, and yet in order for this very same existence to exist, there must be in our minds, an infinitude of existence and/or non-existence for there to be any possibility of our ability to perceive mathematics. This is why the material reductionists default to infinite regress of existence- the issue is that they contradict the very point: if an infinity of existence *is*, then mathematics *must* be, they must transcend or at least equivocate to an infinity of non-existence, because we can not prove any discernible difference between the

infinity of existence and non-existence: at this boundary, whether infinity represents a space-time construct or lack thereof, the question of whether math is transcendental or not simply becomes clear because we prove math's existence through measurement of finite things while simultaneously supporting its validity through the concept of "infinity". Now it may exist as a spacetime construct or an absolute void, but whichever it turns out to be becomes irrelevant because *infinity itself* is the remaining constant and has no choice to exist beyond a Spatio-temporal construct, making it and all non-infinite numbers transcendental.

I want to go back to what I said: *Whichever it turns out to be, whether it is an infinity of existence or non-existence*, I want to recall that although we have no need to prove either one in order to know that maths are transcendental, that the very fact that we can *not* prove either/or is backed up by Gödel's incompleteness theorems; in short, it is not transcendentalism that his theorem claims is a truth which can not be proven, it is an infinity of either/or which can not be proven. Therefore, infinity is a truth which can not be mathematically proven precisely because mathematics transcend infinity.