

God and Mathematics (Descartes)

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Descartes provided an argument involves a proof of the existence of God in his meditations. One of the premises of the argument he gave is that “Only God could be the cause of idea of God.” Descartes thinks that the premise is true because he believes that God is infinite, complete, and perfect, and that no finite thing can initiate an idea of an infinite thing (hence, God). Furthermore, he thinks that only infinite things can give him an idea of an infinite thing (God), but he also thinks that there are no infinite things but God himself. Yet he thinks it is impossible to have an idea of an infinite thing (that can give rise to the idea of God) in the first place because it is impossible to be at a point where his knowledge is incapable of greater increase. He says, “Although my knowledge may always increase more and more, nevertheless I understand that this knowledge will never by this means be actually infinite, because it will never reach a point where it is incapable of greater increase. On the contrary, I judge God to be actually infinite, so that nothing can be added to his perfection” (M3,47). Hence, the premise through which Descartes gets the conclusion that he cannot ever attain infinite knowledge (or have an infinite idea that can rise an idea of God) is that he cannot reach a point at which his knowledge is incapable of increase. However, we may show that this premise is not necessarily true because given that something (hence, knowledge) is infinite does not necessarily imply that it cannot increase. I think this premise can be false because mathematics confirms that there are infinities greater than other infinities. For instance, the set of natural numbers, rational numbers, real numbers, and complex numbers are all infinite. Yet the set of natural numbers is contained in the set of rational numbers which is contained in the set of the real numbers, and the set of real numbers is contained in the set of complex numbers. Furthermore, God can be analogical to the infinite set of complex numbers because we cannot even recognize (or really know) all of irrational numbers in the interval $[0,1]$, for example. Hence, we cannot state all numbers within this interval because we do not even know them. On the other hand, the infinite set of natural numbers can be analogical to the knowledge we can gain in order to inspire us with an idea of God. The infinite knowledge is a good candidate to inspire us with an idea of God because it is infinite and as Descartes believed only infinite things can rise an idea of infinite things. Yet, the set of natural numbers can get extended to include all rational, irrational, and imaginary numbers and hence be the set of complex numbers. If the infinite natural numbers can still get extended

(increase), then, by the same token, infinite knowledge can still increase. Nevertheless, there is still an important question remaining, "How can we gain infinite knowledge in the first place?" As we said that knowledge is analogical to the infinite set of natural numbers, and in fact, we can recognize all of natural numbers. Thus, we can make a computer program to keep on stating more and more natural numbers until we reach an infinite number of them. In contrast, we cannot make a computer program to state all of complex numbers because we do not know all of existing complex numbers, we do not even know all of irrational numbers with the interval $[0,1]$. In conclusion, the premise of Descartes' that "Only God could be the cause of idea of God" is not necessarily true because it is based on the claim that he can never attain infinite knowledge (that can inspire him of an idea of God) just because there is no such a point at which one's knowledge is incapable of increase. As we showed, this claim itself is not necessarily true because if something is infinite, it is still capable of increase. At the time of Descartes, I believe mathematics was not that sophisticated, and I do not think he was aware of the idea that there are infinities greater than other infinities. Additionally, after Descartes made sure that God is not a deceiver, he would not doubt mathematics anymore. Thus, I think Descartes would agree with me and start to think of an alternative premise to his claim that "Only God could be the cause of idea of God" other than that "I understand that this knowledge will never by this means be actually infinite, because it will never reach a point where it is incapable of greater increase" because given that knowledge is infinite, this does not necessarily mean that it is incapable of greater increase. I think Descartes would agree with me and start to think of an alternative premise to his claim that "Only God could be the cause of idea of God" other than that "I understand that this knowledge will never by this means be actually infinite, because it will never reach a point where it is incapable of greater increase" because given that knowledge is infinite, this does not necessarily mean that it is incapable of greater increase.