Occam's Razor

"Plurality is not to be assumed without necessity."

- William of Ockham, Quadlibeta, Book V. (c. 1324)

Quite often we'll hear someone say that assuming the existence of a god, of souls, of angels, of ESP, etc. violates "Occam's Razor." But what does the mean? What is "Occam's Razor" and who is this "Occam" person anyway? William of Ockham ("Occam" is the Latin spelling) was an English theologian of the fourteenth century who has become relatively obscure today. Others, like Thomas Aquinas and Duns Scotus, are much better remembered and are practically superstars in comparison. Yet, it was actually William whose ideas and writings prefigured modernity.

Ockham was probably born sometime between 1290 and 1300 and he died on April 10th, probably in 1349 due to the fact that the plague was especially strong that year (although some think that he may have died one year later). He sided with other members of his Franciscan order against Pope John XXII on the subject of poverty. Previously, property left to the friars was turned over to the pope so that they could enjoy the benefits of the property without suffering from the sin of ownership. This arrangement was ended by Pope John XXII, who said that they should simply accept ownership themselves. Some, like Ockham, were charged as heretics and he was excommunicated in 1328. Fortunately, he escaped and took refuge with Emperor Louis and settled in Munich. The question about whether or not the church should be poor is an issue which still creates controversy today. A leading contender to succeed Pope John Paul II insists that while poverty may be a virtue, it is not a virtue for the church itself. Cardinal Giacomo Biffi said Catholics should follow Christ's example of poverty by donating all their wealth to the church, which should, in turn, be rich. This is the same cardinal who has also claimed that the Antichrist is already on earth in the guise of a vegetarian philanthropist whose concern about human rights and environmental problems hides his desire to destroy Christianity.

There is one thing for which Ockham is well known and remembered - his so-called "razor." What is his razor? It is a logical tool he used to cut absurdities out of arguments and philosophical systems.

According to Ockham, the simpler an explanation is, the more preferable it ultimately is.

In other words, if it is not *necessary to introduce certain complexities or hypotheticals into a situation or explanation, then don't do it. Just say No. Not only would the result be less elegant and convincing, but it would also likely be less correct.

Here it is important to point out that nowhere does he assert that the simpler explanation is **always** more correct or that the more complex explanation is **always** less correct. Had he done so, he would have been mistaken and remembered quite differently. The point is to **start** from the simplest possible explanation and only make it more complex when absolutely necessary.

An example of this which is relevant to atheism is the following two hypotheses:

- 1. There is a universe.
- 2. There is a universe and a God which created the universe.

The first hypothesis is obviously simpler than the second. Thus, without sufficient reason, the first is preferable to the second. That doesn't mean that the second hypothesis is wrong - it does, however, mean that we should not simply **assume** the second. Interestingly enough, this theologian's recognized that his logical tool essentially eliminated the hypothetical of the existence of God in pretty much all arguments and explanations. You might think that this would be a problem for Ockham, but that judgment would be a bit hasty.

It's not that he didn't believe in God - on the contrary, he was very devout. He did not, however, think that the existence of God could be logically *proven with arguments. Doing so would require introducing all the extra complexities which are unnecessary and which he deliberately sought to eliminate. Most other theologians of the time - and today, too - might have sought scientific arguments to prove that God exists, but Ockham said that that simply wasn't possible. In his mind, science and theology are two totally different systems dealing with totally different realms. It should be noted that Ockham really wasn't the first person to use or explain this logical tool - indeed, nowhere in his writings will you find the most common formulations today, like "Entities are not to be multiplied without necessity." The closest you will come to a direct formulation is the quote at the beginning of this article. However, it was Ockham who used it most ruthlessly and even vehemently, chiefly in reaction to the intellectual climate of his age. At the time, the methods of theology and philosophy were dominated by his predecessor Thomas Aquinas and other "Scholastics" - so named because they preferred arguments based upon texts and pure thinking rather than experiment and experience. These Scholastics desperately wished to make their theology more "scientific" in nature, resolving any contradictions between ancient science and contemporary scriptural teachings. It was their goal to offer fully rational explanations and proofs of theological concepts such as God's existence. Curiously, we find similar attitudes today among people attempting to find support for the existence of their god in the "design" of the

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universe. Ockham thought that the Scholastics of his day were simply wasting their time, and he would probably render a similar judgment about "Intelligent Design" theorists today.

One step in the Scholastic road was to treat universal concepts like "good" and "great" (and even more mundane universals like "dog") as real, independent entities. They argued, closely following Plato, that if we call both a pine and an oak "trees," then there must exist some real thing called "treeness" that they both share. For another example, if we call both Martin Luther King and our best friend "good," then that means that there is some universal, really existing thing called "goodness" which they both must share. Neither goodness nor treeness is a subjective concept in our minds. This doctrine is known as "realism."

As you might guess, Ockham regarded this "realism" as nothing more than nonsense. It confused categories and elevated that confusion to a "science." According to Ockham, it is a mistake to treat a mere name as a **reality** rather than just a *description. The contrary idea, that names really are just names is called "nominalism." If we call two different objects both "trees," it is not because there is some independently existing "treeness" out there, but instead because they both share certain characteristics which we have chosen to label "treeness." If all the trees suddenly disappeared, then there would no longer be any "treeness" left around outside our own memories and records.

Such realist universals were done away with by Ockham wielding his Razor. He insisted that valid, reasonable explanations had to be based upon simple, observable facts, supplemented by logic. The acceptance of such conditions results in not being able to either simply assume that God exists or scientifically prove that God exists - but Ockham, even though he was a theologian, was willing to accept that consequence. In his mind, theology was one thing - a matter of revelation - and science quite another - a matter of discovery.

It took quite a while for this idea to take hold either in ecclesiastical or secular circles; Galileo found that out rather unpleasantly. Ultimately, however, the basic ideas and premises which Ockham used have become the foundation of modern, secular society - at least in theory.

Although science and religion have generally gone their separate ways, there are still people seeking to mix the two or limit science with religion's assumptions. And many, if not most, people don't quite make full use of the skepticism required to avoid introducing unnecessary assumptions or ideas in their explanations.

However, most people do realize that this is what they should do and that this is what is best. And it is thus Ockham's ideas here which have become so fundamental to modernity and even secularism.

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