**The Razor Cuts Both Ways**

Darrell Bryan

Fanshawe College

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Dr. Nicholas McGinnis

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In this essay I will be covering some supporting and opposing views on the philosophic principle: Occam’s Razor. Along with its significance to scientific and philosophic reasoning. I will express the ways in which this ‘Rule of Thumb’ contributes to the other philosophical razors. Even though some philosophers have constructed counter arguments with regards to the field of medicine, Occam’s Razor is still a huge corner stone of grounding theories in the mentioned fields.

**A Shave to remember**

Occam’s Razor is a principle of judging competing theories that make the same predictions or reach the same conclusion. When William of Ockham said, “Plurality should not be posited without necessity” (1285–1347/49) he was expressing that the inference to the best explanation is the one that can be made with fewer entities and supposition; the simpler a theory is with equal explanatory power, the more likely it is to be true. For example, if a glass were to knock over and the only thing near it at the time were a cat, under Occam’s Razor it would be safe to accuse the cat of the crime. Instead of jumping to an elaborate conclusion which requires more assumptions to be true, we can shave off any part of an explanation that requires us to make an assumption with no supporting evidence. If we had no rational grounding, it could equality be reasonable to assume the wind blew the glass over, even if the window was closed at the time; because maybe the window opened, let the gust of wind in, then closed before we noticed. Whereas the wind conclusion requires more extraneous assumptions to be true, the Cat theory only needs one simple assumption to be. Occam’s Razor boils down to an ideology of less assumptions, less variables in the equation, less chance of one being wrong and collapsing the whole theory. It explains what the most rational theory is to believe, **not** what humans will actually do. Which is why, when using Occam’s Razor, we must always check ourselves to not overlook plausible explanations. Even if one has less suppositions, we must cross examine our theories with the other philosophical razors to make sure not to harbor bias, because sometimes we have not shaved close enough and we need to rethink our approach.

**Early Modern Example**

One widely accepted truth that put Occam’s Razor to the test was the Land bridge theory. The Paleolithic findings of similar fossils on the inner sides of different continents led researchers to theorize that long ago there must have been massive land bridges that cut through the oceans, connecting all the continents together. Over time with raising water levels these bridges collapsed or otherwise washed away, stranding the creatures on either side of the ocean. This ideology was later challenged by the tectonic plate theory, in which the continents were once one large land mass and over time separated. It was discovered the crust of the earth is a series of plates that slowly move over long periods of time. At first, the land bridges seemed more in tune with Occam’s Razor, because the sound of the earth being held together by these slowly moving rocks seemed absurd at the time. But once the evidence mounts, sufficiently, such that the plate theory is simpler than the land bridge theory; then it is rational enough to adopt the new ideology.

On the other hand, in the medical field, Doctors following Occam’s Razor tend to link multiple symptoms to one underlying illness due to the simplicity of diagnosis. For example, thinking it is more likely someone is low on iron just because of their diet, instead of assuming it could be any number of illnesses that could be the culprit. Hickam’s dictum, a counter argument to Occam’s Razor, expressed in the words of John Hickam, “A man can have as many diseases as he damn well pleases” (1914-1970). In this we can see how we can always make theories simpler, but the answer isn’t always going to be simple.

**Scientific Sharpening**

Moreover, Occam’s razor is widely looked at as scientific concept, mainly in set with its 8 other razors that help keep each other in check. As no one single principle is enough to completely back scientific or philosophical speculation. These ‘Rules of Thumb’ are mere guidelines to help usher in thought provoking, yet more importantly, rational ideologies. Doing this shaves away utterly ridiculous arguments that have no supporting evidence because time should only be spent on well thought out rationale. Even Albert Einstein him self was a subscriber to this way of thought, “Everything should be as simple as it can be but not simpler”. A lot of this ‘human desire’ for simple theories over complex ones stems from nature itself, from Aristotle to newton, all have endorsed this narrative of nature being simple. Though, what justifies this claim has been in debate, it comes down to either 1) God has created a simple universe; or 2) Constant success with simple theories confirm our suspicion. But, in time many other philosophers have taken a stance against the notion nature is simple; claiming what seems simple to nature, is complex to us humans.

**Conclusion**

So, while Occam’s Razor alone has weight behind its logical, it should not be the only justification backing a theory. When used accordingly with other razors, theories only become more thorough, or fizzle out. Again, this philosophy is to help with rational deduction and not what people will actually do, so its logical leverage varies in different situations. Still though, Occam’s Razor is always a good starting place when needing to piece together an explanation, just make sure its not also the stopping place.

**Citations**

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