

Candidate

“Seek simplicity, and distrust it” (Alfred North Whitehead). Is this always good advice for a knower?

Simplicity is coherent, concise and easy and is of value to the knower. Something that is simple is usually considered pure and beautiful and being able to utilize such conclusions is valuable to the knower. A knower understands the concepts of knowledge and all that surrounds it. When creating theories, scientists and mathematicians often look for the simplest answers and postulates to make the theory harder to disprove. The simpler the answer the less there is to it to be proven wrong. However, a knower must be able to comprehend both simple and complex facts in order to obtain all the knowledge necessary. Simplicity is not always the correct answer and a true knower must be able to realize when to distrust simplicity. A more complex answer can be correct. However, the more complex the answer becomes the more that can be wrong with it. The simplest answer is mostly correct in the natural sciences, mathematics and ethics. For the knower, the simplest principle contains the most truth and can be validated easier than the superfluous, complex principle.

In mathematics the simple axioms are known and conjectures to prove mathematics, they use Reasoning is used to deduce use axioms to create theorems. Without this whole process falls short. Aristotle believed that the simplest postulates were the most correct. This belief came from the fact that the simpler

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axiom which by definition is simple. These theorems and are also used in proof for the knower to understand axioms and utilize these simple statements. and to prove theorems based upon axioms and

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the postulate the less there is to be proven wrong. Newton also believed that the simplest answers are most likely correct and stated in his "Rules of Reasoning in Philosophy" at the beginning of *Book III of Principia Mathematica* "We are to admit no more causes of natural things than such as are both true and sufficient to explain their appearances"(Newton 1729). Newton also says that nature prefers simplicity and has no need for the superfluous. The simple answers keep to the point and concern only the purpose of the statement without adding unnecessary information. Critics may argue that math is comprised of several very complex conjectures and postulates but when they are further examined, these postulates can be broken down into simple theorems and basic equations. A complex equation can be broken down into simpler equations to be sure that it is valid and true.

In science, old theories are constantly being refuted and new ones are being created even more than in math. The sciences look for simple answers to the questions that we face but when are these simple answers not enough? Occam's razor states that the simplest answer is almost always correct when all other factors are equal. This is used in the natural sciences to help disprove pseudo sciences (Courtney 7-8). For instance, a few years ago a family friend who owns a farm found a crop circle in one of his fields. The story was all over the local news and there were questions as to how it got there. Some claimed that aliens from outer space had created it as a way to communicate with us. However, the simplest answer was that a few teenagers were bored and felt like destroying some property and created this symbol in the field. About a year after the incident when the news stories had died down some local teenagers confessed to creating the crop circle using boards attached to rope.

The theory of Parsimony is that the explanation of a phenomenon that is the simplest is claimed to have more value than the more complex explanation. It believes in "less is more" and

the simpler the explanation, the more powerful the argument and greater the plausibility of it being true. Critics may argue that the simplest answer may not account for all of the data and for outliers (Courtney 7-8). There is concern over confirmation bias and scientists over simplifying complex structures such as molecules all the way to human beings. When information is broken down too much and too simplified, it loses its purpose and full truth. However, arguments against these simplified theories do not address issue with theories but with the burden of proof and cannot prove the theory itself wrong because of its simplicity (Vaknin 1-4). The more complex the theory, the more that can be found wrong with it such as the string theory that is being developed by physicists all over the world. It is the theory that everything in the universe is made up of extremely small strings that vibrate like those on a string instrument. This theory is extremely complex. It is taking years to perfect it because every time a scientist thinks they have figured it out, another scientist comes along and disproves it. Opposition argues that this theory needs to be complex because it needs to incorporate all parts of the molecular world (Greene 1-3).

Simplicity is a big part of many religions. Quakers believe in focusing on things that are more important and disregarding those that are not; making life easy and fulfilled. In Tibet, the monks believe in Daoism and simplify their lives in order to find pure, true knowledge. They believe that simplicity allows for focus and the ability to find truth from the basic, simple information. In contrast, their seclusion and simplicity keeps them from advances in technology and limits their knowledge that can be shared from outside cultures and experiences (Firstbrook 1). St. Thomas Aquinas argued that if something can be done well with only one then it is superfluous to do it with any more. If things can be simple then let them be simple instead of wasting time, energy and resources adding to something that is already true. Aquinas also

believes that things must have "theoretical virtue" that in nature things are not done by two that can be done by one (McInerney 1-6).

Kant argues that principles should be unnecessarily added to or multiplied to just make them complex. If a simple principle works, then adding to it or multiplying it will not make it any better just more complicated and unnecessary. Words should not be added for the sake of having more words but to hold meaning and value when addressing knowledge claims and principles. Kant also believes that the simplest answer is usually morally correct and therefore should be followed in ethical dilemmas (Johnson 1-3). It can be argued that humans are complex people and complex ethical dilemmas will call for complex solutions but, through implicit association it can be shown that humans can break things down into simple, straightforward solutions. Implicit association is the automatic association of people to stimuli. The brain automatically chooses what answer it wants to give before a person even realizes what answer they are going to choose (Nosek 1). So the ethical decisions is actual very simple and quickly made. Humans thoughts and brain function is based upon chemical signals that signal nerves and muscles that lead to our decision making. The problem here is that humans are believed to have souls and there is a problem of *reductio ad absurdum* where these things are over simplified and humans are being said to be just molecules put together (Burgess-Jackson 1-3).

While the simplest answer can be very valuable answer to the knower, so can a complex answer that incorporates everything needed. The knower just needs to be aware of when a complex conjecture goes too far and tries to claim too much. The simplest answer is coherent and concise and is harder to find fault with. Scientists, mathematicians, and philosophers prefer simple solutions because they leave less room for error and criticism. The knower must be able to incorporate several simple answers to create more complex conjectures and be able to put the

facts together in order to develop true knowledge. Simplicity is pure and clear giving the knower assurance. Simple deductions can be found using reason and we must use our knowledge of the simplest answer being almost always true to help determine what we perceive. The simplest answer should not be distrusted but everything should be questioned and not taken for truth until proven so. It is with caution and skepticism that we determine whether the simple or complex answer is correct and the knower must always be questioning even the simplest answers.

Word Count: 1,433

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