

VALUE IS IRRATIONAL, BUT IT IS ALSO REAL

“The value of π is considered by mathematicians to be an ‘irrational’ number but also to be a ‘real’ number. This is true of many values.” —Hippokrites

We all have different values, albeit we share some values. We have words for these value judgements, words such as ‘good’ and ‘evil’, ‘beautiful’ and ‘ugly’. We sometimes disagree about which word should apply, although we quite often agree. What is one to conclude from this? That value judgments are irrational?

Are all value judgements purely subjective, as a relativist would claim? So then beauty really is just in the eye of the beholder, and morality is the same as cultural mores—or even individual judgment? To claim that something is objectively more beautiful than something else is irrational? To claim that there are actions that are objectively and universally evil—or good—is irrational? Because people often do not agree on what is beautiful or what is the moral thing to do, must it be deemed *irrational* to claim value judgments are anything but relative?

Well, it may indeed be irrational, but not in the conventional sense. Consider the *mathematical* definition of ‘irrational’. The ancient Greek mathematician, Pythagoras, believed that all numbers were what he termed “rational”. He meant by this that all numbers were either integers or precise fractions, a reflection on the orderliness of the universe of which he firmly believed. The term is still used to distinguish this class of numbers from *irrational* numbers such as π or the square root of 2, which cannot be expressed as a precise fraction. His student, Hippasus, allegedly proved that one couldn’t represent the square root of 2 as a fraction, and so it had to be “irrational”. It is relevant that such numbers are now included in the category of what are technically designated as *real* numbers. Real includes the rational and the irrational. But, at least according to the story, Pythagoras was so threatened by this evidence of the reality of irrationality that he tossed his student into the sea to drown.

If one treats this mathematical definition of irrationality as metaphor, value judgements could indeed be said to be irrational. *But that doesn’t make them less real. Pi* will never be precisely rationally defined, but it *is* a real number (in both the mathematical and real-world-sense), and we know it is not 30.

The rejection of all statements of value as merely subjective, and the resultant acceptance of moral and aesthetic relativism, is based on an implicit, and false, premise. It is the assumption that values are digital and one-dimensional, like integers or fractions, those “rational” numbers. But actually both aesthetic value and moral value are continuums, like real numbers: they are analogue in nature. And, furthermore, they are multi-dimensional.

You may assign a higher value to the crayon drawings of your beloved three-year old child than to the abstract paintings of Kandinsky because the former elicits in you more of an emotional response, but that doesn't *really* make your child's scribbling better. You can choose to assign any value you want to *pi*, but it is dangerous to use it in your calculations for building a bridge in the *real* world. You may believe the morally correct thing to do is kill abortionists, because you believe they are themselves murderers, but that doesn't *really* make it the ethical thing to do.

If pressed, most people will admit this. It would be hypocritical to deny it, for we all behave as if there are real distinctions to be made between beautiful and ugly, between right and wrong—no matter what we say.

In the field of aesthetics, we demonstrate our belief in taste and distinctions between the good, the mediocre, and the bad whenever we read reviews of books or films—or subscribe to a magazine. We may not always agree with the determination of what is worthy of audience attention that a reviewer or an editor has, but no one reads a magazine where the editorial policy is to publish in sequence whatever was tossed over the transom.

In the field of ethics, too, we don't condone anything anyone chooses to do. We condemn a mother mutilating her daughter's genitalia even if she believed it was the right thing to do. (Well, strangely, some ethical relativists will actually argue we have no right to label clitoridectomy wrong if it is an accepted practice in another culture or religion.)

While the relativists claim to be respecting and acknowledging the values of other cultures and other people, relativism is actually profoundly egocentric. In saying everyone's opinion is equal, relativists can then claim that their own opinion is equal to that of anyone else. This is acknowledged as ridiculous in other domains. Few laymen think their opinion about the validity of an arcane mathematical proof is of equal value to that of the mathematician. No one, showing strange physical symptoms, consults their seven-year old child instead of a doctor for a diagnosis and then flips a coin to decide whom to believe.

It is symptomatic of our desire for simplicity that we dichotomize the world. It is easier if there is just right and there is wrong, if there is just what is beautiful and what is not. But, alas, these things are not really binary. Yes, there is black and there is white, but there are an awful lot of shades of gray blurring black into white. And, furthermore, these gradient shades are not digital, are not finite countable units, are not a precise number of gradations such as the 256 levels for the gray scale on a typical computer graphics display. Relativists are like Pythagoras in their refusal to admit the irrational can still be real.

Ironically, it is in this gray area, in the infinite complexity of real numbers and the real world that relativists seek to find justification for their dogmatic viewpoint. If it is unclear whether one Rembrandt painting is better than another, or even what criteria should be used to make that decision, then that is taken to mean one can't make *any* such

aesthetic judgment. Of course that there is no consensus on such a question doesn't mean that there is no consensus about whether a child's finger painting is better or worse than any Rembrandt. No mathematician can say definitively with infinite precision what π equals, but they *can* say that 3 is closer to π than 30.

Obviously there are innumerable acts whose precise ethical value is difficult to determine. And situations requiring this kind of value judgment increase exponentially as advances in science and technology generate situations previously inconceivable. But that there is no agreement on whether it is ethical to abort an embryo detected to have an incurable disease that would result in the very early death of the child does not mean one can't say that it is clearly immoral to put out newborn infants with any signs of physical frailty to die of starvation and exposure—as Plato proposed in *The Republic*. Our inability to find a way to determine if one gray patch is lighter or darker than another doesn't mean we can't tell a very dark gray from a light gray.

Value judgements are further complicated by their multi-dimensionality. They are not even a simple linear continuum from black to white as in the above analogy. Consider the question of whether a given Chopin nocturne is better than a particular Turner seascape. Or whether it is more ethical to perform euthanasia or to perform a second-trimester abortion? Apples and oranges, one might say. True enough, but both *are* fruits, and they have attributes that can be compared in one dimension, but are meaningless in another.

Value judgments are often easy, and then there is a clear enough consensus that we don't even notice we are making them. It is the judgments that are not easy to make that are the ones that draw our attention. The relativists avoid the difficulty of making these judgment calls by interpreting this difficulty as evidence of them being totally subjective—a mere matter of personal opinion or individual preference or cultural norms. That is equivalent to saying π is a matter of personal opinion because no one can *precisely* define it—nor probably ever will.

This is a very naïve and dangerous way to deal with ambiguity. We need to face the fact there may not be a final answer to some specific aesthetic or ethical question (or mathematical value) because it is analogue and multidimensional. What is the final answer to the value of π ? There probably is no final answer, but we can say with *absolute* certainty that it is greater than 3 and smaller than 4. From there we can work, have worked, at becoming more and more precise in defining it. But it doesn't matter that it will never be completely defined, never be reduced to a 'rational' number. This is also true of defining aesthetic and ethical values. The best we can do is to strive for greater and greater precision. To toss overboard, like Pythagoras did Hippasus, the reality of the irrational value is to render *all* value meaningless. That is not real. We need to get real.

