IS BEAUTY IN THE EYE OF THE BEHOLDER?
John Hyman

In this article, John Hyman argues that beauty does not consist in mathematical perfection; that Hume was mistaken in claiming that beauty exists only in the mind; that we can discover what is really beautiful by learning to give reasons for our preferences; and that some things in the world are beautiful – probably many more than we imagine.

Two views about beauty
In the middle of the eighteenth century, the Scottish philosopher David Hume wrote: ‘Beauty is no quality in things themselves: It exists merely in the mind which contemplates them.’ Some people find this claim shocking and absurd, while others think that it is obviously true. I want to consider how it should be interpreted, and whether it is plausible. But I shall begin by examining another view about beauty, which Hume deliberately rejected when he wrote these words. It is attributed by tradition to the mathematician and philosopher Pythagoras, who lived in the second half of the sixth century BC, and it has influenced artists, poets and philosophers ever since. The Pythagorean view is that beauty consists in mathematical perfection.

Numbers, triangles and strings
Pythagoras is best known for believing in reincarnation, for refusing to eat beans, and for having proved the famous theorem about right-angled triangles, that the square on the hypotenuse is equal to the sum of the squares on the other two sides. But he is also credited with a surprising discovery about the sounds produced by vibrating strings, for example the strings on a violin or a guitar. He discovered that if the ratio of the lengths of two similar strings is a simple arithmetical ratio – one to two, two to three, or three to four
– the sounds they will produce when they are bowed or plucked will be harmonious.

This was a profoundly important discovery, for two reasons. First, it encouraged philosophers to imagine that mathematical patterns pervade the natural world, and hence that mathematics could become the main instrument of science: not just a technique for making calendars, measuring plots of land and regulating the exchange of goods, but the means by which our knowledge of the world could be extended.

Secondly, if musical harmonies can be explained by measurements and calculations, then it seems that beauty is a quality in things themselves, and that it is as independent of the mind as the geometry of a right-angled triangle. Perhaps the allure of beauty is so subtle and entrancing that we cannot generally perceive its abstract skeleton with the clear vision of a mathematician. But this skeleton is hidden in the harmonies we love, and described by the ingenious rules that artists use to make a beautifully proportioned face or body (Fig. 1).

**Does beauty consist in mathematical perfection?**

How plausible is the Pythagorean view about beauty? The philosophers who have rejected it have given several reasons for doing so, some of which (I think) are better than others. Here are four arguments.

First, it is obvious that taste varies. (By ‘taste’ I mean the appreciation of beauty – not stylishness or decent manners.) For example, the shapes of Greek vases made in the fifth century BC are quite unlike the shapes of vases made in China in the Sung dynasty. The shapes of chairs and cars and even scissors change as fashions change. But why do these differences exist? Are there unvarying laws beneath the differences, which a new Pythagoras may eventually discover? Do different cultural traditions and changing fashions simply make people sensitive to some instances of these laws, and not to others?
Fig. 1 (top). Albrecht Dürer, Woodcut illustration from *De Symmetria Partium ... Humanorum Corporum*, published in Nuremberg, 1528. The Getty Research Institute, Los Angeles.

Fig. 3. Michelangelo, Pietà, 1497-1500. Marble. St. Peter’s, Rome.

Fig. 4. Female figure, carved in the Cycladic islands c. 2700-2300BC. Marble. Nicholas P. Goulandris Collection, The Museum of Cycladic Art, Athens.
Many philosophers have found this quite implausible, and have argued that the variety of taste disproves the Pythagorean view. For example, the French philosopher Voltaire said that for a toad the most beautiful creature in the world has two big round eyes popping out of its little head, a yellow belly and a brown back; whereas for a devil, it has a pair of horns, four claws and a tail. Only philosophers, he said, think that there is a universal abstract pattern which everything that is beautiful conforms to.

The German philosopher Immanuel Kant gave a different reason for rejecting the Pythagorean view. If it was true, he said, then we could be convinced that something is beautiful by a proof, just as a proof will convince us that Pythagoras’s theorem about right-angled triangles is true. But no such proof is possible. ‘It’s a sonata; therefore, it’s beautiful.’ ‘It’s a sonata in A flat; therefore, it’s beautiful.’ ‘It’s a sonata in A flat by Mozart; therefore it’s beautiful.’ All of these arguments are non-sequiturs, because no kind of form or kind of object can be beautiful. Hence, there is only one way to decide whether something is beautiful. We need to see it or hear it for ourselves: ‘I must feel the pleasure directly…’ Kant claims, ‘and I cannot be talked into it by any grounds of proof.’

Kant does not deny that we can give reasons for saying that something is beautiful. And in fact we often can. (Critics, Hume says, can reason more plausibly than cooks or perfume-makers.) But he does deny that we can ever give conclusive reasons. And this seems to be right. For it is always possible to say to somebody: ‘I understand exactly why you think it’s beautiful. I just don’t see it that way.’ Saying this might be bone-headed, but it would never be absurd, as it would be absurd to say: ‘I understand exactly why you think that the square on the hypotenuse ... etc. I just don’t see it that way.’

A third argument against Pythagoreanism is that it presents a particular kind of taste – a taste for symmetry and perfection – as if it were a universal law of beauty. Pure
geometry is sometimes dazzling, in both art and nature. But there are many beautiful things – such as the Matterhorn and Chartres Cathedral – which are far from perfect or symmetrical. In general, smaller works of art are more likely to be perfect than larger ones, which can take years or even generations to complete. But even in smaller works, insouciance and spontaneity can be prized more than symmetry or perfection, and regarded as more beautiful (Fig. 2).

So symmetry is very far from being required for beauty. Some philosophers have even held that nothing beautiful is perfectly symmetrical, or strictly canonical in its proportions: ‘There is no excellent beauty’, wrote Francis Bacon, ‘that hath not some strangeness in the proportion.’ This sounds like an exaggeration. (Does it include the pyramids?) But beautiful things quite often do have odd proportions, like the vast lap in Michelangelo’s Rome Pietà (Fig. 3). And asymmetries can appear in unexpected places. Look, for example, at a marble figure carved in the Cycladic islands in the third millenium BC (Fig. 4). The figure is so elegant, and the carving so consummate and exact, that we can easily miss the fact that one arm is longer than the other.

The last argument against the Pythagorean view is this. The mere fact that an object satisfies a canon of proportions, or that there is a relatively simple ratio between the lengths of two vibrating strings, cannot be a reason to admire the object, and cannot make the sounds worth listening to. So if the Pythagorean view were true, the mere fact that something was beautiful would not be a reason for wanting to see it, or hear it, or perform it; or for wanting to prevent it from being destroyed – by iconoclasts or by the Ministry of Transport. It would not even be a flimsy reason, easily outweighed by religious or commercial reasons. It simply would not weigh at all. But beauty does weigh, and so the Pythagorean view is false.
Is beauty an illusion?

So there we are: four arguments against Pythagoreanism. But if we find these arguments (or some of them) convincing, and decide that the Pythagorean view is false, should we instead accept Hume’s claim, that beauty is no quality in things themselves, and exists merely in the mind which contemplates them?

One reason to resist this claim, which Hume examines carefully, is that if it is true, then beauty is an illusion, and nothing in the world is really beautiful. Some poets and philosophers have accepted this conclusion. Here, for example, are a few lines translated from a poem written in 1914 by the Portuguese poet Fernando Pessoa:

Has a flower somehow beauty?
Is there beauty somehow in a fruit?
No: they have colour and form
And existence only.
Beauty is the name of something that does not exist
Which I give to things in exchange for the pleasure they give me.

Pessoa make this austere doctrine seem attractive, by the simplicity and conviction of his writing, and by connecting the idea that beauty does not exist with respect for the integrity of nature. But in Hume’s view, we cannot be convinced that beauty is an illusion, at least not by philosophy, because the love of beauty is too deeply rooted in our nature: ‘The reflections of philosophy are too subtle and distant to take place in common life, or eradicate any affection. The air is too fine to breathe in, where it is above the winds and clouds of the atmosphere.’

Hence Hume is bound to argue that his claim does not imply that beauty is unreal. And so he does, by means of an analogy. It has, he says, been proved in modern times (by which he means the seventeenth century) that ‘tastes
and colours ... lie not in the bodies [i.e. the things we taste and see], but merely in the senses.’ But it does not follow that the sweet taste and the white colour of a lump of sugar are illusions. If the sugar tasted bitter on my tongue because I was feverish, or if it looked yellowish because the light was dim, these would be illusions. But ‘the appearance of objects in day-light, to the eye of a man in health, is denominated their true and real colour, even while colour is allowed to be merely a phantasm of the senses.’

Beauty, Hume insists, is similar to colour. Like colour, it is merely ‘a phantasm of the senses’, and exists merely in the mind, when the objects we perceive produce a pleasant feeling. But it does not follow that nothing is really beautiful. It only follows that the decisive test of beauty, as of colour, is psychological. The question is simply whether the object does or does not ‘excite agreeable sentiments’; and this cannot be settled by examining the object itself, or by taking measurements and making calculations.

**Can we mistaken about beauty?**

Another question Hume examines carefully is this. If beauty exists merely in the mind, can a reaction of pleasure, indifference or distaste, or a judgement of artistic value, ever be right or wrong? Or is every sensibility unique, and every person’s judgement unimpeachable?

The view that it is has also been accepted by some philosophers; and like Pythagoreanism, it originated in antiquity. The earliest record of it, or of something rather like it, appears in a poem by the Greek lyric poet Sappho, which was probably composed early in the sixth century BC, and begins as follows:

Some say a cavalry corps,
some infantry, some, again,
will maintain that the swift oars
of our fleet are the finest
sight on dark earth; but I say
that whatever one loves, is.

These lines suggest that an intimate friend can be more beautiful than the most splendid public spectacle or the greatest display of power. But they also express the idea that the root of beauty lies in an individual person’s sensibility, and hence that beauty is relative to every individual.

This is an attractive thought, and harder for many people to resist than Pessoa’s austere doctrine. But Hume resists it. He holds that beauty is merely in the mind. But he argues that it is independent of any individual person’s sentiment, and that a judgement of artistic value is just as capable of being mistaken as a scientific opinion. Once again, his argument turns on the analogy with tastes and colours.

I mentioned earlier that when we are feverish things can taste strange. As Hume would say, they do not produce the same impressions in our minds as when we are well. And when we catch cold, we can find it difficult to taste at all. So we would not rely on someone feverish, or on someone with a cold, to find out what things taste like. But if we are fit and healthy, we agree that sugar is sweet, that coffee is bitter, and so on.

Similarly, (Hume argues) some particular forms or qualities are so attuned to human nature, that they will trigger the pleasant feelings we associate with beauty, as long as there is no ‘defect or imperfection’ in the ‘organs of internal sensation’. But, he argues, this is a rarer and more complex state than the physical fitness which we need to taste things normally.

Hume argues that we need four attributes to ensure that ‘the proper sentiment’ occurs: sensitivity, experience, freedom from prejudice and good sense. If I possess these attributes, Cezanne and Degas will delight me; Tolstoy will please me more than Salman Rushdie; and I shall be easily distinguished in society, by ‘the superiority of [my] faculties
above the rest of mankind.’ But if my taste is impaired – by prejudice or insensitivity, for example – then my sentiments will be wayward and my judgement false.

**How to feel better**

How plausible is Hume’s position? I think it has both strengths and weaknesses, which we must tease apart.

Hume’s principal claim is that the *right* sentiment and the *true* judgement is whichever one occurs when our ‘organs of internal sensation’ are operating normally: when, as he puts it, ‘the general principles’ are allowed ‘full play’. But is this claim convincing? Kant – who was Hume’s most penetrating critic – would not accept it, for the following reason. If something is really beautiful it deserves to be admired, and we are right to admire it. But nothing can be right merely because it is normal. ‘No amount of prying into the empirical laws of the changes that go on within the mind can ... give us a command as to how we *ought* to judge’, Kant wrote: it can ‘only yield a knowledge of how we *do* judge.’

I think this is a convincing refutation of Hume’s principal claim. But I also think Hume offers a simple and compelling reason not to accept that if toads find yellow bellies beautiful, and devil love horns and claws, each of us should simply acquiesce in his or her own sentiments. Freedom from prejudice, good sense, experience and sensitivity are, as Hume says, the principal attributes which are conducive to good judgement: not only in art, but equally in politics and in our personal lives – in fact in every aspect of our lives in which we need to make hard choices or weigh values. Hence, if we gain in experience, good sense and sensitivity, and shake off our prejudices, we shall do better than the man who ‘knows what he likes’ by the light of nature, because we shall have better reasons for our feelings and our judgements.

Hume’s theory of taste combines this simple insight with the implausible idea that taste is a natural faculty for pleasant feelings, which will function normally – just as the heart beats in a natural rhythm – as long as it is not in ‘a defective
state’. But these two doctrines pull in opposite directions: one supports the idea that taste is educable, while the other opposes it. (By ‘educable’ I mean capable of being improved in ways which depend on reason and understanding.) Hume knew (of course) that our natural capacity for pleasure is aroused by glittering colours, lullabies and the taste of milk. But he thought of the enjoyment of the arts in two contradictory ways: both as the result of reflection, reasoning and experience; and as the normal operation of our ‘internal organs’ – as if learning to enjoy poetry and music were like syringing out our ears.

What do we know about beauty?
What conclusions can we reach? Here are the three basic facts we know about beauty: first, beauty, like colour, is something we encounter face to face, not something whose presence we detect by taking measurements and making calculations. Second, perceiving beauty is intrinsically enjoyable. Third, beauty, like kindness or goodness in a person, inspires love, or at least admiration.

These facts are sufficient to disprove the Pythagorean view. But we have to take care. If the first fact is coupled with the view that only what can be quantified is real (or natural, or in bodies themselves) then we shall find ourselves forced to accept that beauty is not real (or natural, or in bodies themselves). And the second and third can also mislead us. The lines I quoted from Pessoa’s poem seize on the second fact, and distort it. For it does not follow from the fact that beauty is intrinsically enjoyable, that ‘beauty’ is just a name we trade for pleasure. And the lines from Sappho’s poem seize on the third fact, but exaggerate it. Beauty inspires love or admiration, but nothing is beautiful simply because I love it.

Finally, we also know that some things are beautiful. Nothing can disprove this, unless the three basic facts we know about beauty are inconsistent, which they do not appear to be. For just as we can never prove by means of an argument
that a particular object is beautiful, we can never prove that it is not. Hence, the only way of proving that it is false that some things are beautiful would be by proving that nothing is beautiful, because these basic facts are inconsistent, and hence the very idea of beauty is contradictory.

How many things are beautiful? Probably many more things than we imagine. John Constable was moved by the sight of ‘willows, old rotten planks, slimy posts and brickwork’. And Francis Bacon – the painter, not the seventeenth century philosopher quoted above – was inspired by a book he bought in a second-hand bookshop in Paris: a book, he explained, ‘with beautiful hand-coloured plates of diseases of the mouth.’

Further Reading


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