

[This piece was written for a book called “The Consequences of Poetry”, in which fifteen authors, one after another, would be sent a few lines of verse and asked to write an essay that sprang from them, which would itself end with some different lines of verse, which would then be detached and sent to the next author on the list, and so on. Although commissioned in 2007, it now seems unlikely that this book will ever see the light of day.]

Illustrations to accompany the essay are at

www.humphrey.org.uk/papers/2010Beautyfigures.pdf

Starres are poore books, & oftentimes do misse:

This book of starres lights to eternal blisse.

George Herbert.¹

BEAUTY’S CHILD: SEXUAL SELECTION, NATURE WORSHIP AND THE LOVE OF GOD

Nicholas Humphrey

When I stand in front of a famous work of art – lets say Michelangelo’s panting of the Creation on the ceiling of the Sistine Chapel in Rome – I sometimes have a wonderful feeling of connection. I don’t mean so much connection to the artist (though there’s that too), but connection to the other people who were here before me. *Here* is where they all have stood, and *this* is what they all have looked at. Einstein, Queen Victoria, John Lennon, Nelson Mandela, Picasso, my great grandpa . . . maybe you too. We have all been enticed to this spot by this one work of art.

When you and I are present together in a room, we can lock into each other’s mental state by *jointly attending* to the same object. Now, here I am in the Sistine Chapel

doing it with all those people whom I've never met. *Been here, seen this*. The work of art is a connecting node. On some level, it is solving what games theorists call the "coordination problem." – how to get people who may be complete strangers into sync.

But what, now, if I should want more? What if I should want to connect to *everyone who has ever lived*? Shakespeare never stood here in the Sistine Chapel, Alexander didn't, Socrates, Jesus, Genghis Khan didn't. Lucy, our australopithecine ancestor, didn't. In truth perhaps just one hundred million people have seen this painting since it was created. Yet now lets imagine there were to be a gallery visible everywhere on Earth, whose works have been in place for millions of years.

We don't have to imagine it. We can visit just such a gallery every night.

"Look at the stars! Look, look up at the skies!" Gerard Manley Hopkins calls us out to celebrate God's heaven. But he has no need to. Every mortal one of us has stared wonderingly at those patterns pricked into the blackness of space. Perhaps not everyone has perceived the exact same constellations you and I do. But some of the groupings of stars – and the stories told around them – are certainly very old. The seven stars we Europeans see as making up The Plough (or the Big Dipper) in the constellation of the Great Bear are associated with the "bear" in the mythology of native peoples right across Europe and the Middle East, through Siberia and down through North America. There's every reason to think that palaeolithic hunters and gatherers must have taken the legend with them when they crossed the Bering Straits to the New World some 16,000 years ago. Caves in the Dordogne in France show evidence of bear-cults going back as much as 30,000 years. If that is where the legend of those stars originated, it means we today are seeing a pattern that has been recognised as a picture in the sky by a thousand generations of human beings.²

I love that idea. Yet many questions follow. Did our ancestors consider the stars a work of art? Whose work? Did they find them beautiful? What would beauty have meant to them? Ralph Waldo Emerson wrote: "If the stars should appear one night in a thousand years, how would men believe and adore; and preserve for many generations the remembrance of the city of God which had been shown! But every night come out these envoys of beauty, and light the universe with their admonishing smile."³ "Stars are poor books," George Herbert

says, compared to God's Bible. But are stars, to the contrary, the book in which our ancestors first saw the hand of God?

With these question I want to engage you in a discussion of the *deep history of beauty*. By deep I mean *as seen from an evolutionary perspective*. I am an “evolutionary psychologist”. I believe that to understand and fully appreciate human mental traits, we need to know *why* they are there – which is to say what biological function they are serving. Evolutionary psychology has been making pretty good progress. But, as we say, “there are still some elephants in the living room” – big issues that no one wants to talk about. And human beings worship of *the beautiful* remains one of the biggest.

Evolutionary theory has no problem with explaining many – even most – of the things that give people pleasure: honey, orgasm, babies' smiles, sunshine, lullabies, fresh water, flower gardens. But, the closer we get to high art and beauty proper, the less easy it becomes to see how people's attraction to it can be contributing to biological survival. If beauty were of relatively minor significance in human lives, we evolutionary theorists could push it to one side. But in reality it's the opposite. While people *like* the lesser pleasures, they do not love them passionately or attempt to justify their lives by them. With beauty, they do.

John Hadfield, the critic, can say, for example, “What is it that makes life so abundantly, so triumphantly, worth living? If I had to answer the question in one word the word would be Beauty.”⁴ Or G .E. Moore, the philosopher: “Personal affection and the appreciation of what is beautiful in Art or Nature are good in themselves. It is only for the sake of these things -- in order that as much as possible of them may at some time exist – that any one can be justified in performing any public or private duty. Personal affections and aesthetic enjoyments include *all* the greatest, and *by far* the greatest, goods we can imagine.”⁵

We may not agree entirely. But we can surely see where these enthusiasts are coming from. The proposition that it is Beauty that gives life a purpose, makes human sense – as it would not if we were to replace Beauty with Food, say. “What is it that makes life so abundantly, so triumphantly, worth living? If I had to answer the question in one word the word would be Food”? No.

Yet, is this fair? Is Beauty – with its capital B – truly such a unique and special category? Isn't Beauty just the limiting case of the ordinary pleasures – produced, perhaps, by the coming together of several species of pleasure at one time? Steven Pinker, in his book *How The Mind Works*, has suggested something like this. In the case of music, for example, “I suspect that music is auditory cheesecake, an exquisite confection crafted to tickle the sensitive spots of at least six of our mental faculties.”⁶

I'm sure we can agree that music does excite our interest in just the ways that Pinker lists. And no doubt a similar story about “visual cheesecake” could be told about painting as well. But it surely cannot be nearly the whole story. For this low-level explanation of why we find music so appealing makes no bridge at all to beauty. True, some music hardly counts as beautiful, and is indeed merely pretty or pleasant (and some of this may well come under Pinker's recipe.) True, too, we are not always in the mood to respond to the beauty of music, even when it is potentially there. But when the music *is* beautiful and we *are* in the mood, we know the difference between music and muzak. We feel a different kind and degree of emotional response. Hadfield produced three celebrated anthologies: one he called “A Book of Beauty”, another “A Book of Pleasures,” and the third “A Book of Delights”. Look at them, and you'll see why the three books aren't the same.

Let me list several of the reasons – reasons that would surely occur to you – why the response to beauty is quite special – and distinct from the response to cheesecake:

We think of beauty, as Moore said, as good in itself. We don't think of cheesecake as good in itself. We are prepared to say, with Keats, that “Beauty is truth, truth beauty”. We feel virtuous (and not merely greedy) in pursuing our love of beauty, and expect others to appreciate us for it – as if, rather than indulging a private appetite, we were honouring something wonderful outside ourselves.

We love beauty through the medium of our senses, but at the same time what we love is obviously not merely the sensory stimulus as such. With cheesecake, we have only to have the stimulus on our tongue and the right affective buttons will be pressed. But with beauty it's not so straightforward. For a start we often need to be told that this *is* beauty, before we will respond to it at all. Henry Thoreau said “We do not enjoy poetry unless we know it to be

poetry.”⁷ And the same is true of many other kinds of art. We find beauty in a framed picture in a gallery where we might miss it entirely if we were to come across the same pattern of colours unframed outside. As Robert Browning wrote: “We’re made so that we love / First when we see them painted, things we have passed / Perhaps a hundred times nor cared to see.”⁸

It’s true that the same is sometimes true of other pleasures, including food and drink: probably true that we do not enjoy the taste of an oyster unless we know it to be an oyster, and certainly true that we do not enjoy a great wine – at least not as much – unless we know it to be a great wine. But I’d say what this shows is that some foods can indeed be considered works of art. Cheesecake is not one of them.

Even so, with beauty in art it isn’t enough that an object with the right sensory qualities should exist and have come to our attention *as* art. We still need to know who made it and how. We care deeply about creative input, genuineness and authenticity. While we find a copy of a slice of cheesecake just as tasty as any other version, we find a reproduction of a Rembrandt less valuable – and surely less beautiful – than the original. While we enjoy the cheesecake for its gustatory qualities without thinking to ask who or what made it – it could have been a cheesecake robot – we value the work of art only when we see the human hand behind it. We marvel at the cave paintings at Lascaux, for example, only because we believe they were made by *artists*. If it were to turn out these images had been created by accidental water stains, they’d become merely quaint.

Alongside this concern with authenticity comes our concern about being taken in by fraud. We want to be sure that the author of a work of art is indeed worthy of our respect. Looking at a Kandinsky painting or hearing Schoenberg’s music for the first time, we worry perhaps that a child could have done it – or even an animal or even a machine. No one has any such worries about cheesecake. Douglas Hofstadter says it would be “a tragedy” if it should turn out that a computer program could emulate the artistic genius of Mozart: “If that’s the case then I’ve been fooled by music all my life. I’ve been sucked in by a vast illusion. And that would be for me an absolute tragedy, because my entire life I’ve been moved by music.”⁹

We are indeed *moved* by beauty. Beauty stirs us up, and takes us over – giving rise on occasion to the peculiar feeling of “flow,” “melding,” or “union”. Rebecca West can write, for instance, of: “this crystalline concentration of glory, this deep and serene and intense emotion that I feel before the greatest works of art.” “What in the world,” West asks, “is this emotion? What is the bearing of supremely great works of art on my life which makes me feel so glad?”¹⁰

Well, what does it look like to an evolutionary psychologist? To answer her, I would say what we are seeing, in these and other peculiarities of our response to beauty are the tell-tale signs of a *social* emotion. Beauty arouses passion, *moral* passion. And the moral passions – jealousy, rage, infatuation, grief, devotion, admiration, humility – are in origin always concerned with *other people*. So too, I have no doubt, with beauty.

We may seem to love beautiful things as if it were indeed the thing of beauty in itself that counts for us. But our feeling about the thing is always a proxy for our feeling about some idealised person in the background – so that the feelings aroused by beauty typically mirror the feelings we might otherwise have for a child, a mother, a friend, a sexual partner. G.E. Moore lumped together “aesthetic enjoyments” with “personal affection” as the greatest goods we can imagine – and this apparently arbitrary combination now makes sense, when we realise that the two classes of enjoyment do belong in the same category.

I said “a child, a mother, a friend, a sexual partner”. But I believe it is primarily sexuality that holds the key. The evidence stares us in the face. The imagery of aesthetic ecstasy is, time and again, transparently *erotic*. We saw it already in Rebecca West’s talk of “this crystalline concentration of glory”. Or here in a commentary by Jacques Barzun: “The experience of great art disturbs one like a deep anxiety for another, like a near-escape from death . . . The reported physical signs of such a magnificent ordeal include sweating, trembling, shivering, a feeling of being penetrated and pervaded and mastered by some irresistible force.”¹¹ Or, now from the point of view of the artist himself, in this passage from William Rothenstein’s autobiography: “One’s very being seems to be absorbed into the fields, trees and the walls one is striving to paint. . . At rare moments while painting I have felt myself caught, as it were, in a sort of cosmic rhythm.”¹²

George Santayana wrote: “The whole sentimental side of our aesthetic sensibility – without which it would be perceptive and mathematical rather than aesthetic – is due to our sexual organization remotely stirred.”¹³ I’m sure he was right. But he had no good idea about why he was right (and nor did Sigmund Freud).

Charles Darwin, however, had a pretty good idea. What he proposed in his great book, *The Descent of Man: and Selection in Relation to Sex*, was that human aesthetic preferences have in fact evolved in the context of *courtship* and *mate choice*. The argument – which has been developed brilliantly by Geoffrey Miller¹⁴ – can be summarised in a few lines. It’s this. When we are excited by beauty – whether in painting, music, sculpture, words or ideas — what is happening at a deeper level is that we are responding to features in the beautiful object that reveal the hand of a *human artist*. In the real world any such artist is likely to be an individual with especially well developed manual, sensory, intellectual, and maybe even moral skills. And a person with such skills is likely to be a person with highly desirable traits as a *progenitor* or *parent* or *companion*. Hence when we are turned-on by beauty in the things around us, we are being turned-on by cues from the environment that we are in the presence of a *potentially good mate*.

This one idea – aesthetic preferences arising through *sexual selection* – provides a ready solution to so much that is otherwise puzzling about people’s response to art: the nature of the emotion, the idolisation of artistry, the age and sex demographics of who makes art and who responds, the anxiety on the part of both artists and consumers about authenticity, and so on. But the strength of the hypothesis is that it provides an explanation for the specific content as well as the larger social context of artistic creation.

If it’s true that works of art are being (or at any rate in the evolutionary past were being) created primarily as a way for the artist to demonstrate his or her desirability as a sexual partner, we should expect to find a clear relation between what people appreciate as artistry and the mental and intellectual traits they do in fact value in a partner. And we don’t have to look far to find this prediction born out in detail. For it’s obvious as soon as we look for it, how works of art are indeed veritable showcases for just those traits that most count for people in choosing who to mate with – dexterity, sensitivity, memory, creativity, loyalty, mentorship, humour, good judgement, rich resources.

When asked by Pope Boniface VIII to prove his skill as an artist, Giotto drew a perfect circle freehand. Raphael in his painting of the *School of Athens* showed Archimedes drawing a circle under the admiring gaze of his young disciples. Their rapturous expressions resemble those of boppers at a rock concert. The musician Brian Eno has asked: “Art seems to be something that we are biologically inclined to do. If we are, then what is the nature of that drive? What is it doing for us?”¹⁵ Here’s the answer: artistry is sexy, it’s a way of showing what you are worth.

Still, even if we have the answer to “Why people make and appreciate *art*?”, I’d agree we do not yet have the whole answer to “Why people love Beauty?” For as it stands this theory is a theory only of the human response to *man-made* beauty and it says nothing about the response to beauty in the natural world – in mountains, lakes, forests, plants, animals. Yet, the aesthetic emotions aroused respectively by beauty in art and in nature – though not the same – are certainly very much alike. So, clearly a theory of the former ought – if it is any good – to say something about the latter. I’d go further and say that a really good theory ought to be able to explain beauty *wherever* we find it.

Compare, for example, the celebrations of man-made beauty quoted above with Richard Jeffries’ paean to the beauty of the earth: “The hours when the mind is absorbed by the exceeding beauty of the earth are the only hours when we really live, so that the longer we can stay among these things so much the more is snatched from inevitable Time.”¹⁶ Compare West’s ecstatic response to human artistry with the reveries of William Wordsworth inspired by a Welsh valley: “For nature then ... / To me was all in all. I cannot paint / What then I was. The sounding cataract / Haunted me like a passion: the tall rock, / The mountain, and the deep and gloomy wood, / Their colours and their forms, were then to me / An appetite; a feeling and a love, / That had no need of a remoter charm, By thought supplied.”¹⁷

For that matter, compare the ardent sexuality of Barzun’s swooning response to man-made art with Albert Camus’s description of his mystic union with the landscape at Tipasa in Algeria: “How many hours I have spent crushing absinthe leaves, caressing ruins, trying to match my breathing with the world’s tumultuous sighs! Deep among wild scents and concerts of somnolent insects, I open my eyes and heart to the unbearable grandeur of this heat-soaked sky. . . I must be naked and dive into the sea, still scented with the perfumes of the earth,

wash them off and consummate with my flesh the embrace for which sun and sea, lips to lips, have so long been sighing.”¹⁸ It is almost as if Camus is making love to the Earth .

But let’s start with something easier. It’s not hard to see why people who have evolved to look for beauty in a sexual partner should be turned on by *some kinds* of beauty in the natural world. The reason is that many other creatures besides humans have evolved under sexual selection and have faced similar challenges to show off their fitness – with brilliant displays of their resources, health, strength, skill, and so on, displays that like our own are difficult to fake. It means that the courtship displays of animals will boast many of the same features that we look for in displays by human artists. It’s not surprising then if some of the tricks the birds and bees use to impress their mates impress us too. The particular devices with which a peacock tries to inspire love in a peahen – the symmetrical patterning, colorfulness and glossiness of his tail, for instance – will very likely inspire similar feelings of admiration in a human observer. If his tail were in fact man-made, it would certainly say something good about its human maker. The same goes for the wings of a butterfly, the majestic antlers of a stag, the dance of the grebe, the flashy colours of the coral fish, the song of the nightingale. We humans find these animal displays attractive because they speak to us in the *universal language* of the biological courtier and troubadour.

However this can hardly be the whole story about what we find beautiful in nature. For it’s patently not true that everything we find beautiful has been made for display. To the contrary, much of it must surely be counted in some sense accidental. The patterns and colours of a seashell, for example, or a willow tree, or a sunset were not made for us or for anybody else to look at. Yet they still work a remarkable spell on us. Why should we humans be so lucky as to be surrounded by such beauty? Such beauty and so much of it? So much order, intelligence and harmony in a world that for the most part was not made to be admired?

The answer lies in the remarkable convergence between the features of works of art that we humans value because they provide evidence of human skill, and the features of natural things that have evolved and persisted because these features have typically given them staying power and survivability. That’s to say, the convergence between our sense of

aesthetically “good form” and nature’s selection of evolutionarily “stable form”.

In the case of animals and plants, part of the reason for this is, of course, the working of ordinary natural selection. To have a body that grows in an ordered and harmonious way just *is* the best way of building a living machine. So – even without the added stimulus of sexual selection – good form will have proved to be biologically adaptive. Symmetry, segmentation, rhyme, balance, grace. These – beautiful to us features – will be the preferred choice of the blind watchmaker.

But there is another quite separate reason for the convergence. This is the existence of universal deep laws of morphogenesis, common to the development of all complex systems, that result in the emergence of so-called “attractor states” – states that draw order from chaos. And these laws work across the *whole* of nature – wherever complex systems are in flux. So that we do in fact find order and harmony emerging not only in organic nature but all around us in inorganic nature too – in the shapes of mountain ranges, clouds, snow-crystals, galaxies.

Similar processes can even result in the emergence of good form in populations of abstract entities. So that, against the odds, we can even find beauty in things (non-things, really) such as the natural numbers. As, for example, in the behavior of a “cyclic” number, such as 142857 – a number which, when added to itself repeatedly, twirls like a honeysuckle up the pole till it spills over: 142857 .. 285714 .. 428571 .. 571428 .. 714285 .. 857142 .. 999999.

Suppose we human beings have evolved to find all evidence of fine artistry beautiful, *provided we can imagine the hand of an artist behind it*. Then it’s only to be expected that we will be taken in by these naturally occurring examples and find them beautiful too. “Does anyone feel the same kind of emotion,” Clive Bell once asked, “for a butterfly or a flower that he feels for a cathedral or a picture?”¹⁹ The answer (though it wasn’t Bell’s) is: Yes, we do feel similar emotion if and when we see the butterfly or the flower *as* a cathedral or *as* a picture – when in short we see the natural forms *as* works of art.

Now, I admit there may seem to be a major difficulty here for this account. The illusion of natural beauty works, I’m suggesting, provided we can imagine the hand of an

artist behind it. But this proviso raises problems. As I said, we are highly sensitive to questions of authenticity in art. In general if a work of art turns out not to be the work of the artist we imagined – but the work of an impostor, or a mindless computer program, or even nothing at all – we change to regarding it as relatively worthless. Hence, there's a real question about why we should in fact continue to value nature's works when in reality we know there is no artist who made them.

The answer I think is that we don't *know* it, or at any rate we are very willing to deceive ourselves. And this deception has several factors helping to sustain it.

To begin with, it happens – at least in modern culture – that many of our encounters with nature come first through art. We see pictures of flowers, animals, landscapes, before we ever encounter the real thing. And even when we do see the real thing first, we often do not notice it until a human artist has captured and framed it for us. Thus, by the time we get to see the natural scene, we are already seeing it through the eyes of the earlier human artist as-if it were a work of art. To continue that poem from Browning: “Art was given for that; / God uses us to help each other so, / Lending our minds out.”

But Browning hints here at a factor that's surely far more important still. This is the ubiquitous and incorrigible human tendency to believe that phenomena of nature are not merely as-if works of art but genuine ones – the work indeed of a supremely intelligent and skilled Creator. Or the belief that, as the children's hymn has it: “All things bright and beautiful, / All creatures great and small, / All things wise and wonderful, / The Lord God made them all.”

“Because God made you,” says another hymn, “that's why I love you.” It is indeed precisely this admiration for the Big Artist in the Sky that justifies and explains the romance we have with nature – right the way through from the romantic poets to the New Age nature-worshippers, to the scientists who have a love affair with natural law. So we find Newton, for example, arguing that only a supremely gifted and loveable artist could have made the laws of physics as they are. Or, to take a lesser case, we read today the geneticist Francis Collins quoted in the journal *Science*: “When something new is revealed about the human genome, I experience a feeling of awe at the realization that humanity now knows something only God

knew before. It is a deeply moving sensation.”²⁰

We love nature because God made it. But I suspect it would come still closer to the psychological and biological reality to say: “Because God made you, that’s why *I love God*.” For, given my argument above, it would seem bound to happen that our experience of natural beauty will lead to an erotic infatuation with whoever we suppose created it. Religious ecstasy, aesthetic ecstasy and sexual ecstasy will have become part of the same package.

“Look at the stars! .. Christ and his mother and all his hallows.” Open the gate. Kiss the Book of Nature. Live by the Book of Books. The Bible’s Song of Solomon, supposedly written to celebrate Solomon’s marriage to Pharaoh’s daughter, has been equally for Jews a celebration of the love match between Jehovah and Israel, and for Christians a celebration of that between Christ and his church. In the King James version the fourth chapter of the Song is headed thus: “Christ setteth forth the graces of the church. He showeth his love for her. The church prayeth to be made fit for his presence”. Some love, some church.

Thy lips, O my spouse, drop as the honeycomb: honey and milk are under thy tongue; and the smell of thy garments is like the smell of Lebanon.

A garden inclosed is my sister, my spouse; a spring shut up, a fountain sealed.

Thy plants are an orchard of pomegranates, with pleasant fruits; camphire, with spikenard,

Spikenard and saffron; calamus and cinnamon, with all trees of frankincense; myrrh and aloes, with all the chief spices:

A fountain of gardens, a well of living waters, and streams from Lebanon.

Awake, O north wind; and come, thou south; blow upon my garden, that the spices thereof may flow out. Let my beloved come into his garden, and eat his pleasant fruits.

NOTES

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14. Geoffrey Miller, 2000, *The Mating Mind*, New York: Doubleday; see also Denis Dutton, 2009, *The Art Instinct*, Oxford: Oxford University Press.
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17. William Wordsworth, 1798, “Lines composed a few miles above Tintern Abbey.” 1.72.
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