

Aesthetic Reflection and the Very Possibility of Art

In Ian North (Ed) Visual Animals: Crossovers, Evolution and New Aesthetics. Adelaide:
Contemporary Art Centre of South Australia: 73-83.

Jennifer A. McMahon © 2007

I

If we conceive of ourselves as animals, it might be accurate to call us visual animals. The visual cortex is much larger in us relative to the size of our brains than in other animals, and large relative to the parts of the cortex responsible for the transmission of signals emanating from the other perceptual transducers. Our ability to recall visual images, recombine them in imagination and enter imaginatively into narratives is linked to this evolved piece of brain architecture. However, what this means within the context of human culture is not so clear. A large visual cortex might not necessarily translate into a heightened susceptibility for fine visual distinctions over auditory or kinetic distinctions, at least not in all cultural contexts.

There are two considerations that should make us pause when we feel tempted to derive an explanation for our capacity for art from our enhanced capacity for visual processing. The first consideration is that in some people the auditory and kinetic imagination seems to outperform the visual imagination. The heightened abilities in the visual imagination of artists are matched by the equivalent in the auditory and kinetic imagination of the composer and choreographer respectively. Art broadly construed is not the sole province of the visual artist.

Secondly, when we do limit our focus to the consequences of our enhanced visual capacities, they can be understood to make a number of humanly specialised

activities possible. That is, our enhanced visual capacities are not monopolised by the artist, visual or otherwise. Take sport for example. The majority of those involved in sport are spectators. The appreciation of sport from the perspective of the spectator arguably requires visual imagination, visual memory and enhanced visual perspicacity. Only an experienced spectator of a particular kind of sport can appreciate the difference between a reckless move and a creative manoeuvre, a workmanlike response and inspired risk-taking where that sport is concerned.

Sport, like art, has standards as well as rules. We can all learn the rules from a book, that is, as a series of propositions, but it is only the experienced and attentive spectator who can appreciate how standards can still operate once the rule books are surpassed. Arguably the acquisition of this know-how depends upon enhanced visual capacities but it draws upon other capacities also such as the kinaesthetic. My point is that art, like sport, exercises enhanced visual capacities but it is not defined or characterised by virtue of them. What art and other activities such as sport employ beyond visual capacities differs and in this difference can be found their uniqueness. Hence we cannot understand art solely in terms of our enhanced visual capacity.

I am going to shift the focus from the visual and instead concern myself with the non-linguistic. This serves two purposes. First it allows me to focus on an aspect of art that is relevant to all art forms. Second, it ensures that the aspect of art I focus upon is not the literal aspect whose content can be conveyed in propositional form. I believe that this will address the spirit of this symposium which I take to be that art in its various forms engages a part of the human brain that is neglected by the literal and logical artefacts of culture. After all, when our attention to art is limited to the literal or logical, we ignore the art in art.

I will argue that the aspect of art which eludes literal translation is the aspect that distinguishes it from nonart. This is the aspect which can be linked to an adaptive orientation of mind. The relevant aspect is art's expressiveness of ideas like freedom, infinity and even immortality. The relevant ideas are ones that we are capable of thinking and imagining in spite of the absence of instances of them in nature or experience. The artist by definition is someone who finds form for such ideas. These ideas are manifested indirectly through aesthetic form. Regardless of how illusory these ideas may be, our capacity for conceiving of them is linked to the survival instinct and hence we find them very compelling. The foundation of our capacity for art is hence objective and rational, without being tied to literal or logical forms. And consequently I will argue that it is our reflective rather than visual self that makes art possible.

II

My aim will be to explain certain features of art in terms compatible with an evolutionary justification for our capacity for art. To this end, I will derive an explanation from Immanuel Kant's *Critique of Judgment*.¹ However, before embarking on this, I will briefly critique a sample of competing evolutionary conceptions of art by judging how comprehensively they address a range of features that characterise art, when it is construed from an evolutionary perspective. I judge evolutionary conceptions of art deficient to the degree that they fail to address, accommodate or provide some insight into these features. I do not argue for these features here. I simply list them as my working definition of art.

1. Art promotes a community of minds.
2. Art approximates our responses to those of our friends and family.
3. Art personalizes our world, in countering alienation and separateness. That is,

through human artefacts that are made for our reflection we make our world continuous with ourselves, as opposed to one toward which we might feel alienated and separate. We make of our world a reflection of the architecture of our minds so to speak.

4. Art communicates through aesthetic form. Art is adaptive by virtue of its aesthetic form; that is, aesthetic form as opposed to logical form. An artwork may have a logical form but it is not adaptive by virtue of it. This distinction between aesthetic form and logical form is exemplified in the difference between the form of a novel and the form of a journal article or scientific lecture; the difference between visual art and visual journalism; the difference between cinema and documentary.

5. Art expresses a peculiar cognitive content. There are examples of art, whether it be in the form of visual art, music, architecture, cinema, dance or whatever medium you please, that evoke such a response in us that we return to ever new examples or instances of it in order to attempt to relive the experience. It is very hard to capture this experience in terms of a description. The experience has a peculiar tenor where a certain kind of mental content is evoked. As a description is not in the offing, a way to convey the relevant tenor of this experience is to attempt to explain it. In our efforts to explain this phenomenon, we reveal its character more aptly than any description could hope to achieve. And the explanation I offer centres around the notion of undemonstrable ideas; a peculiar cognitive content in light of the fact that, as we will see, its expression is not achieved through correspondence or any kind of literal reference.

While I judge evolutionary theories against the five criteria, a theory ultimately succeeds or fails in my view on whether it can aptly reflect the phenomenology of our most moving experiences of art.

III

Evolutionary theories of art are theories so defined because they treat art as somehow related to capacities and predispositions evolved to ensure survival of the species. Such theories are individuated by *how* they relate art to these capacities or predispositions. A very general outline of the different ways in which art might be related to these capacities might be as (i) an offshoot or corollary of capacities evolved for other tasks; (ii) a unique capacity which evolved to aid some aspect of survival; or (iii) a dead end capacity which evolved for a purpose which is no longer relevant. I will refer to these ways of relating art to evolved capacities as types of evolutionary perspectives on art.

Thinking of art according to the Type 3 evolutionary perspective is incompatible with holding an evolutionary *theory* of art. If art were conceived in this way it would not be the kind of human practice that warranted an evolutionary theory. Its continued practice might be due to a particular cultural context, no more requiring an evolutionary justification than washing the car. In any case, I reject the Type 3 perspective on art because the prevalence of artefacts that communicate by virtue of aesthetic rather than logical form throughout all cultures of all historical periods suggests that our capacity for aesthetic experience does warrant an evolutionary theory.

In contrast, the first two types of evolutionary perspective on art offer more promise. An example of the first type of perspective according to which art is an offshoot of an unrelated adaptation would be that art uses up energies left over when our survival needs are met.² That is, the creative, imaginative and logical resources that have evolved for survival are not fully occupied in an organized culture where people cooperate in such a way that survival needs are met before our mental

resources are exhausted. Hence art would be what we call objects and activities that exercise a particular subset of these capacities for their own sake (sport would be another such activity). This approach can be fine tuned to address the idea that art provides us with an opportunity to exercise our understanding of other people's minds and to approximate our values to those of our peers. As such it accommodates the first two of our criteria. However, it does not prove successful on any of the other of our criteria. To address these further criteria moves us away from the central principle of this Type 1 perspective. This is because criteria 3-5 address purposes and features of art that are peculiar to art. In contrast, the implication of the central principle of Type 1 evolutionary perspectives on art is that while art might serve a variety of purposes, these purposes could and possibly are met by cultural artefacts other than art. For example, according to one theory that falls into this type, art uses up energy left over when survival needs are met, and hence having the time and money to engage in art advertises to prospective mates one's success (and hence desirability as a breeding partner).³ As such art does not exhibit any features peculiar to it. The Type 1 perspective could only address criteria 3-5 by adopting some *ad hoc* manoeuvres rather than applying its central principle and as such would not result in a coherent theory.

Turning now to the second type of perspective, this is the notion that artistic endeavours exercise an adaptive trait peculiar to art creation and reception. An example of an evolutionary art theory that embodies this perspective would be one according to which art has evolved as a means to cement a sense of community within a group.⁴ Art does this by being the occasion for the kind of feeling responses that engender a sense of oneness with those recognized as within one's group. Such a feeling response promotes actions whose purpose is to put the group's well being

before one's own interests. The relevant feeling is promoted and exercised through engaging with formal attributes of objects and activities which we appreciate for their own sake. This kind of appreciation shifts us into a different gear to that which characterises our normal state. Our normal state, directed by individual appetites and desires, is unlike aesthetic appreciation, in that it is driven either directly or indirectly by personal interests. The mental state characteristic of aesthetic appreciation, in contrast, is associated with pleasure or satisfaction in certain patterns or unities for their own sake, or so it seems.

The apprehension of order within perceptual elements when that order is unmediated by discursive principles and apprehended *as if it were* immediate, pleases us. It does not please through personal gratification or personal benefit. The object of the pleasure seems removed from the personal. Objects and activities that promote this pleasure incorporate into our self identity a sense of belonging to the group with whom we share the appreciation of particular instances of aesthetic form. In some cases, particular styles of aesthetic form can be internalised which results in a preference for that style over others. As such, our capacity for apprehending aesthetic form can be exploited unwittingly or otherwise by a cultural group. Preferring a particular style of aesthetic form over others can contribute to cultural group identity.

This example of a Type 2 evolutionary perspective on the nature of art, that is, treating it as evolved to satisfy a survival need related to the individual's identification with a particular group, fares better in addressing the features of art listed above than the kind of theory that treats art as an offshoot or corollary of some adaptive trait. It can accommodate the criteria that art creates a sense of community, and that it provides an occasion for approximating our responses to those of our peers. It can also begin to explain how art personalises our world. We create the world in

the likeness of our mental architecture by making artefacts whose forms reaffirm our perceptual and cognitive orientation. In effect this will mean that they are forms that either epitomise our perceptual and cognitive orientations or exploit them in some way as in tantalising or playfully challenging them. This would suggest a platform from which an explanation might be developed for the difference between aesthetic and logical form.

Typically, theories of art that fall into the second type of evolutionary perspective can address the fourth criterion according to which art provides the basis for structuring and ordering our experience which resists a principled, that is logically principled, treatment.⁵ This is because such theories typically treat the basis of our engagement with art as more fundamental than the structures that are compatible with language. There are no logical or discursive principles to guide it, yet there are standards, the exploitation of which by particular cultures can lead to aesthetic choices which come to represent group identity. The example of a Type 2 perspective presented here, illustrates the evolutionary point of aesthetic form as opposed to logical form.

Regarding the fifth criterion, however, the example presented here of the second type of evolutionary theory does not fare so well. The example presented here of this type of theory is typical of this perspective. It suggests that the most moving experiences of art are empty of cognitive content. For example, it might be similar to the group momentum one can experience at a sporting event; or in cases of a more intimate art experience it might be like the blissful love between mother and child.⁶ These kinds of experiences do bear some relation to aesthetic experiences. For example, the appreciative audience of a violin virtuoso or other highly charged musical performance can respond with a passion and excitement that approaches the

group mentality of an audience at a sporting event. At the more intimate end of the scale, a finely carved bowl can inspire a tenderness approaching love. However, there is a cognitive component of losing oneself in an aesthetic experience of a performance or being moved to love the aesthetic form of an artefact as there is in all moving experiences of art regardless of medium. This cognitive component is left out of the standard evolutionary theories of art that adopt the Type 2 perspective.

The cognitive component, to which I refer, while varied in detail between individuals, nonetheless exhibits the same kind of character in all very moving experiences of art. The starting point for finding a way of characterising the feature common to all very moving experiences of art is to recognise that they typically involve the expression of undemonstrable ideas. This is where the doctrine of *aesthetic ideas* found in Immanuel Kant's *Critique of Judgment* can be drawn upon to supplement the Type 2 evolutionary perspective on art in such a way that results in a comprehensive and plausible evolutionary theory of art.

IV

According to Kant, art manifests ideas which are undemonstrable. Undemonstrable ideas are those for which we may have labels, but which have no referent or counterpart in the physical world or in experience. That is, they are ideas that cannot be *directly* illustrated, demonstrated or exemplified. The kind of ideas that Kant has in mind are *not* just any abstract idea such as those which we project onto experience in order to make sense of it, such as love, hate, evil and so on. Indeed, such abstract ideas *can* be directly demonstrated and illustrated in deeds and expressions. In contrast, the ideas Kant has in mind are those for which there is no evidence in nature or experience. These are ideas such as freedom (conceived broadly), immortality and infinity. Nowhere in nature do we find instances of them. Instead we find their

opposites in physical and mental limitation, mortality and finality. Yet we think them and find them compelling in spite of their absence in our direct experience of the world. Kant calls such ideas, *rational ideas*.

While we cannot directly demonstrate or present these ideas, we can, as it turns out, express them indirectly. They are expressed indirectly, according to Kant, by virtue of aesthetic form. The apprehension of aesthetic form is an experience of *rational ideas* but not as representations or determinate concepts. Instead through aesthetic form we experience these ideas through a personal lens. We imagine them instead of thinking them. We experience them as a mass of fragments connected and unified by the general rule provided by the ideas in question but not unified by virtue of their discursive form. Instead our minds are flooded with a wealth of fragments of memory, half realized thoughts and nuance, intimations which nonetheless exhibit a purposiveness that distinguishes them from daydreaming or personal reverie. They are drawn from our memories of things related to *rational ideas* and this gives their realisation in our minds an intense and deeply moving character. In this form Kant calls them *aesthetic ideas*. When we think them they are *rational ideas*. When we imagine them they are *aesthetic ideas*. We can only do the latter by virtue of apprehending aesthetic form. *Aesthetic ideas* are purposive by virtue of aesthetic form.

Now, Kant is only entitled to introduce this doctrine of *aesthetic ideas* if he can provide a mechanism for *aesthetic ideas* which draws upon the central principles of his philosophical system. At this point we need to ask, how and why would certain forms evoke ideas for which they have no direct affinity? They are not linked through convention like a word and its referent, nor are they linked through a natural

representation like an object and an outline drawn of it in the sand. How then does Kant link our experience of certain forms to *rational ideas*?

Kant makes this link by virtue of an aspect of certain objects which draws us away from attention to what kind of thing the object is, to the way the object comes to be that perceptual object by virtue of a perceptual unity. In attending in this way, our awareness of the concept of the object is momentarily suspended. In its place, we apprehend a new perceptual object for which the mind has no concept. This prompts the mind to find, in place of a determinate concept, ideas which have no perceptual counterpart. That is, the mind engages in a kind of stabilising operation. A concept-with-no-percept is found for a percept-with-no-concept.⁷ The implication is that the link between aesthetic form and *rational ideas* is mechanical by which I mean non-cognitively mediated.

Now you might find such a suggestion unsettling. We recoil from any conception of ourselves that approaches determinism where our thought patterns are concerned. The idea that we might be, as it were, robots responding mechanically to a set stimulus is unappealing to say the least. Yet according to at least one contemporary conception of mind, the main principle of perception and cognition is stabilisation.⁸ The relevant stabilisation occurs across a system of nodes. Think of nodes as units of information. Once an incoming datum stimulates activation across a selection of nodes, the system seeks to establish coherence between this pattern and formerly laid down or memorised patterns. Finding such coherence is a matter of finding equilibrium or stabilising the system.

Think of it this way. Normally the constraints of the system are such that each new information-state consists of a coherent unit consisting of a matching percept and concept. Without these components in place, no stabilization is possible. For

example, when we have flower type data, we automatically match it with a concept of a flower. When we have blue sky type data, we automatically match it with a concept of a blue sky. Of course we do not recognise the data as any particular thing until it is subsumed under a concept. But the matching that goes on is automatic, you might say, robotic.

Where aesthetic experience is concerned, we have a percept that has no matching concept. As such the system is compelled to fill the placeholder normally occupied by a concept with a surrogate otherwise no equilibrium of the system would be possible. Yet, the system is only made up of corresponding percepts and concepts. Matching aesthetic form with a concept that has an alternative perceptual match would make the perceptual system unreliable. Constraints of uniqueness and the law of non-contradiction ensure that this does not happen. However, there are *rational ideas*. As we have seen, *rational ideas* are an exception to the normal concept because they do not have a matching percept. So the system has a way out of the threat of destabilisation caused by the apprehension of aesthetic form. The perceptual system is stabilised in the case of aesthetic appreciation when ideas for which there are no percepts are matched with the aesthetic form for which there is no concept. We experience this automatic operation of the system as the evocation of *aesthetic ideas* through the apprehension of aesthetic form. And this automatic operation has evolved because it is adaptive for reasons that I will discuss shortly. First though I will address the evidence for this theory.

V

What could possibly count as evidence for such a claim? The only evidence we have at our disposal is the explanatory power of such a claim. Consider that it is the only explanation we have that explains the peculiar cognitive component of moving works

of art. This is perhaps best drawn out with a musical example. Non musically trained people, such as myself, do not find it easy to apprehend aesthetic form in music. Instead they are distracted by the music's sensuous charm or they experience the music through the emotionally charged themes and narratives they conjure up in their imaginations which they imagine correspond to emotions in the music. Neither response is a response to the music. Music critics would accuse such listeners of not actually paying attention to the music. When one does succeed in apprehending the aesthetic form of music, the beauty apprehended involves a peculiar kind of cognitive content in spite of the fact that one is simply listening to "tonally moving forms" in the words of a famous music critic Eduard Hanslick.⁹ This content is hard to describe but its phenomenology is captured by the notion of a glimpse through a personal lens, of the kind of ideas that Kant's *rational ideas* intimate. No other theory comes close to explaining how an apparently contentless artform in the literal sense, can evoke an experience which has such moving cognitive content.

The fact that content of this kind can be experienced in nature and other art forms does not on the face of it demand such an explanation because what I refer to as the peculiar content of aesthetic experience, in such cases, is usually commingled in experience with the literal content of the object. Consequently, the apparently uncaused nature of the peculiar cognitive content goes unnoticed as it is often attributed to the literal content of the object or artwork. However in some cases of pure music or absolute music as it has been called, its power to evoke a feeling for something non believers would be reluctant to call the eternal, cannot be confused with any literal content as there is no such content to be confused with. In the case of such music, the content apprehended is extraordinary in its apparent lack of a cause.¹⁰

The doctrine of *aesthetic ideas* addresses or is compatible with all the features listed as those a comprehensive evolutionary theory of art needs to accommodate. However, it is regarding the fifth feature that the doctrine of *aesthetic ideas* is most clearly motivated. The doctrine of *aesthetic ideas* provides a way of characterising those experiences of art which we would class as experiences of the best that art can offer. This is the evidence I present in support of a theory of art whose central principle is the doctrine of *aesthetic ideas*.

Turning now to this theory's adaptive or evolutionary significance, we find that our capacity for aesthetic form is a capacity that furthers our survival instinct. Consider that the best of our experiences of art evoke an experience of *aesthetic ideas*. By virtue of this experience our survival instinct is nurtured in the face of reason. This experience is only possible in creatures with a capacity to reflect.¹¹ Aesthetic experiences do this by flooding our minds with vague but nonetheless compelling intimations of freedom, immortality and infinity. We may not articulate these intimations to ourselves in exactly these words but their effect is to further our commitment to life. This is the evolutionary justification for our capacity for apprehending *aesthetic ideas* through aesthetic form.

This does not necessarily mean that the artist explicitly sets out to express *rational ideas*. What it means is that any form which provides the occasion for an apprehension whose unity is not principled in the logical or literal sense, but unified nonetheless, must be unified by virtue of some other kind of principle. This is the principle provided by aesthetic form. In place of a determinate concept, we experience *aesthetic ideas*. Aesthetic forms just are forms expressive of *aesthetic ideas*.

A critique of Kant's doctrine might begin with the observation that what Kant terms *rational ideas*, one would normally suppose, are known through their opposites. We are familiar with experiences of restriction, limitation, mortality, and finality. A part of having a concept of these states involves conceiving of their opposites. The source of our understanding of *rational ideas* would just be their role in the concept we have of concepts like restriction, mortality and so on. As such they should not be afforded any special status.

A response to this is that how we come to have these ideas is not a part of the core doctrine of *aesthetic ideas*. In Kant's metaphysics, for example, *rational ideas* originate in the supersensible substrate of humanity, a kind of sense we all have in common but which derives its content not through the senses but by virtue of a higher realm of which our minds partake (think of some divine realm perhaps). However, we do not need Kant's metaphysics in order to draw some insight from his doctrine of *aesthetic ideas*. That we would explain the source of the relevant ideas in a different manner to Kant does not undermine their application to understanding our experience of art.

The intriguing aspect of the ideas represented by Kant's *rational ideas* is that they articulate the kind of assumptions that seem to underpin what we would consider constructive and life reaffirming behaviour. That is, if we were to try and capture in a few key words the mindset displayed by the busy purposeful activity of those who contribute to the creation of institutions, cultural infrastructure and the advancement of civilization, a belief in what Kant's *rational ideas* present would suffice.

Rational ideas play an important role in what has been considered good mental health. Civilizations have been driven by belief in what these ideas suggest. Our imaginations seem particularly responsive to them. The intensity with which they

engage us led Rene Descartes¹² for example, to claim that ideas like infinity were not simply a conception of the opposite of what we do experience in nature. He claimed that infinity was prior to the finite in our minds because our sense of it was whole and distinct and did not incorporate the notion of its opposite, the finite. His argument for this where he first discusses the infinite was that we intuit the infinite as manifestly more real than the finite.¹³ I am not citing Descartes as an authority but simply as an example of this belief in *rational ideas* in action. However, one does not need to *profess* a belief in the infinite in order to manifest such a belief. One simply needs to attribute meaning to one's life. In doing so, one is acting out, I would suggest, a belief in the infinite or the immortal. Aesthetic experience feeds this implicit belief.

Constructive, positive behaviour like the belief in life itself seems driven by a belief in continuity. I do not mean we need to accept freedom, immortality and infinity in the form of true propositions. Instead I am suggesting that what we deem constructive, positive behaviour is behaviour which is informed by such implicit beliefs. The beliefs themselves might be instantiated in the system as a certain hormone or chemical. When we get out of bed in the morning and face the trials and tribulations of another day, we do not behave as though we are racing towards our demise. We behave as though the relations we build up and nurture have a meaning beyond a mere random expense of energy. I am suggesting that our capacity for imaginative behaviour linked to *rational ideas* is a more direct corollary of our survival instinct.

Another objection to elevating *rational ideas* to the core of an evolutionary theory of art is that it may be possible to get through life perfectly well without any involvement in art whatsoever – no music, film, painting, appreciation of architecture and so on. Or another objection with the same point might be that many people only

appreciate art in its decorative aspect, sensuous aspect, or its narrative or literal aspect, and as such their best experiences of art do not implicate *rational ideas*.

I would respond to both objections in the form of an analogy. We can subscribe to some view about the relativism of scientific principles while unwittingly benefiting from all the products provided by science; products which demonstrate the objectivity of scientific principles. Analogously, we might experience only the frivolous or literal in art while living within frameworks whose very conception could not have been possible without the imagination fuelled by *aesthetic ideas*; that is, frameworks that demonstrate the necessity of *aesthetic ideas*. I would suggest that the hope and faith required to build institutions and to structure experience according to them provide the framework for all people to construct meaningful lives.

The only evidence I am presenting for this theory is its explanatory power and each individual will judge the theory according to whether it happens to explain the phenomenology of their own best experiences of art. Where aesthetic theory is concerned, the vagaries of reception are explicit due to the fact aesthetic theory as opposed to other philosophical theory wears its heart on its sleeve so to speak. However, all philosophical debates, I would venture, eventually reveal bedrock assumptions that originate in cultural norms beyond which reason has little impact.

VII

I have argued that the creation of a form that is expressive of *aesthetic ideas*, which I have called aesthetic form, draws upon capacities that exceed our visual capacities. In fact they exceed the perceptual imperative generally. The perceptual imperative is presumably to recognize objects and judge distances in a way which serves our immediate survival needs. The aesthetic imperative, in contrast, is to create or re-

present our experience for the purposes of integration into nature and community for the furtherance of culture and life. We might access aesthetic form through perception but this does not make the aesthetic a purely perceptual act. I have attempted to argue that art is more aptly characterised by reflection rather than perception and that its peculiar content defines it as aesthetic reflection.

I have argued that aesthetic form conceived as a form expressive of *aesthetic ideas* is a necessary component of an adequate evolutionary theory of art based on the fact that it captures the phenomenology of our most moving and lasting experiences of art. My contention is that those experiences of art that provide in our minds a standard to which all other art experiences are implicitly compared are those experiences characterised by an imaginative engagement with *rational ideas*, that is an experience of *aesthetic ideas* or what Kant called a reflective aesthetic judgment. It is our capacity for such reflection that makes art possible and such reflection would presumably exercise higher level cognition, in this case through the operations of the imagination. Consequently it is not the visual animal in us that makes art possible. It is our reflective selves that make art possible.

¹ Kant, Immanuel. *Critique of Judgment*, 1790. Trans. W. S. Pluhar. Indianapolis: Hackett, 1987.

² For an example of a Type 1 evolutionary perspective on art see Stephen Pinker, *How the Mind Works* (New York: Norton, 1997).

³ Stephen Pinker, *How the Mind Works*, 1997.

⁴ John Pfeiffer, *The Creative Explosion* (New York: Harper and Row, 1982).

⁵ For an example of a Type 2 evolutionary perspective on art see Ellen Dissanayake, *Homo Aestheticus* (New York: The Free Press, 1992).

⁶ Ellen Dissanayake's aesthetic theory fails to explain the peculiar cognitive content to which I refer. See Ellen Dissanayake, *Art and Intimacy: How the Arts Began* (Seattle: McLellan & University of Washington Press, 2000).

⁷ See Jennifer A. McMahon, *Aesthetics and Material Beauty* (New York & London: Routledge, 2007).

⁸ See Paul Smolensky, 'Information Processing in Dynamical Systems: Foundations of Harmony Theory' in J. L. McClelland and D. E. Rumelhart (eds), *Parallel Distributed Processing, Vol.1* (Cambridge, Massachusetts: The MIT Press, 1986), 194-281; and

Paul Smolensky and Geraldine Legendre, *The Harmonic Mind* (Cambridge, Massachusetts: MIT Press, 2006).

⁹ Eduard Hanslick, *On the Beautiful in Music* (Trans. G. Cohen) M. Weitz (ed) (London: Macmillan, 1985).

¹⁰ When Kant was developing his theory of *aesthetic ideas* he seems to have had nature and art media like painting and poetry uppermost in his mind rather than music. His characterisation of music in some places addresses only the sensuous aspect of it rather than the aesthetic form of the music. See Kant, *Critique of Judgment*, Pluhar, 1987, 199-200.

¹¹ An evolutionary theory of art does not have to postulate that the aesthetic instinct was present in the very earliest hominids. It can, as I suggest, have evolved along with the higher cognitive ability of reflection. The aesthetic instinct can be

understood as serving survival by nurturing ideas which further life and culture in the face of reason's reflection upon life's purposes. The Upper Paleolithic period between 40,000 and 10,000 years ago (towards the end of the Pleistocene period) produced the kind of artefacts that suggest that this was the period that saw the emergence of the aesthetic impulse.

¹² Rene Descartes, Third Meditation in *Descartes Key Philosophical Writings*, Enrique Chavez-Arviso (ed), (Hertfordshire, UK: Wordsworth Editions Limited, 1997), 156 (in original 1641 Latin version 45-46).

¹³ In contrast to the notion of infinity *per se*, Descartes discusses our notions of infinite number as a result not of imagination but of the understanding. See Rene Descartes replies in Objections II, concerning the Ideas of God and an Infinite Number. Available from: http://www.earlymoderntexts.com/f_descarte.html

Last accessed May 30th 2007.