

Clouds of Illusion in the Aesthetics of Nature

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Abstract

I defend extreme formalism about the aesthetics of inorganic nature. I outline the general issue over aesthetic formalism as it manifests itself in the visual arts. The main issue is over whether we need to know about the history of artworks in order to appreciate them aesthetically. I then turn to nature and concede that with organic nature we need to know a thing's biological kinds if we are fully to appreciate it. However, with inorganic nature I deny that we need to know the deeper nature of the things we experience. What is important, I argue, are the appearances of those things not their real natures. I consider the beauty of clouds, which depends on an illusion of solidity, and I argue that scientific knowledge does not reveal beauty that is not available to the ignorant. There is only the beauty of appearances, and it does not matter whether those appearances are accurate or illusory.

The debate over formalism in the aesthetics of nature has flourished in the last generation, largely due to the impressive and influential writings of Ronald Hepburn and Allen Carlson.¹ Both argue against formalism. The central issue over formalism can be put in two ways. We can ask: what does the beauty of nature depend on? Or we can ask: what do we need to know in order properly to appreciate the beauty of nature? (By 'appreciation' I shall mean aesthetic enjoyment and judgement.) In this paper I focus on the beauty of inorganic nature. I defend an extreme version of formalism about it, in the sense, roughly, that the beauty of inorganic things depends only on their perceivable appearances and it does not depend on their history, context or deeper nature; and to properly appreciate the beauty of inorganic things we need only an awareness of their perceivable appearances and we need not know their history, context or deeper nature.

I. Formalism and Function

The debate over formalism about the aesthetic appreciation of nature runs parallel to debates over formalism in art criticism and theoretical reflection on the arts. One way to cast the issue about art, or about some art form, or about some artwork, is to say that it is about whether history or context is aesthetically relevant. Anti-formalists say that it is, whereas formalists say that it is not. Or we can put this in a different but related way by saying that they disagree about what we need to know for the proper appreciation of art; in particular, the question is whether knowledge of the history of production or context of a work of art should affect our aesthetic appreciation of it. Anti-formalists say that it should whereas formalists say that it should not.²

The debate over formalism about the aesthetics of nature has many similarities with debates over art, but there is one notable difference. The debate over the aesthetics of nature is less about the aesthetic relevance of the history and context of natural things and more about the aesthetic relevance of the natural kinds to which natural things belong. Natural kinds are kinds like being a tiger or being a mammal or being basalt rock. Anti-formalists about the aesthetics of nature say that the proper aesthetic appreciation of natural things requires knowledge of the natural kinds into which they fall. Formalists deny this. For example, do we need to know whether a whale is a mammal or a fish? And do we need to know whether a rock is igneous or sedimentary? In each case, anti-formalists say that we do while formalists say that we do not.

Anti-formalism about nature comes in either strong or weak modes. In the strong mode, the knowledge of the natural kinds of things that is required is *scientific* knowledge. We need to know not merely into which natural kinds things fall, but we also need scientific knowledge of what makes something a member of those natural kinds. Weak anti-formalism requires only ordinary knowledge of which natural kinds things fall under, and we need not have scientific knowledge of those natural kinds. Some anti-formalists also require that we know the ecological roles of inorganic things, which is a matter of their wider causal role with respect to living things.³ Formalists also deny this.

In the case of living things, the natural kinds in question are the biological kinds under which they fall. On most views, membership of biological kinds is determined in part by a thing's history. That history determines functional properties of a thing—the biological type to which whole organisms belong, and also what parts of organisms, such as eyes or hearts are *for*. Being a thing of a biological kind is in part to have a certain history. By contrast, being a thing of an *inorganic* natural kind has no historical implications that imply a function. One view would be that the natures of inorganic things are always non-historical. But this is not obviously right. We sometimes identify inorganic features by reference to their histories. For example, a tarn in a mountain area is a lake generated by glacial action. Otherwise it is not a tarn. Limestone rock also has an essential history, an essential organic history as it happens. But these histories do not determine functions. Inorganic things may also have ecological causal roles, which is a matter of their causal role with respect to living biological things in which the inorganic things are situated. But, again, this is not their function. (Note that not all biological things are *living* things—for example, a bone may persist after an animal has died, but it is still a biological thing. By contrast, limestone rock, despite being composed of ex-living things, is not a biological kind of thing.)

For our purposes we may assume a notion of function that is to some extent univocal, covering artifactual functions and evolutionarily selected functions. What makes something a heart or a lion depends on its history, just as what makes something a table or a coffee-maker depends on its history. If lightning strikes in a swamp and something molecularly exactly like a heart or table materialises, it is nevertheless not a heart or table, for both have an essential history. This is slightly controversial—but not very. I am using Ruth Millikan's historical notion of function, which she calls 'Proper Function',⁴ rather than Robert Cummins' notion of systematic capacity function, which involves a set of dispositions that a thing has at a time in virtue of how it is at that time. Her notion, unlike his, is historical.⁵ It is not easy to say exactly what the specific history is that generates functions. However, this does not cause great problems for the aesthetics of biological nature. For we can stipulate that anti-formalists think that the aesthetic properties of biological things depends on their biological kinds, which are historically determined—somehow. Formalists about the aesthetic properties of biological things deny this. History is aesthetically irrelevant, they say.

II. Inorganic Nature and Formulating Formalism

My focus in this paper will be only on *inorganic* natural things—such as rocks, lakes and clouds. Inorganic natural things have natures, but not biological natures.⁶ It might be suggested that anti-formalists think that the proper appreciation of natural things requires that we understand them. That is, anti-formalists think that we need to know what kind of things they are, whereas formalists deny this. But this does not give us enough precision about the *kind* of kinds that anti-formalists but not formalists think are aesthetically important. For formalists *do* think that some kinds are aesthetically important, such as being a bright blue and yellow stripy kind of thing.

Two examples of formalist/anti-formalist disagreements may help focus the issue. Formalists and anti-formalists differ over the following matters. Is the composition of rock—igneous or

sedimentary—aesthetically relevant? Is the glacial history of a tarn aesthetically relevant? How should we understand these disagreements?

In order to pursue these debates, it will not suffice merely to characterise formalism *negatively* as the denial of the aesthetic significance of historical and contextual properties. For some differences that only anti-formalists think important are differences in constitution not history. In the igneous/sedimentary rock case, both history and composition differ, and for the formalist both are irrelevant. So we need another characterisation of the formalism/anti-formalism distinction.

We need that anyway, even in the domain of living things and art, because the non-historical and non-contextual characterisation of formalism is merely negative—it says that certain properties (history and context) are *not* aesthetically relevant. But presumably a formalist is someone with a positive view about what *is* aesthetically relevant. Formalism about inorganic nature and formalism about biological nature and art agree on the negative view about the aesthetic irrelevance of history and context. But what is the positive view? It is not, for example, that formalists think that only ‘intrinsic’ properties are aesthetically relevant; for microphysical properties (such as being igneous rock) are intrinsic, and typically only the *anti*-formalist thinks that those properties are aesthetically relevant. Formalists about inorganic natural things think that microphysical constitution is aesthetically irrelevant because they think that the natural kinds into which they fall are aesthetically irrelevant. But what do they think *is* aesthetically relevant?

III. Perception and Formalism

It is common to appeal to *perception* when formulating formalism; and one common idea is that formalists think that what is aesthetically relevant must be available in the perceptual experience of a thing. But this idea is not straightforward, since we can perceive things in the light of what we know about their history, context or microphysical constitution, so that our experience is transformed by that knowledge. For example, in a sense, we can perceive relational and historical properties of things. We can perhaps see that a coin is Roman just as we can see that it is round. We can see that a man is married just as we can see that he is tall. The attempt by some philosophers of science and others to distinguish ‘direct’ or ‘unmediated’ perception from their opposites has not been a great success. So this idea will not help characterise formalism.

Nevertheless, I propose that we *can* appeal to perception in a positive characterisation of formalism, at least so that it will serve the debate over inorganic nature.

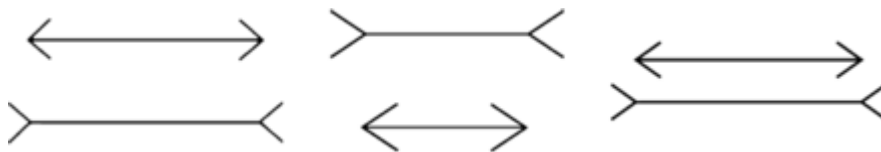
Thus far, I set up the issue about inorganic nature as being about whether aesthetic properties of inorganic natural things depend on their natural kinds and whether we need to know the natural kinds under which inorganic natural things fall in order to make aesthetic judgements about them. Formalists and anti-formalists disagree about this. For example, if a boulder really *is* igneous rock, then anti-formalists, but not formalists, thinks that knowledge of that fact should affect our aesthetic experience of it.

My conjecture is that the contrast in play here is between appearance and reality, or between seeming and being. The natural kind properties of a thing are a matter of how it *is* with the natural thing, and this contrasts with how it *seems*. Of course, things can also seem the way they are. However, what is at issue, I suggest, is whether we should experience things as they are.

Let us draw on a certain way of thinking about perception and perceptual properties of things. Objects have *appearances*. Let us speak of the ‘appearance properties’ of things. The moon, for example, has the appearance property of looking like a face to Europeans. Japanese and Korean

people see a rabbit pounding rice. These appearance properties are ‘secondary’ qualities of things on the standard definition of a ‘secondary’ quality, since they are dispositions to produce experiences of certain sorts in certain observers under certain circumstances. The ‘face’ of the moon is such an appearance. The moon looks to some people as if it has a face, which is an appearance property of it, and this disposition is manifested when someone sees the moon as having a face. Appearances, so conceived, may be the intentional objects of perceptual experience.

We can now make a distinction among a thing’s appearance properties: certain of a thing’s appearances are what we may call ‘bare appearances’ and some are not. By ‘bare appearances’ I mean those appearances the experience of which would survive if we knew that they are non-veridical. A famous example is the Müller-Lyer illusion. The fact that one line of the Müller-Lyer figure looks longer than the other is a bare appearance property of it.



What is interesting is that the lengths of two lines carry on *looking* different even though we *know* they are the same. The Müller-Lyer Illusion shows that some of our perceptual experiences are, as psychologists say, not ‘cognitively penetrable’, since things carry on looking a certain way despite our knowledge that our experience misrepresents reality. Some appearances are bare and others are not. One advantage of making the distinction between bare and non-bare appearances is that we avoid having to distinguish ‘direct’ and ‘indirect’ perception, or having to say what constrains what can and what cannot enter into the contents of perceptual experience—both of which are very hard to do. Many intellectual ships have run aground on those rocks. Instead, we can say that when a round coin looks elliptical from a certain point of view, this is its *bare appearance*. It is a property of the coin that it looks that way from that point of view, and that look survives even though we know that the coin is round.⁷

In these terms, the issue over aesthetic formalism is: is it important to our aesthetic appreciation that things appear to us as they are—that appearances are ‘veridical’? The anti-formalist, as we are now conceiving that position, requires that we experience things as they are; so we experience their veridical appearances. The anti-formalist admits that appearances matter, but only so long as those appearances are veridical and informed by knowledge of the things perceived. By contrast, the formalist tolerates illusory experiences—bare appearances suffice. This yields a more positive claim for the formalist, which is that the aesthetic properties of a thing depend on its appearances *and* it does not matter whether or not those appearances are veridical or illusory.

Does this mean that the formalist believes in what is sometimes disparagingly called ‘the innocent eye’? It is true that the formalist denies that we must experience things in the light of knowledge of their history, context or essence, and in that sense the eye may be ‘innocent’. Nevertheless, the formalist can embrace visual complexity, the appreciation of which may take practice and which may profit from the instruction of others. Some beauties may not be immediately available—few children like chamber music. An innocent eye or ear, if it is an untrained eye or ear, may miss much. A sophisticated eye or ear may see or hear more. But a sophisticated eye or ear need not be informed by knowledge of matters that anti-formalists think are aesthetically important.

How does this conception of visual formalism relate to other ways of conceiving it, for example in terms of patterns of colours and spatial arrays ('plastic form')?⁸ The distance is not far. The colours of things may also be illusory. There are many examples of psychological illusions where colours look different even though they are in fact the same, and the illusion persists even when we know they are the same. For the formalist, it is the apparent colours of things that matter aesthetically, whether there are veridical or not. The same is true of the shapes and visual rhythms that are important for formalists. It is the apparent shapes and apparent repeated elements that matter aesthetically, for formalists. Consider an example from renaissance architectural theory: a window has the appearance property of looking square if it has a disposition to look square to the relevant class of perceivers. The relevant class of perceivers are those who are located on the ground, looking up, and not, say, in a helicopter that is hovering level with the windows.⁹ The question is: is it acceptable that a window looks square even though we know it is not, or that it does not look square even though we know it is?

(On this conception of the issue, if something looks like a face, this is a bare appearance property, since something may carry on looking like a face even though we know it is not a face. Thus these properties may be considered aesthetically relevant by a formalist. This is not particularly problematic. For one thing, looking like a face is quite different from being a representation of a face, which formalists do not think is aesthetically relevant, because in a representation, history matters, and it is part of what generates the representational function. Furthermore, seeing something as a face is a special kind of aspectual imaginative seeing, and there are plenty of other formally relevant appearance properties that are not dispositions to provoke such imaginative seeing.)

IV. Extreme Formalism about Inorganic Nature

There is a significant distinction between biological nature and inorganic nature. Formalism is not the whole truth about the aesthetics of biological things, but I argue that it *is* the whole truth about the aesthetics of *inorganic* nature.

Biological things have *both* formal aesthetic properties as well as non-formal aesthetic properties. That is, biological things have aesthetic properties that can be ascribed without knowing their history and we can ascribe those aesthetic properties on the basis of knowing only their bare appearances; and they also have aesthetic properties that we should not ascribe without knowing their history and that cannot be ascribed on the basis only of knowing their bare appearances. They are typically beautiful in virtue of the biological kinds under which they fall, and they may *also* be formally beautiful considered, as it were, as mere things. This is a 'moderate formalist' position, since it accepts both formal and non-formal aesthetic properties.

It is different with inorganic nature, I maintain: inorganic things only have formal aesthetic properties. Thus the view of inorganic nature is: (a) we *need not* judge that things have their aesthetic properties in virtue of their natural kinds; and (b) we *should not* judge that things have their aesthetic properties in virtue of their natural kinds. This yields *extreme formalism* about inorganic nature. On this view, aesthetic judgements about inorganic things should always ignore their natural kinds and should only take bare appearances into account. I oppose both extreme anti-formalism, which says that aesthetic judgements about inorganic things should always take account of their natural kinds, and I also oppose moderate formalism according to which aesthetic judgements about inorganic things should sometimes take account of their natural kinds, and should sometimes ignore them.

How might we argue about this? It is quite common to put forward examples that are supposed to weigh on one side or the other. For example, anti-formalists often want us to consider examples of duplicates that are the same as far as their bare appearances go but different in their history or deeper nature.¹⁰ We are supposed to find it intuitive to think that it is appropriate to find a difference. This is the standard argumentative strategy of anti-formalists. Despite its currency, the strategy is weak. Such examples have little dialectical efficacy because the interpretation of the examples is theory-dependent.¹¹ Consider a pair of very similar lakes—one man-made and the other natural: it is not obvious that they differ aesthetically. Or suppose that some impressive ‘rocks’ turn out to be plastic, and thus fake. It is not obvious that we should revise our aesthetic judgements about them. Or suppose we come to believe that God or aliens from outer space made certain inorganic things (such as the Norwegian Fiords), and thus that they are artifacts. Or suppose that we used to believe that God made natural things but then came to believe that they are not artifacts after all. I cannot see that one's aesthetic experiences would or should change if one changes one's views in this way. Doppelgänger examples may sway the theoretically uncommitted or those who are wavering, but they are of little dialectical use otherwise. An example has dialectical efficacy only to the extent to which its interpretation is uncontroversial.

Despite this, I shall put weight on a certain example, which I hope will not be found overly controversial and question-begging. Some may intransigently resist the example, and if so, the argument will not work against them. But I hope to use the example to reveal a quite general aspect of ordinary aesthetic experience, which anti-formalists and moderate formalists about inorganic nature will not want to reject. To reject it would be to reject something central to the aesthetic outlook of most people. The argument for extreme formalism about inorganic nature will appeal to a pervasive aspect of our ordinary aesthetic experience. Anti-formalism and moderate formalism can only be maintained at the cost of embracing a systematic critique of our actual aesthetic lives.

V. Clouds and Bare Appearances

Flying through clouds is an extraordinary and seemingly impossible experience. I am not thinking of wispy cirrus clouds but of thick clouds. Thick clouds look solid. They look like you cannot fly through them. Of course, science and our own experience of walking in the hills or reading or television tell us that they are not solid. But, strangely, it is hard really to *believe* what we *know* when we fly towards clouds. A few moments later, when we are in the middle of the clouds, we can believe what we know, for a while, except that, phenomenologically, the clouds seem to have disappeared. When we re-emerge from the clouds, looking down or back on them, it is once again hard to believe what we know.

In our perceptual experience of clouds, we are subject to a Müller-Lyer Illusion. The apparent solidity of thick clouds, even though we know that they are not solid, is like the apparent similar lengths of the Müller-Lyer lines, which carry on looking different even though we know they are the same. In particular, clouds appear to us as fluffy, bouncy, solid objects. Perhaps they look as if they are made of cotton-wool. One could sit on them, surely! This is *how they look*. Hence the popularity among painters of seating winged cherubs comfortably on clouds. We may know that clouds are *aeronautically* penetrable, but the experience of them is not *cognitively* penetrable by that knowledge. Looking solid is a bare appearance property of clouds.

Let us now add the aesthetic fact that clouds, most clouds, have great beauty. The formalist claim is that their beauty depends solely on their bare appearances. The beauty of clouds is the beauty of things that look solid, in a fluffy, bouncy way. Science, and what we have learned through flying, from climbing hills, or from others, tells us that this appearance of solidity is an illusion. But that

does not matter for our experience of their beauty. We know that clouds are not solid, even though they look as if they are. Their beauty depends on that solid look. Formalists are happy with this because they think that we should judge the beauty of clouds on the basis of how they look irrespective of what we know about how they are. For formalists, our experience of the beauty of clouds should be unaffected by our knowledge that the appearance of clouds is an illusion. By contrast, this illusion matters to anti-formalists like Hepburn and Carlson. They say that we should aesthetically appreciate things as the kinds of things they really are. But since clouds are *not* solid, even in a bouncy, fluffy way, then they must say that we should *not* find them beautiful on the basis of experiencing them as such. The anti-formalist cannot say that they allow beauty in illusory appearances so long as it is informed by a proper knowledge of how things are, for the point of anti-formalism is to insist that aesthetically relevant appearances should be veridical, since they are appearances informed by knowledge.

It follows that anti-formalism has seriously revisionary consequences for aesthetic experience. Accepting anti-formalism would destroy our experience of the beauty of clouds, which is an experience of the beauty of apparently solid objects. That appearance of solidity is an illusion. So anti-formalists must say that clouds do not have the beauty we take them to have, and that the pleasure we take in their apparent beauty is illegitimate. For anti-formalists, the *truth* matters, whereas for formalists, *appearances* matter, whether veridical or not. But our perceptual experience of clouds is systematically misleading, and our appreciation of their beauty depends on that systematic illusion. Anti-formalists cannot live with this illusion, but formalists can, because, for formalists, the beauty of things depends on their bare appearances, irrespective how they really are; and our experience of the beauty of things depends on how they appear to us, where that appearance need not be informed by knowledge of how they are. Thus only formalism can tolerate our actual experience of the beauty of clouds. Anti-formalism is a threat to our aesthetic lives.

Formalists and anti-formalists disagree about appearances. Clouds have the appearance property of looking solid, because they are disposed to look solid to human beings in standard observational circumstances, where those standard observational circumstances are not being located inside the cloud (since clouds are usually above us). For the formalist, what matters aesthetically is limited to bare appearances. The anti-formalist thinks that our aesthetic experience should be informed by knowledge of how things are, and in particular by knowledge of their nature. But in a case, such as a cloud, appearances are not veridical. So insisting on the kind of experience that is informed by knowledge of how things are does violence to our experience of their beauty. For the anti-formalist, pleasures in the beauty of clouds are illegitimate.

Suppose we describe some clouds metaphorically as 'magnificent massive floating castles' as part of an aesthetic description of them. The anti-formalist will not approve of that aesthetic description, for it celebrates bare appearance, not reality. Castles repel attempts at penetration in a way that clouds do not. The anti-formalist must think that such descriptions are misleading, frivolous and irresponsible, in the way that some rather stern parents think that telling children about fairies, ghosts and Santa Claus is frivolous at best and irrational delusion-mongering at worst, because there are no fairies, ghosts and Santa Claus. By contrast, for the formalist, such creative frivolousness, or colourfulness in aesthetic description, is inescapable, and to be celebrated, because we are attempting to describe the aesthetic properties that things have in virtue of their bare appearances.

VI. Hepburn and Budd on Clouds

Hepburn discusses the aesthetic appreciation of clouds at one point. He claims that an aesthetic experience of a cloud in the light of thoughts about its internal workings is superior to one where it

simply reminds us of a basket of washing.¹² But this is unfair on two counts. First, merely reminding us of something or seeing an aspect in a cloud does not amount to an aesthetic experience of the cloud. By contrast describing the cloud as ‘magnificent massive floating castles’ does describe aesthetic properties of them and issues from an aesthetic experience of them. Secondly, while the internal workings of clouds are no doubt interesting, it is far from clear that they are of aesthetic significance—or so the formalist will say.

Malcolm Budd also discusses the aesthetics of clouds. He rejects a formalist position about them as follows.¹³ He says that when we understand what kind of cloud a cumulonimbus cloud is—a thundercloud—we come to see its anvil shape as *powerful*. Hence the aesthetic appreciation of the cloud may be informed by knowledge of its nature. In my view, this is a questionable description of our experience of the anvil-shaped cumulonimbus cloud. I agree that such clouds look powerful, but not because of what we know about their causal potential, as sources of heavy rain, lightening and thunder. Consider a large grey cumulonimbus cloud that is on the point of breaking up, in which case it is not at all powerful in the sense of actually being the source of heavy rain, lightening and thunder. Nevertheless it still *looks* powerful. Those clouds are not powerful even though they look powerful and it is that look that matters aesthetically.

Budd might reply that this is because such clouds look the way powerful clouds usually look. However, suppose that wispy white cirrus clouds typically issued in rain and thunder whereas large grey anvil shaped clouds typically meant that hot sunny weather will follow the next day. Would these large grey anvil shaped clouds still *look* powerful? Although this is not uncontroversial, I think that they would. But Budd will say that they would not, it seems. For the formalist, cumulonimbus clouds look powerful, and that look is a bare appearance (an appearance that would survive accepting that it is not veridical). But Budd's view would be that what matters aesthetically in the imagined example is how things really are, not bare appearances. So these large grey anvil shaped clouds would not, in the counterfactual circumstances, be beautiful in virtue of their powerful look. It is not clear who is right.

In my view, Budd's example has a certain complexity, which, when we understand it, undermines its plausibility as a counterexample to extreme formalism. (Here I shall re-exploit a part-whole tactic that I previously used to tame Hepburn's famous beach/tidal basin example).¹⁴ Let us interpret Budd's cloud example as positing a whole with two temporal parts: in the first phase, there is large grey cumulonimbus cloud; in the second phase, that cloud is raining heavily and issuing lightening and thunder. (We should also remember the other senses in play besides sight: touch, smell, and hearing.) Now the succession of these two phases is the usual scenario, although when a cumulonimbus cloud breaks up then we have phase one without phase two. The phase one cloud has aesthetic properties that are determined just by what is within that phase, and the phase two cloud has aesthetic properties that are determined just by what is within that phase. The phase one cloud *also* has aesthetic properties that it has in virtue of being a predecessor of a phase two cloud with its aesthetic properties. And, crucially, there are aesthetic properties that the whole has—of the sum of the two temporal parts—which are not the mere conjunction of the aesthetic properties of phase one plus those of phase two. The phase one cloud *contributes* to the aesthetic properties of the whole, of the fusion of phases one and two. Thus the aesthetic properties of the cloud in phase one does indeed outstrip what is narrowly given, within the phase. Budd is right about that. But it does *not* do so in virtue of the deeper real nature of the cloud; it does so in virtue of the wider whole in which it participates. So there is nothing to threaten extreme formalism here.

Imagine an abstract painting with a complex design, with a left hand side and a right hand side. Each half has the aesthetic properties that it has in virtue of the designs on its half. But the whole also has

additional aesthetic properties, and the designs on each half also have aesthetic significance in so far as they contribute the aesthetic properties of the whole. It is similar with Budd's cumulonimbus cloud. The power of a cumulonimbus cloud derives from what typically follows such a cloud—rain, storms, lightening and thunder—that also have aesthetic properties; and the combination of the phase one cloud plus the phase two storm has aesthetic properties that are distinct from those of its parts. The aesthetic properties of the phase one cumulonimbus cloud are both narrowly determined aesthetic properties and ones that it has because it contributes to the aesthetic properties of the temporal whole—the fusion of the cumulonimbus cloud before and during the storm. Thus there is a formalist interpretation of Budd's cumulonimbus cloud.

VII. Illusion, Ignorance and Counterfactual Stability

What can we learn from clouds? Does the case generalise? It is true that in our experience of the beauty of most inorganic natural things, there is no Müller-Lyer Illusion, as there is in the case of clouds. Nevertheless, I believe that the case of clouds is symptomatic of the general fact that inorganic natural things are beautiful in virtue of their bare appearances, and we find these things beautiful in virtue of their bare appearances—the way they appear to us, irrespective of whether or not those appearances are veridical or are believed to be veridical. In a Müller-Lyer case, something looks a certain way to us even though we know it is not that way. (One is subject to an illusion without being deluded.) It is the *look* that is important in the aesthetics of inorganic nature. We find inorganic things beautiful in virtue of how they appear—typically how they look—where it does not matter to us whether they really are as they appear.

There are other cases where things appear to us a certain way even though we know nothing or very little about them. This is ignorance rather than illusion. Things can appear a certain way to us even though we have no beliefs about whether they are as they appear; we can find things beautiful in virtue of the way they appear, in the absence of beliefs about whether they are as they appear.¹⁵ In many cases, we are ignorant of what we relish aesthetically. For instance in the aesthetic appreciation of rocks, we often do not know whether they are igneous or sedimentary—which is a huge difference in their constitution and history. Since we think that is alright, and not a shortcoming in us, this suggests that it is bare appearances that matter, as in the case of clouds. The idea that we might be ignorant of the nature of something and still find it beautiful is as problematic for anti-formalists as the idea that we might find something beautiful on the basis of perceptual experiences that we know to be illusory. By contrast, both are fine for formalists.

It is true that in many cases, our appreciation of the inorganic things suffers neither illusion nor ignorance. We know how they are. They appear a certain way, and we know that they are the way they appear. Our experience is veridical and we know it. Here I propose a counterfactual stability condition. In a case where we find a thing beautiful, and we know how it is, and our experience of it is veridical, the question is: if we did not think that the experience was veridical, would we still find it beautiful? If so, it shows that it is bare appearances that matter to us aesthetically. (My polar bear example in Zangwill, *Metaphysics of Beauty*, p. 116–18, appealed to such a counterfactual.) Our aesthetic experience of many natural phenomena surely is counterfactually stable in this way. Even when things are the way that they appear, our aesthetic experience does not depend on our believing that those things are as they appear. Where our perceptual experience of inorganic things is veridical and we know it, our aesthetic experience of inorganic nature is nevertheless counterfactually stable.

In all these cases—of ignorance, illusion, and counterfactually stable experience—the conservative card can be played with dialectical effect. Extreme formalism is revisionary: it is revisionary of our

ordinary aesthetic experience of inorganic nature where we suffer illusion, where we are ignorant, and where we suffer neither illusion nor ignorance but if we thought that we did it would not affect our aesthetic experience.

VIII. Moderate Formalism about Inorganic Nature?

Thus far I have presented an overly polarised view of the theoretical choices over the aesthetic properties of clouds and other inorganic things: either one is a formalist or an anti-formalist; that is, either one thinks that the beauty of inorganic things depends on their bare appearances, and so we should judge their beauty only on the basis of our experience of their bare appearances, or else the beauty of inorganic things depends on how they actually are, and so we should judge their beauty on the basis of knowledge of how they actually are. But perhaps these two perspectives are not exclusive. Perhaps there are both kinds of beauty and we can both judge and experience inorganic things in both ways.

We can separate three views, as I did in section IV. Extreme formalism is the view that *all* the beauty of inorganic things depends on their bare appearances. Extreme anti-formalism is the view that *all* their beauty depends on their deeper nature. Moderate formalism is the view that *much* of their beauty depends on their bare appearances, and also that *much* of their beauty depends on their deeper nature. Corresponding to these metaphysical claims are epistemological claims. Extreme formalists say that aesthetic judgements about inorganic things should never be informed by knowledge of their natures. Extreme anti-formalists say that it should always do so. And moderate formalists say that in some respects it should, and in other respects it should not. Moderate formalists allow that one thing has many aesthetic properties, and we should experience some of them in a formalist way and some of them in a non-formalist way.

Moderate formalism has great appeal in many cases. For example, most representational works of art and biological kinds of things have both formal and non-formal aesthetic properties; they admit both formal experience and evaluation as well as non-formal experience and evaluation in the light of their nature, history or context. There is no doubt that in many cases moderate formalism is an attractive view. The question addressed here is whether this is the right view of inorganic nature.

Moderate formalism for inorganic nature initially appears problematic. One problem is that the fit between formal and non-formal beauties seems uncomfortable where the aesthetically relevant appearances are not veridical. In the case of clouds, formal and non-formal evaluations seem to *compete*. Does the cloud or doesn't it have aesthetic properties that are consequential on solidity? How can it have both? Moderate formalists want to grant these two sets of properties equal status. But if it is not solid and merely appears to be, how can it have both the aesthetic properties consequential on how it merely appears as well as those that are consequential on how it really is?

Contrast inorganic nature with biological nature. There the aesthetic properties—formal and non-formal—are both grounded in the reality of the things in question. They really have their biological function, and it is not a question of bare appearances. For example, in a butterfly's wing, we can see the beauty of its abstract pattern, and also appreciate its beauty as a wing. The butterfly has both and we can experience both; and the beauty of both depends on veridical, not illusory, appearances. By contrast in the case of clouds, our appreciation of their beauty depends on illusion; clouds are not solid and the beauty we see in many of them depends on the perceptual illusion that they are solid. Of course, an illusion is not necessarily a mistake that we make; nevertheless, beauty that depends on illusory appearances is still beauty that depends on the way things appear but are not. How can we grant that beauty the same status as the beauty that depends on how things really are? This is

not position of happy compromise, for the aesthetic evaluation and description of clouds in the light of their real nature yields a contrary aesthetic evaluation and description from the aesthetic evaluation and description of clouds in the light of their bare appearances. But the aesthetic properties that depend on how it is ought to take precedence over those that depend on how it is not.

This initial worry with moderate formalism appears forceful. However, we can imagine a moderate formalist insisting that there is both beauty that depends on appearances—veridical or not—as well as beauty that depends on how things are, and both have equal status. Why not?

In arguing against this possibility extreme formalists seem to have a difficult task, since they have to prove a negative claim—that there is no beauty that depends on the natures of inorganic things. This is like having to show that there is no china teapot in orbit circling the earth. But it cannot be assumed for this reason that extreme formalists have the onus of proof against them. For it is equally true that there is no presumption that there *is* non-formal beauty. Neither side has the onus of proof.

IX. Two Arguments Against Moderate Formalism

I now give two arguments against moderate formalism. The first is that in all other cases where moderate formalism is plausible, it is because there is non-formal beauty that is due to function—either human purposes or natural functions.¹⁶ Something that is non-formally beautiful is so because of the way it discharges its purpose or function; that is, it is the appropriate aesthetic realisation or expression of its purpose or function. Kant talked of ‘dependent beauty’ to capture the category of functional (non-formal) beauty.¹⁷ Functions are the *source* of non-formal beauty. But there are no functions in inorganic nature.

Compare absolute music and abstract visual art. Here I would argue that in most cases there is only formal beauty. Why? Because there are no representational purposes or other aesthetically relevant purposes. Therefore there is no non-formal beauty, and extreme formalism is correct.¹⁸

The argument over nature is similar. The argument is: (a) functions are not *a* source of non-formal beauty, they are *the* source of non-formal beauty; so (b) where there are no functions there is no non-formal beauty; (c) there are no functions in inorganic nature; therefore (d) inorganic nature has no non-formal beauty.

One argument for (a) is inductive—that all the plausible examples of non-formal beauty are functional. But there is also an explanatory argument that seeing functions as the source of non-formal beauty explains both our experience of that beauty and also the way our experience of beauty changes as we acquire knowledge of functions. Knowledge of non-functional facts is not aesthetically transformative in the same way.

There is system in the sources of non-formal beauty and in our experiences and judgements of non-formal beauty: it is always functional. That means that we can close the door on non-formal beauty in inorganic nature. Hence moderate formalism is incorrect.

The second argument against moderate formalism about inorganic nature concerns curiosity. The moderate formalist says that scientific understanding enhances our aesthetic appreciation of the beauty of inorganic nature, so that the scientifically informed person understands more of the beauty of nature than the ignoramus who only appreciates its formal beauty. But why should we think that scientific knowledge allows non-formal beauty to be revealed? The moderate formalist thinks that the scientifically knowledgeable person finds non-formal beauty that the ignoramus fails

to find. I deny this. I think that what the scientifically knowledgeable person knows is *interesting*, but it does not open up more beauty that is lying in wait in the world.

I grant that the scientifically informed person's *experiences* are valuable and important, but that does not mean that they are *aesthetic* experiences—that is, it does not mean that they are experiences of beauty. The moderate formalist owes an argument that scientific knowledge reveals extra aesthetic aspects of the world. The extreme formalist, equally, owes an argument that it does not. Although there may be pleasures to be had by scientifically informed persons when they perceive inorganic nature in the light of their knowledge, it is far from clear that such pleasures are aesthetic pleasures. Equally, though: why think that they are not?

The reason is that scientific pleasures arise from *curiosity*. Curiosity is the desire to know. The role of pleasures and desires in scientific theorising has been little explored, but it is clearly a significant factor. Curiosity is an important aspect of our lives. Indeed, it is a marvelous aspect of human beings that we are curious. We are curious creatures, as cats are supposed to be. Curiosity is a significant motivation in scientific invention and discovery. Of course people also pursue science because they want to control the world, and there is money to be made, status to be achieved, and so on. But there is also pleasure in discovering and knowing. Concerning his motivations, the physicist Stephen Hawkins spoke of '... The joy of discovering something that no one knew before' (*The Independent 2*, 12th December 2012). It is wonderful to know how galaxies were born, about the speed of light, about the evolution of life, and many other things. Knowledge of this sort gives pleasure. But whether it enhances our *aesthetic* understanding is another matter.

What we need here is some characteristic of intellectual pleasures that is not shared by aesthetic pleasures. That would yield a positive argument against moderate formalism since we could argue that the pleasures, or extra pleasures, arising from knowledge of the natures of things, are not aesthetic pleasures. Here I propose that we may appeal to one of the less controversial aspects of Kant's doctrine of disinterestedness. This is the idea that aesthetic pleasures—pleasures in beauty—are not based on desire. When we take pleasure in a football team scoring a goal, this is usually because we want them to score; so that pleasure is interested. The idea that aesthetic pleasure in beauty is not like that has considerable plausibility—by contrast with another aspect of Kant's doctrine of disinterestedness, which is that pleasure in beauty does not *produce* desire, which is more controversial.¹⁹ Kant is surely right the aesthetic pleasure (pleasure in beauty) is a contemplative pleasure, and it is not dependent on having a desire concerning the intentional object of our pleasure. But scientific pleasure *does* depend on desire, the desire to know. The pleasure that scientific knowledge yields is bound up with the desire of curiosity. But aesthetic pleasures are not bound up with desire in that way. So these pleasures are not aesthetic pleasures and moderate formalism is false.

This conclusion is quite intuitive. Consider some examples. There are intellectual pleasures to be had from knowing how clouds work. But there is no reason to think that it is aesthetic pleasure. Or consider an example from organic nature. Monkey's bottoms are presumably fascinating and there is much joy to be had in finding out about them. But beautiful they are not. The pleasures taken in contemplating monkey's bottoms do not include aesthetic pleasure in their beauty. Or consider volcanic eruptions. Volcanic eruptions are often beautiful. But it is not plausible that knowledge of the unseen subterranean processes that produce eruptions enhances our aesthetic experience of them. (This case is unlike Budd's cloud example, since it cannot be analysed in part-whole terms.) The subterranean processes are *interesting* and information about them may enhance our perceptual and intellectual experiences of the volcano, in a broad sense, and it may even increase

our *wonder* at some of the phenomena of nature. But it does not enhance our aesthetic experience of the volcano.

Indeed, care needs to be taken to prevent such knowledge distracting from aesthetic appreciation. Fear of a volcano might inhibit a proper contemplative aesthetic response to it. Or consider the beauty of a spider's web (another example of organic nature). A spider's web is a thing of beauty. It is also a death trap. Knowledge of that fact may get in the way of aesthetic appreciation. The extra knowledge of what a thing is may distract us from its formal beauty. In all these cases, there may be pleasures deriving from curiosity just as there may be feelings of fear and horror, and all sorts of other emotional reactions to nature. All of that, however, is distinct from aesthetic pleasure in the beauty of nature.

X. In Praise of Bare Appearances

I have argued that the beauty of inorganic things, such as clouds, depends only on their bare appearances, and that our experience of their beauty depends only on our perception of their bare appearances—that is, it depends only on how they appear to us, where how they appear to us is not informed by our beliefs about how they really are. As far as judgements of inorganic natural beauty go, it does not matter to us whether things really are as they appear. What matters is our experience of their appearances, in the sense in which our experience of those appearances is not and would not be affected by our beliefs about how things really are. Perhaps some aspects of our experiences would be altered by changes in beliefs. But other aspects of our experience are not penetrable in this manner. If I am right, it is this non-penetrable kind of perceptual experience that is the kind of perceptual experience that matters in our aesthetic experience of inorganic nature.

A particularly strong version of anti-formalism requires that we have scientific understanding of the kinds into which natural things fall. Of course, a scientific understanding of the deep nature, history or role of natural things is fine in its own way. But the idea that the appreciation of nature *must* be done in the light of such scientific understanding is a threat to much of our actual aesthetic lives. Quite a lot of our experience of the beauty of inorganic nature, such as our experience of the beauty of clouds, could not survive being subjected to scientific scrutiny of those things, for our aesthetic experience of clouds depends on an illusion. Science threatens our experience of this beauty. Or rather, it is not science itself that is a threat, but the mistaken idea that scientific understanding must police our aesthetic experiences. Science itself is fine. But not everything should be subject to its strictures. The idea that our experience of beauty must be informed by scientific knowledge threatens to deprive us of some of the most valuable aspects of human life.

For a moderate formalist, our aesthetic experience of nature is a compound of different kinds of aesthetic experiences—some of our aesthetic experiences and judgements of nature should be informed by knowledge of how things are, and some should not. So inorganic nature possesses both formal beauty and non-formal beauty. The moderate formalist says that we miss out on many important aesthetic aspects of inorganic nature if we do not experience it in a scientifically informed way—there are beauties that the scientific ignoramus can never know. But we saw reason to deny that there is any such beauty. There are no functions to support non-formal beauty, and the enhanced pleasures we feel when we contemplate inorganic nature armed with knowledge derive from curiosity and are not aesthetic pleasures. This counts against moderate formalism and for the extreme formalist view that the aesthetic judgements that we make about inorganic nature should *only* be made on the basis of our perception of their bare appearances, and should *never* be informed by knowledge of their nature.

While Moderate formalism is the right view of the aesthetics of biological nature, as it is of many of the arts, given the aesthetic significance of functional properties such as representational properties, extreme formalism is the right view of inorganic nature.

Formalists celebrate our naive and uninformed pleasures in the beauty of nature, which anti-formalists want to confiscate. The appreciation of *some* beauty of nature does indeed require sophisticated knowledge. Full appreciation of the beauty of living things requires some knowledge of what they are. But the beauty of inorganic nature depends only on bare appearances. We should be content to relish these appearances, without worrying about whether they are true to a deeper reality. When it comes to inorganic nature, let us love only what Plato, or Plato's Diotima, referred to as the world of sights and sounds, without worrying about other deeper, or higher, beauties. The beauty of inorganic nature is skin deep—the beauty of bare appearances: there is no higher or deeper beauty.²⁰

Footnotes

- ¹ R. Hepburn, 'Contemporary Aesthetic and the Neglect of Natural Beauty', 1965 reprinted in *Wonder and Others Essays* (Edinburgh UP, 1984); A. Carlson, *Aesthetics and the Environment* (London: Routledge, 2000); A. Carlson, 'On Aesthetically Appreciating Human Environments', *Philosophy and Geography*, 4 (2001), pp. 9–24.
- ² For a survey of the issue, see N. Zangwill, 'Formalism' in D. Cooper, S. Davies, K. Higgins, R. Hopkins and R. Stecker (eds), *Blackwell Companion to Aesthetics* (Oxford: Basil Blackwell, 2nd ed, 2009).
- ³ G. Parsons, 'Natural Function and the Aesthetic Appreciation of Inorganic Nature', *British Journal of Aesthetics*, 44 (2004), pp. 45–56.
- ⁴ R. Millikan, *White Queen Psychology and Other Essays for Alice* (Cambridge, MA: MIT Press, 1993).
- ⁵ R. Cummins, 'Functions', *Journal of Philosophy*, 72 (1975), pp. 741–65. I believe that Cummins' worries with conceiving of functions historically can be met. Furthermore, Millikan argues persuasively that the historical notion captures explanatorily important explanatory uniformities that cannot be captured by the non-historical notion. See R. Millikan, 'Biofunctions: Two Paradigms' in A. Ariew, R. Cummins and M. Perlman (eds), *Functions* (Oxford UP, 2002).
- ⁶ I assume the falsity of the so-called 'Gaia' hypothesis—that the whole of planet earth is one living organism.
- ⁷ Alva Noë defends a notion of appearance properties, which I think roughly coincides with what I have in mind here. See A. Noë, *Perception in Action* (Cambridge, Mass: MIT Press, 2004) ch. 3. Noë conceives of appearance properties as relational properties of mind-independent things, such as how they look or sound. Moreover, Noë makes the controversial claim that we perceive how things are *by* perceiving how they look (or sound, etc). For example, we perceive that the coin is round by perceiving its elliptical appearance.
- ⁸ N. Zangwill, *The Metaphysics of Beauty* (Ithaca: Cornell UP, 2001), Ch. 4.
- ⁹ B. Mitrović, *Learning from Palladio* (New York: Norton, 2004).

- ¹⁰ E. Gombrich, *Art and Illusion* (London: Phaidon, 1959), p. 313.
- ¹¹ Zangwill, *Metaphysics of Beauty*, chs 5–8.
- ¹² Hepburn, p. 29.
- ¹³ M. Budd, *The Aesthetics of Nature* (Oxford UP, 2002), pp. 20–21.
- ¹⁴ Zangwill, *Metaphysics of Beauty*, pp. 119–20.
- ¹⁵ See N. Zangwill, 'Rocks and Sunsets: A Defence of Ignorant Pleasures', *Revista di Estetica*, 29 (2005), pp. 53–60.
- ¹⁶ Zangwill, *Metaphysics of Beauty*, ch. 4.
- ¹⁷ I. Kant, *Critique of Judgement* (transl. by Meredith) (Oxford UP, 1928), section 16.
- ¹⁸ See Zangwill, *Metaphysics of Beauty*, chs 4–7.
- ¹⁹ N. Zangwill, 'Kant on Pleasures in the Agreeable', *Journal of Aesthetics and Art criticism*, 53 (1995), pp. 167–76.
- ²⁰ This paper originated in a talk at the British School of Rome conference on 'The Nature of Natural Imagery: Landscape between Experience and Representation'. Much of the talk was prepared on the aeroplane on the way to that conference! The view of the clouds from the aeroplane window was particularly stunning! The resulting paper was presented at the Karbank Symposium in Environmental Philosophy at Boston University, where Amelie Rorty commented, and at the Institute for Physics and Mathematics (now renamed the Institute of Fundamental Sciences) in Tehran, and at Ritsumeikan University in Kyoto. Many thanks to Allen Carlson for insightful comments as well as encouragement. A referee for this journal supplied constructive comments. A conversation about appearances with Tim Crane was also helpful.