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Visuality and Aesthetic Formalism

Abstract: In the philosophy and psychology of perception there exists a long-standing debate about the detachability of the visual from the conceptual contents of perception. The article analyses the implications of this dilemma for the attribution of aesthetic properties independent of the classification of aesthetic objects and the possibility of (moderate) aesthetic formalism.

For the past hundred years, a cluster of assumptions about human visuality, commonly stated using slogans such as 'all seeing is seeing-as' and 'there is no innocent eye', has exercised a huge influence on theories of visual perception—and through them on a whole range of positions and approaches in aesthetics, art and art historiography. In *very* general terms, the core idea of these assumptions is that *all* contents of one's visual experience depend on the way one classifies the objects and properties that one perceives, usually in relation to what one knows, believes or expects about them. Different authors describe this dependence in different ways and I have summarised some well-known formulations in the next section. It is fair to say that they all assume that the perceiver in the act of perception must operate (consciously or unconsciously) with some classification of the object of perception and that if this classification changed or were unavailable then the object of perception would be perceived differently, not perceived at all or perception would be abnormal. The opposing view is that (some) objects or properties can be perceived independently of the way they are classified by the perceiver. Through this paper I will refer to this latter view as the *detachability thesis* and the dilemma between the two views as the dilemma about *detachability* (of the contents of) visual experience. This is a very general description of the two opposing positions; the formulations of various authors described in the next section will provide further clarification, while later through the paper I will analyse the specific constraints that are relevant for the discussion of the attribution of aesthetic properties. I will not attempt to provide a formalised account (e.g. in terms of supervenience) of the two opposed positions or of the concept of dependence that they rely on—I am not sure that such a unified account is possible considering differences in various authors' formulations, and if it were possible, its formal articulation would be more appropriate for a paper on the history of psychology or history of the philosophy of perception.

This paper analyses the implications of the dilemma about detachability for theoretical discussions about aesthetics—and especially the possibility of aesthetic formalism—in relation to architecture and other visual arts. I say 'implications' because an author's position on this dilemma may not be explicitly stated, but still affect his or her views on aesthetic formalism and the way one's classification of aesthetic objects affects one's attribution of aesthetic properties to these objects. The dilemma about detachability is a major topic in the philosophy and psychology of perception and its implications in aesthetics need to be discussed in the context of the positions that exist in these disciplines.

Obviously, I do not have any new arguments to present about detachability itself—otherwise this would be an article on the philosophy or psychology of perception and thus not suitable for a journal specialising in aesthetics.

I will start with a short presentation of the views on detachability that were formulated in the past in the psychology and philosophy of perception and their implications in aesthetics, art theory and especially their significance for the rejection of aesthetic formalism in the final decades of the twentieth century. This opening presentation will specify the scope of the discussion presented here; it is partly historical and intended to illustrate the significance of the topic. I will then argue that the dilemma about detachability (in the form that is relevant for the discussion of the attribution of aesthetic properties) differs in important aspects from closely related philosophical and psychological debates about nonconceptual content and the impenetrability of vision. (I am unaware that this distinction has been explicitly made in the existing literature.) At the same time, there are (so far I know) three valid arguments in favour of detachability and after I present them I will analyse the implications of classification-free seeing for the attribution of aesthetic properties and aesthetic formalism. The analysis is intended to define more precisely the necessary assumptions that the formalist position can (and needs to) make about classification, spatial interpretation of two-dimensional images and relationships between physical objects and spaces. In the final section I will address the problem of visual constancies and whether they can be used as an argument against aesthetic formalism.

Perception and aesthetics

Mid-twentieth century psychological research used to emphasize the impact of classification, beliefs and expectations on human perception. Famously, as early as 1921 Kurt Koffka claimed that when a Diesel engine is perceived after an engineer explains its functioning, it looks differently than it did before the explanation.[1] After the explanation, he stated, one sees nameable parts, such as cylinders, and not merely round and angular items. 'A "picture", a phenomenon', Koffka said, is replaced by a better one. The claim is contentious and Koffka's use of the words 'picture' and 'better' under scare quotes makes it unclear whether (or in how far) he may have used them metaphorically.[2] What he called 'picture' may not pertain to shapes and colours but to the ways they can be verbally described, while the qualification 'better' may merely stand for the increased capacity to describe what one sees by learning new words. It is, after all, a dubious proposition that one sees better just because one learns new words to name the things one sees. The belief that perceptual content is inseparable from conceptual content (and maybe even its available verbal descriptions) came to dominate mid-twentieth century understanding of perception. The ways

[1] '…sieht er anders aus'. Kurt Koffka, 'Zur Theorie der Erlebnis-Wahernehmung', *Annalen der Philosophie*, 3 (1923), 375-399, at 393.

[2] Note the use of scare quotes: '…jetzt wird durch Begriffe, die das Funktionieren eines Gegenstandes betreffen ein "Bild", ein Phenomen von dem Gegenstand "besser", ich kann jetzt besser beschreiben'. Koffka, 'Zur Theorie', 393. It is not clear whether the use of scare quotes for 'Bild' may mean that the word is used figuratively and does not pertain to the perception of shapes and colours.

perception depends on classification were the central topic of American 'New Look' psychology of the 1950s. In a widely cited experiment, Jerome Bruner and Cecile Goodman tested the influence of the economic-social background on the perceptual capacities of ten-year old children by asking them to adjust the size of a light circle on a screen to the size of coins they were looking at at the same time.[3] The radius of quarter-dollar coins that children from poor families reported to perceive was larger by 25% than the one reported by children from wealthy families. During the 1950s experiments of this kind attracted much attention of American psychologists who sought to establish the ways in which knowledge and expectations determine visual perception. The strange and unexpected implication that one does not see reality, but rather what one believes to be reality, accounts at least partly for the popularity of this research—including the tendency to believe, as Ian Gordon put it, that if perception is malleable and vulnerable to manipulation in laboratory conditions, it must be so all the time.[4] Probably, it also explains the tendency to overlook alternative interpretations of these experiments—in the case of Bruner's experiment with children and coins, for instance, it is not clear that children from poor families were not culturally conditioned to *report* the coin size as bigger than it was, regardless of how they saw it. More generally, it is fair to ask how humans can survive at all, if their perception does not reflect reality, but is fundamentally (or even always) driven by what they expect and believe.

In analytic philosophy, the initiating moment in the debate was the publication of Fred Dretske's book *Seeing and Knowing* in 1969. Dretske insisted that some contents of visual experience were detachable—that the basic contents of perception, shared by humans and animals, are independent of how we classify things.[5] Seeing a bug, Dretske claimed, does not involve any more belief content than stepping on it inadvertently.[6] Although four-year old children know nothing about x-ray tubes they can see them: 'Why should they not see them? Are they invisible?'[7] In later decades, advocates of detachability have pointed out that '[t]here is then no reason to think that how things appear must be constrained by what concepts the perceiver has'[8] and that two perceivers see the same shape the same way, although one perceiver may think of it as a rectangle and another as a straight-sided figure.[9] Similarly, it has been pointed out that two persons looking at a Cyrillic text will perceive the same shapes even if only one of them can read it.[10] In the case of tactile perception, the proponents of detachability argue that one need not have the concept of a sheepskin rug in order to feel something smooth and silky when running with a hand over it.[11]

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[3] Jerome Bruner and Cecile Goodman, 'Value and need as organizing factors in perception', *Journal of Abnormal and Social Psychology*, 42 (1947), 33-44.
[4] Ian Gordon, 'Gombrich and the psychology of visual perception,' in Richard Woodfield (ed.), *Gombrich on Art and Psychology* (Manchester: Manchester University Press, 1996), 60-77, 63.
[5] Fred Dretske, *Seeing and Knowing* (Chicago: The University of Chicago Press), 1969, 4-77.
[6] Dretske, *Seeing and Knowing*, 6.
[7] Ibid., 37.
[8] Michael Martin, 'Perception, concepts and memory' in Gunther York (ed.), *Essays on Nonconceptual Content* (Cambridge, Mass.: The MIT Press, 2003), 237-250, 246.
[9] Christopher Peacocke, 'Does perception have a nonconceptual content?', *The Journal of Philosophy*, 98 (2001), 239-264.
[10] Christopher Peacocke, 'Scenarios, concepts and perception', in York (ed.), *Essays*, 95-107, 123.
[11] Alan Millar, 'Concepts, experience and inference,' *Mind*, 100 (1991), 495-505, 496.

The opponents of detachability point out that 'if a person sees something at all it must look like something to him.'[12] A decade before Dretske's book David Hamlyn claimed that 'Anyone who can see things *must* be able to identify them in a number of circumstances. Otherwise we should not allow them the claim to see things at all'.[13] Detachability was strongly rejected by a number of authors writing on aesthetics, such as Nelson Goodman or David Pole.[14] In his recent book on perception, John Searle expressed this view by saying that a change of intentionality causes a change of phenomenology; if two identical cars are perceived by a person who owns one of them, and the optical stimulus that produces perception is the same, they will still not be perceived the same way.[15] In the case of non-visual perception, it has been pointed out that the knowledge that one's hand is running over a sheepskin rug is crucial for the feeling that it is something smooth and silky: '… if one had no concepts of smoothness and silkiness what on earth would the experience be like?'[16]

The implications of these views for the possibility of aesthetic formalism are direct. Hans Georg Gadamer in *Wahrheit und Methode* rejected aesthetic formalism by arguing that perception is inseparable from classification—that all seeing is 'auffassen als', as he put it, following the works of German psychologists Max Wertheimer and Wolfgang Köhler.[17] In the visual arts, formalists are interested in those aesthetic properties that can be attributed to aesthetic objects independently of how one classifies these objects, their perceptible non-aesthetic properties (for instance, shapes and colours), or relationships between such properties. Moderate formalism is the claim that such attributions of aesthetic properties are possible. This is certainly not going to be the case if aesthetic objects and their non-aesthetic properties cannot be even perceived without being classified. An author who claims that all seeing depends on classifications, and that no spatial properties of objects (e.g. shapes, colours) can be perceived independently of how objects are classified, can accept the contribution of spatial properties (or their relationships) to aesthetic properties only insofar as these spatial properties are classified. A good example is David Pole's discussions of aesthetic properties of architectural works. Pole systematically related their attribution to the expressive characteristics that he associated with the shapes and colours of these works, whereby this expressiveness is established as similarity to (classificability with) other objects to which one standardly applies the term that specifies the expression.[18] In his view, one attributes boldness to stone or ferroconcrete, gaiety or serenity to

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[12] G. N. A. Vesey, 'Seeing and Seeing As', *Proceedings of the Aristotelian Society*, New Series, 56 (1955), 109-124, 114.

[13] David Hamlyn, *The Psychology of Perception* (London: Routledge & Paul), 1957, 71.

[14] Nelson Goodman, *Languages of Art: an Approach to a Theory of Symbols* (Indianapolis: Hackett, 1976). David Pole, *Aesthetics Form and Emotion* (London: Dockworth), 1983, 134. Later he says that he does not endorse the formula fully, but nevertheless asserts that 'What we see, and quite literally see, depends on our equipment of concepts'. (177)

[15] Searle, *Seeing Things as They Are*, 37.

[16] David Hamlyn, 'Perception, sensation and nonconceptual content', in York (ed.), *Essays*, 251-262, 257.

[17] Hans-Georg Gadamer, *Wahrheit und Methode* (Tübingen: Mohr), 1990, 96.

[18] He describes this procedure by saying that expression is 'typically characterised in terms whose primary application is elsewhere'—in other words, they are classifiable as objects to which such terms can be applied. Pole, *Aesthetics*, 102.

facades the way such terms are applied to people and their actions (102); a façade is experienced as authoritative because we see it as a face (175); the massing of columns on a baroque church he associates with the generation of energy (167).[19] Through his book *Aesthetics, Form and Emotion* he regularly attributed aesthetic properties on the basis of the associations he has with the visible properties of architectural works and how he classifies them. Such a procedure is certainly consistent with his rejection of detachability—but it is also contrary to the formalist interest in the properties that can be attributed without such associations. Clive Bell's 'significant form', for instance, pertains to particular combinations of lines and colours that stir aesthetic emotions; it does not depend on associations one may have in relation to them.[20] Bell's discussion of such combinations of lines and colours is very similar to Leon Battista Alberti's, who used the term *concinnitas* for spatial and formal relationships between parts of a composition that move the soul.[21] The project of Geoffrey Scott's *Architecture of Humanism* was precisely to demolish a series of established ways to evaluate architectural works on the basis of associations one has about them—Scott described them as Romantic, Mechanical, Ethical and Biological fallacies—in order to affirm the validity of 'disinterested enthusiasm for form'.[22]

Historically, it is reasonable to think that the wide acceptance of the views that 'all seeing is seeing-as' and that 'there is no innocent eye' explains the disappearance of such formalist perspectives from philosophical aesthetics in the final decades of the twentieth century. Authors need not mention these claims explicitly, but one can note the tendency to present *some* examples of aesthetic properties whose attribution depends on categorization and then assume that they *all* do—a twist in the argument that makes sense if it is assumed that all perception is classification-dependent. In a widely discussed article published in 1970, Kendall Walton presented the case for the claim that the attribution of aesthetic properties *sometimes* depends on categorization and then concluded with the general claim that we cannot attribute such properties if we know nothing about the origin of an artwork and cannot categorize it.[23] Similarly, Robert Wicks in 1988 discussed the example of a mosaic to which different aesthetic properties could be attributed depending on categorization, and then concluded with the general claim that 'one cannot specify the aesthetic properties of artworks independently of a presupposed categorization'.[24] More than a decade later, Nick Zangwill complained that '[t]he sin of faulty generalization plagues discussions of formalism'[25]—but these generalizations do not appear as faulty if placed in the context of the beliefs about visual perception that were widespread at the time. Arguably, the moderate formalist position that Zangwill formulated in his *Metaphysics of Beauty* in 2001 could have become

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[19] Similarly, ibid., 92, 95, 97.
[20] Bell, *Art*, 8, 16.
[21] For a systematic survey of Alberti's use of the term *concinnitas* and its analysis see [Author, removed for anonymity.]
[22] Geoffrey Scott, *The Architecture of Humanism* (New York: Norton), 1974, 28.
[23] Kendall Walton, 'Categories of Art', in Joseph Margolis (ed.), *Philosophy looks at the Arts* (Philadelphia: Temple University Press, 1977), 94, 102, 109.
[24] Robert Wicks, 'Supervenience and aesthetic judgment', *Journal of Aesthetics and Art Criticism,* 46 (1988), 509-511, 509.
[25] Nick Zangwill, *Metaphysics of Beauty* (Ithaca: Cornell University Press, 2001), 104.

credible only once the idea of detachability of visual experience from the conceptual contents associated with it became credible again as a result of the collateral debate about non-conceptual content that was going on among philosophers of perception. Moderate formalism would be an impossible position if all seeing were conceived as seeing-as.

Wider implications of the rejection of formalism

It was contemporary psychological research that motivated Ernst Gombrich to insist in his 1960 book *Art and Illusion* that 'there is no innocent eye' and that perception is inseparable from classification. Gombrich was not merely saying that our perception is *sometimes* affected by our mental processes; as he put it, 'All perceiving relates to expectations and therefore to comparisons'.[26] Elsewhere he articulated this thesis by saying that '[t]o perceive is to categorize, or classify'[27] and he maintained that it made no sense to discuss 'a separation between what is "given"—the so-called sense data—and what is merely imagined. ... memory is involved in almost all perception, for except under highly unusual conditions, we do not simply see but recognize what we see'.[28] He dismissed the approaches that differentiate between sensation ('mere registering of stimuli') and perception (understood as its interpretation) as 'nineteenth century psychology'.[29] About the same time, the same views were promoted in architectural theory by Christian Norberg-Schulz, who insisted that human visuality is *always* dependent on non-visual cognitive processes, which he identified with the recognition of meanings. As he put it, 'things are always perceived with a *meaning*' while perception itself is the recognition of things known from experience.[30] '[P]erception is dependent upon our conceptions; we perceive the sum of our own experiences. … the given world consists of the objects we know.'[31] In architectural historiography this meant that architectural works can be studied only *qua* bearers of meanings. Norberg-Schulz's own approach to architectural history consisted in reconstructions of the meanings historically associated with architectural works.[32]

There are, nevertheless, important reasons why the rejection of detachability may be seen to produce disturbing results in various artistic and aesthetics-based activities. Applied to art- and architectural historiography, the claim that all seeing is seeing-as suggests that we perceive shapes, colours, volumes or spaces in radically different ways than people did in the past, because we classify them differently. It is then unclear how one can, for instance, recognize what is represented in paintings from radically different cultural environments. How is it that we can recognize animals in Palaeolithic cave paintings? Had Palaeolithic painters perceived these animals differently than we

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[26] Ernst Gombrich, *Art and Illusion* (London: Phaidon, 1960), 301.
[27] Gombrich, Ernst, 'Image and code. scope and limits of conventionalism in pictorial representation,' cited according to the version in E. H. Gombrich, *Image and the Eye* (London: Phaidon, 1982), 278-297, 286.
[28] Ernst Gombrich, 'Illusion and art' in R. Gregory and E.H. Gombrich, eds, *Illusion in Nature and Art* (London: Duckworth, 1973), 193-243.
[29] Gombrich, *Art and Illusion*, 15, 260.
[30] Christian Norberg-Schulz, *Intentions in Architecture* (Oslo: Universitetsforlaget, 1966), 168, 37.
[31] Norberg-Schulz, *Intentions*, 37.
[32] Norberg-Schulz, *Intentions*, 86-147.

do, we would not be able to recognize in their paintings the animals that they represent. Similarly, when it comes to the preservation of historical buildings: if a building has been restored in a way that produces the same optical stimulus when looked at as it did once, is it going to be perceived the same way as it was originally?

More generally, assumptions about detachability have consequences for a wide range of practices in art- and architectural world. Consider the evaluation of students' works in an architecture school. Should their aesthetic evaluation be based on visual-spatial properties or on the stories pertaining to symbolism, expression, or representations that can be associated with these properties? Considering the important role that 'crits' or 'reviews' (situations in which students publically present and talk about their projects) play in English-speaking architecture schools, the dilemma is inescapable. Should architecture professors grade students on the basis of what they have designed (many people would say that this is the genuine architectural skill) or should the concept of 'design' be expanded to include how they talk about their designs and how this talk positions them in the world of architectural profession? If all seeing is seeing-as, can architecture professors actually see their students' works independently of their knowledge about these students and their enculturation into the environment of the profession (including appropriate dressing, talking, or in Sydney, as Garry Stevens pointed out, their participation in the yearly architects' sailing regatta)?[33] The dilemma has profound implications for architects' understanding of their discipline: if the criteria of aesthetic-architectural evaluation are inseparable from the wider enculturation of the architect (and the studio critic) then the understanding of architectural quality as something rooted exclusively in architectural design itself should be abandoned.

Similarly, consider to the use of classical systems of ornamentation and design in contemporary architecture. Since the 1980s many architects have abandoned modernism in favour of classicism—one can actually talk about contemporary classicist movement. If we attribute certain aesthetic properties to a Renaissance building, does it mean that the same properties will be attributed to its perfect twenty-first century replica? The dilemma does not pertain merely to the full replication of individual buildings, but to the use of specific design procedures and systems, such as the classical orders (Doric, Ionic, Corinthian). On one understanding, the orders as systems of ornamentation have evolved through history by gradual improvements made by generations of architects and this should justify their use today as well. Obviously, this perspective is indefensible if all seeing is relative to what we know about the history of the object seen—but it becomes credible if some properties of objects can be perceived, and possibly some aesthetic properties can be attributed, independently of how we classify works of architecture.

What the debate is not about

[33] During the 1990s this dilemma was formulated as a question about the role of cultural capital in architectural education. See Garry Stevens, *The Favoured Circle. The Social Foundations of Architectural Distinction* (Cambridge, Mass: The MIT Press, 2002).

It is also important to state here what the debate about detachability is *not* about. The problem of detachability pertains to genuine visual experience. By 'genuine' I mean that it does not pertain to the metaphorical or extended use of verbs such as 'see', 'look' or 'perceive'. 'To see', for instance, has a number of meanings that are not visual—such as 'to discern or deduce after reflection' or 'to escort or conduct someone to a place' or 'to ensure'—and such meanings of this verb are not discussed here. Similarly, if 'to see' is taken to mean 'to recognise', then all such seeing certainly depends on classification.

In the existing literature on the philosophy of perception it is generally agreed that the way the contents of a person's perceptual experience are *reported* need not follow (report) that person's classifications.[34] It is acceptable to say, for instance, that a person saw the company's CEO without being aware whom he saw. Insofar as that person's perception was affected by the way he classified the person he met, the classification as CEO played no role, although it does play a role in the way other people may describe the encounter in their communication. It is perceiver's own classifications that are said to play a role in perception, and they do not necessarily coincide with classifications other people would use in order to describe that act of perception.

The problem of the detachability of visual experience is not identical with the problem of *non-conceptual content* that has been widely discussed in the analytic philosophy of perception in recent decades. Admittedly, since the capacity to classify is an important aspect of concept possession, those examples of non-conceptual perception in which perception is said to be independent of classification will also exemplify the detachability of visual experience. For instance, José Bermudez's example in which the same basic perceptions are attributed to a child and an ecclesiastic confronting a religious painting is an example of both non-conceptual content and the detachability of perception from conceptual content.[35] Nevertheless, the philosophical debate about the non-conceptual content of perception pertains to an understanding of concept possession that goes far beyond the capacity to classify and includes the capacity to form propositions and inferences.[36] The participants in this debate have concentrated on concepts as ingredients of beliefs, propositions and inferences.[37]

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[34] This point is generally agreed upon by philosophers of perception. See for instance José Bermúdez, and Arnon Cahen, 'Nonconceptual mental content', *The Stanford Encyclopedia of Philosophy*, <https://plato.stanford.edu/entries/content-nonconceptual/> accessed on 7 August 2017; Dretske, *Seeing and Knowing*, 10; Robert Stalnaker, 'What might nonconceptual content be?' in York (ed.), *Essays*, 95-106, 105; Alan Millar, *Reasons and Experience*, 14.

[35] José Bermudez, 'Peacocke's argument against the autonomy of nonconceptual representational content' in York (ed.), *Essays*, 293-308.

[36] According to T. M. Crowther, 'Two conceptions of conceptualism and nonconceptualism', *Erkenntnis*, 65 (2006), 245–276, 248, the possession of the concept F requires that one is able to make the inference from the judgement that A is F, to the judgement that A is G, where being G is an analytic (or more broadly 'conceptual') consequence of some thing's being F. Purely recognitional capacity (that, Crowther reminds, Peter Geach used the phrase 'brutely causal') is not enough for this.

[37] Andy Clark, 'Constructionism and Cognitive Flexibility', in York (ed.), *Essays*, 165-182, 173 says that Evans' Generality Constraint insists 'that to truly possess a concept you must be able to think all the (semantically sensible) combinations which it could enter into with other concepts you possess. Thus if you can really think Fa, and really think Gb, you must (as a matter of stipulation) be able to think Fb and Ga.' A frog may have the proto-thought 'there is a fly over there' and be able to classify flies as flies, yet be incapable of having any other thought about flies, and

The debate was motivated by the need to explain our ability to have beliefs that are justified by perceptual experience.[38] Additionally, the capacity to classify that is relevant when discussing detachability is a *mental* capacity; concepts discussed by the proponents and opponents of non-conceptual content are (often) conceived of as extra-mental entities that exist in the world independently of human mental processes.[39] Finally, the problem of non-conceptual content is normally defined relative to the *possession* of concepts and not their *use* in classification.[40] An example is the argument about the fine-gradedness of visual experience: Gareth Evans pointed out that it is impossible to have concepts of all shades of colours that one can sensibly discriminate.[41] John McDowell responded by pointing out that one can still create corresponding concepts by saying 'this shade of the colour'.[42] In other words, even if one does not possess the concept of a specific shade when perceiving it (and cannot classify it accordingly), one can create such a concept (and acquire the capacity to classify) in the process of perception. When it comes to the detachability of perception from classification, this response does not solve the problem since the debate pertains to the question of whether one can perceive independently of the concepts (classificatory capacities) that one already has. The fact that one can form such concepts subsequently is irrelevant.

Also, the dilemma about detachability is not quite the same as the dilemma about the *(im)penetrability of visual perception*. In an influential article published in 1999 Zenon Pylyshyn argued in favour of the impenetrability of (at least the early stages of) visual perception for the top-down influences of higher cognitive processes (conceptual thinking, recognition of things known and so on).[43] Since the publication of his paper there has been a steady production of empirical research that endeavoured to confirm experimentally individual cases of top-down penetration of human vision by higher cognitive processes.[44] It is

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consequently not posses the concept of a fly. Christopher Peacocke, 'Does perception have a nonconceptual content?', *The Journal of Philosophy*, 98 (2001), 239-264, 243, says that by 'conceptual' he means the content of a kind that can be the content of judgment and belief. Concepts are constituents of those intentional contents which can be the complete, truth-evaluable, contents of judgment and belief.)

[38] Sean Dorrance Kelly, 'Demonstrative concepts and experience', *The Philosophical Review*, 110, (2001), 397-420, 402.

[39] John McDowell, *Mind and World* (Cambridge, Mass.: Harvard University Press,1994), 26: 'although reality is independent of our thinking, it is not to be pictured as outside an outer boundary that encloses the conceptual sphere'.

[40] James van Cleve, 'Defining and defending nonconceptual contents', *Philosophical Perspectives*, 26 (2012), 411-430, 411 cites definitions by Michael Tye, Tamar Gendler, John Hawthorne, José Bermudez, Tim Crane and Bill Brewer that all insist on the possession of concepts. Athanassios Raftopoulos, 'The cognitive impenetrability of the content of early vision is a necessary and sufficient condition for purely nonconceptual content', *Philosophical Psychology*, 27 (2014), 601–620, 609, who is concerned with the relation between impenetrability and nonconceptuality, says that a person's state S with content p has nonconceptual content if and only if the person need not possess or apply the concepts used to characterize p.

[41] Gareth Evans, *The Varieties of Reference* (Oxford: OUP), 1982, 229.

[42] McDowell, *Mind and World*, 57.

[43] Zenon Pylyshyn, 'Is vision continuous with cognition? The case for cognitive impenetrability of visual perception', *Behavioural and Brain Sciences*, 22 (1999), 341-423. Raftopoulos, 'Cognitive impenetrability'.

[44] See the list of 178 such papers compiled by Chaz Firestone: <http://perception.yale.edu/Brian/refGuides/TopDown.html> accessed on18 March 2017.

recognized that these studies are inconclusive.[45] In an extensive critical review in 2016 Chaz Firestone and Brian Scholl have argued that the empirical findings that support them are actually generated by a small number of methodological pitfalls that they describe.[46]

For our discussion here it is important to note the scope of the debate about penetrability. The core question in the debate about penetrability is whether higher-level cognitive processes *can* penetrate (i.e. whether they *sometimes* penetrate) the processes that generate human vision.[47] As Firestone and Scholl point out, if such effects of cognition on perception were discovered, this would revolutionize the scientific understanding of perception. Should this be the case, one could say that *some* seeing is seeing-as—but even then, one could not say that *all* seeing is seeing-as. A proponent of moderate formalism, such as the position described by Zangwill in his *Metaphysics of Beauty*, can comfortably accept this view. If only some seeing were seeing-as, this could not preclude the possibility that perceptual contents, and consequently the attribution of some aesthetic properties, can be (and probably mostly are) independent of classification. This outcome does not refute the detachability thesis, which opposes the view that all the contents of our perception depend classification.

Constancies

In relation to the discussion in the previous section, it is useful to point out here that the phenomenon of constancies in visual perception cannot be used to refute the detachability thesis, although this was a widespread belief during the middle decades of the twentieth century. Psychologists say that visual perception is affected by constancies when the phenomenal image is not organized according to perspectival rules, but replicates relative relationships between the sizes of objects in the perceptual field regardless of their distance from the observer.[48] For instance, the visual image of a person approaching the observer is said not to increase in size when the distance changes from ten to five yards.[49] Circles not seen orthogonally (food plates on a table) are said not to be perceived as ellipses, as they should be according to perspective, but as full circles.[50] Chairs of equal size and shape at different distances from the observer are perceived as having phenomenally the same size.[51] While the retinal image follows the geometry of light and is perspectivally organized, phenomenal visual experience need not reproduce this organization, the way it need not reproduce

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[45] Dustin Stokes, 'Cognitive Penetration and the Perception of Art', *Dialectica* (68, 2014), 1-34, 5.
[46] Firstone and Scholl, 'Cognition'.
[47] Firestone and Scholl, 'Cognition', 5.
[48] For a contemporary survey of research on constancies see Dejan Todorović, 'Constancies and illusions in visual perception,' *Psihologija*, 35 (2002), 125-207. I delimit discussion here to the constancies of shape do not discuss the constancies of colour, though similar reasoning could be applied to them as well.
[49] Wolfgang Köhler, *Gestalt Psychology* (New York: The New American Library, 1947), 44.
[50] Köhler, *Gestalt Psychology*, 45; Robert Thouless, 'Phenomenal regression to the real object', *British Journal of Psychology*, 21 (1931), 339-359.
[51] Ten Doeschate, *Perspective. Fundamentals, Controversials, History* (Nieuwkoop: B. De Graaf, 1964), 74.

the fact that the retinal image is upside down.[52] Obviously, in all such situations the organisation of the phenomenal experience follows what the subject believes (consciously or unconsciously) about the size and the shape of the objects perceived; classification determines the way objects are perceived. Constancies in phenomenal visual experience can be present insofar as the representation of a given object depends on what we know about its size and shape. If the attribution of aesthetic properties is based on such phenomenal experience, then it cannot be independent of classification.

Constancies were emphasized by *Gestalt* psychologists in their struggle against introspectionism, understood as an approach that attempts to study pure sensations, independent of the attitudes of the observer.[53] The link between *Gestalt* psychology and the views of Gombrich and Norberg-Schulz should be obvious—a statement such as Köhler's that 'objects exist for us only when sensory experience has become thoroughly imbued with meaning'[54] goes hand in hand with the view that *all* seeing is seeing-as. Historically, dogmatic emphasis on constancies produced some curious debates, such as the one about the way receding railway tracks are perceived. If all seeing is seeing-as and considering that we know that tracks are parallel, receding railway tracks should not be perceived as converging—and some authors were indeed prepared to bite the bullet and claim that they are perceived as parallel.[55] (The problem of constancies is independent of dilemmas pertaining to perspective as a tool of visual communication. Perspective is a geometrical procedure to generate the same drawing as the one that would be made if one drew on a piece of glass the lineaments of the objects seen through the glass.[56] Such a drawing delivers to the eye the same disposition of light rays that the eye would receive from the lineaments of the object perceived. The presence or absence of constancies in the phenomenal experience is a different question altogether.)

However, the fact that people see constancies does not eradicate their ability to see perspectivally (and thus independently of what is known): 'The specific nature of the local proximal stimulus [i.e. the perspectival image on the retina] is available in some form to consciousness and it is not swallowed up, so to speak, by the more complex interactional processes of which it is only one part.'[57] At least since the 1950s it has been known that psychological subjects

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[52] V. R. Carlson, 'Instructions and perceptual constancy judgments', in William Epstein (ed.), *Stability and Constancy in Visual Perception* (New York: John Wiley1977, 217-254), 218.
[53] Köhler, *Gestalt Psychology*, 54; William Epstein, 'Historical Introduction,' in Epstein (ed.), *Stability and Constancy*, 1-22.
[54] Köhler, *Gestalt Psychology*, 43)
[55] Irvin Rock, 'In defence of unconscious inference', in Epstein, ed., *Stability and Constancy*, 321-372, 347: 'If we stress constancy of size, as has been tried in the literature since the Gestalt revolution, we cannot explain the vivid impression of convergence that very observer will tell you he has.' Marx Wartofsky, *Models. Representation and Scientific Understanding* (Dordrecht: D. Reidel, 1979), 217 and Carlson, 'Instructions', 220, claim that receding railways lines are not seen to converge; Alfred Holway and Edwin Boring, 'Determinants of apparent visual size with distance variant', *American Journal of Psychology*, 54 (1941), 21-37, 21 and Irvin Rock and William McDermot, 'The perception of visual angle', *Acta Psychologica*, 22 (1964), 119-134, 132, claim that they are.
[56] Goodman, *Languages*, 10-19, attempted to argue that this was not the case, but his geometrical reasoning was incorrect—he did not grasp the concept of the picture plane. For an analysis of his geometrical errors see [Author, removed for anonymity].
[57] Rock and McDermott, 'Visual angle', 132.

will report what they see depending on the instructions they get—they can be instructed to see with constancies or without them.[58] Also, once the cues that provide additional information to subjects (distance, slant) are excluded (for instance when the light stimulus is very short) constancies are not perceived.[59] In other words, the fact that perception depends on classification insofar as one sees constancies does not eliminate the capacity to see without constancies and independently of classification.

Arguments

The question of whether human perception is sometimes penetrated by non-visual cognitive processes is a matter for empirical psychological research. However, the undetachability thesis—that the view that *all* perception is *always* dependent on classification (and thus on higher cognitive processes) and that all seeing is seeing-as—is a much stronger thesis that can be approached philosophically. In the existing literature there are three arguments against this view.

Edmund Husserl in his *Logical Investigations* argued against the view that when one perceives an object with a certain property, one does not perceive the specific occurrence of that property in the object, but rather, the similarity of that object to other objects that have that same property.[60] In other words if I perceive a white ball, I do not perceive *its* whiteness or sphericality but its similarity to (i.e. I classify it together with) other white and spherical things. Such a view, Husserl points out, leads to infinite regress. If one asks what it is to perceive such similarities, the answer has to be their similarities to other similarities, and to perceive these similarities one needs to perceive their similarity to other similarities and further *ad infinitum*.

The second argument pertains to the fine-gradedness of perceptual experience—the fact that our capacities for perceptual discrimination outstrip our capacities for recognition, identification or classification.[61] For instance, I can perceive the curved tops of a mountain range in the distance without having ever perceived such a curve before. We have already seen that this kind of argument has been invoked in the debate about non-conceptual content. Among psychologists, Diana Raffman pointed out that 'It is a truism of perceptual psychology and psychophysics that, with rare exceptions, discrimination along perceptual dimensions surpasses identification'.[62]

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[58] Alberta Gilinsky, 'The effect of attitude upon the perception of size', *American Journal of Psychology*, 68 (1955), 173-192, 178; Carlson, 'Instructions', 217, Todorović, 'Constancies' 152, 164.

[59] Gilinsky, 'Perception of size', 173; H. Leibowitz and L. E. Bourne, 'Time and intensity as determiners of perceived shape', *Journal of Experimental Psychology*, 51 (1956), 277-281, 277; William Epstein, Gary Hatfield, Gary and Gerard Muise, 'Perceived shape at a slant as a function of processing time and processing load', *Journal of Experimental Psychology*, 3 (1977), 473-83; Todorović, 'Constancies', 152, 164.

[60] Edmund Husserl, *Logische Untersuchungen,* (*Husserliana* vol. XIX/1), The Hague: Martinus Nijhoff (1984), 197-207.

[61] Diana Raffman, 'On the persistence of phenomenology', in Thomas Metzinger, ed., *Conscious Experience*, Paderborn: Schoningh Verlag (1995), 293-308, 293. Also, Jérôme Dokic, and Élisabeth Pacherie, 'Shades and Concepts', *Analysis*, 61 (2001), 193-202, 198.

[62] Raffman, 'Persistence', 294.

Finally, our perception does not always follow what we believe that we see. For instance, we perceive optical illusions even when we know that they are illusions. Tim Crane's example is the 'waterfall illusion': when one looks for a long time at a constant movement (such as a waterfall) and then turns the eyes to some stationary object, one has the impression that that the object is both moving and stationary, although one knows that the object is stationary.[63] In such cases, perception clearly contradicts what we know about and expect from the object and how we classify it.

Seeing *simpliciter*

These arguments make it hard to endorse the strong thesis that *all* seeing is seeing-as. The question we need to consider is, which properties of objects one can expect to be perceived independently of classification. The attribution of formal-aesthetic, classification-independent properties necessarily depends on these properties. The most obvious candidates are shapes (lineaments and surfaces) and colours.

Consider the visual phenomena that allow multiple, mutually exclusive conceptual recognition—such as the duck-rabbit or an axonometric drawing of a cube that can be perceived as two rhombuses and a square. In Ludwig Wittgenstein's terminology, these shapes can be seen under different aspects.[64] The important point is that in such situations the shapes or colours that are perceived do not change: one may perceive a duck-rabbit as a duck or as a rabbit, but the shape that is perceived is the same. If one puts tracing paper over a duck-rabbit drawing and copies it once while seeing it as a duck, and another time while seeing it as a rabbit, the resulting drawings will be the same. The perceived shape remains unaltered by conceptualization. Similarly, in the case of Searle's example with cars: imagine that a person who owns one of two identical cars and looks at each of them (under identical conditions) through a glass plate and draws on the plate what he or she sees through it. If the optical stimulus is identical, the drawings should be the same, which could not happen if the person did not perceive the shapes of the cars as identical. Certainly, human beings could not have survived in their physical environment if they did not possess the ability to see the shapes of things in a way that is unaffected by their beliefs or expectations.

In line with Zangwill's moderate formalism, one may thus define formal aesthetic properties as those whose attribution does not depend on classification; moderate formalism is then the claim that attributions of such properties can be made and be true.[65] Those properties whose presence depends purely on objects' shapes and colours would be among them. It may be argued that even if the perception of shapes and colours precedes classification, this happens within such a short time that makes it unlikely that the attribution of

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[63] Tim Crane, 'The waterfall illusion', *Analysis*, 48 (1988), 142-147.

[64] Wittgenstein, *Philosophische Untersuchungen*, part II, section 11. See also Malcolm Budd 'Wittgenstein on Seeing Aspects', *Mind*, 96 (1987), 1-17.

[65] Contrary to Zangwill, *Metaphysics*, 56, I do not think that that material properties (in addition to sensory properties and dispositions to provoke responses) should be said to determine formal aesthetic properties. The knowledge of the material a thing is made of is always conceptual and would make the attribution of aesthetic properties dependent on what we know about the object.

aesthetic properties could occur in that period. The argument has been recently made by Ladislav Kesner: conceptual processing, he points out, starts as quickly as 150 ms after stimulus onset—consequently, the eye is innocent for a very brief period of time.[66] The point is well made: certainly, creatures that took long time to process (subsume under concepts) the information from their senses about the objects they encounter could not have survived through evolution. If Kesner is right, the attribution of aesthetic properties independent of classification could occur, but it would be so short that it would be unnoticable. But the fact that the brain is quick to interpret what the eyes see—that it quickly adds an additional interpretative level—does not mean that it actually dictates or that it can change what the eyes see. The actual shape of duck-rabbit remains the same, regardless of how we conceptualise what we see. In some cases, conceptual thinking possibly influences one's phenomenal experience—or possibly not, if Firestone and Scholl are correct in their analyses of the psychological research that asserts such influence—but even if this is the case, the fact that some seeing may be seeing-as does not justify the claim that all seeing is seeing-as. Consequently, insofar as shapes and colours remain perceived the same way after classification (and after subsequent reclassifications), there is no reason why one could not attribute them aesthetic properties independently of classification. A drawing of a duck-rabbit can be elegant independently of whether it is seen as a duck or a rabbit.

A qualification, however, needs to be made here regarding the term 'classification.' It refers to genuine classifications that derive from conceptual cognitive capacities. It should not be construed to include, for instance, differentiation between lines and surfaces that occurs as a result of different reactions to stimuli in the light-sensitive cells of the retina—although someone might use it in that sense. Counting such 'classifications' of lines, angles, surfaces and so on and seeing-as, would make the thesis that all seeing is seeing-as into a platitude. A similar caveat is important when it comes to three-dimensional shapes. Our visual perception starts with the perspectival image of external objects on the retina. This image is two-dimensional, and the brain only needs to convert it into an experience of a three-dimensional object. A single perspectival image can be a picture of infinitely many different (dispositions of) spatial objects. For instance, what one perceives as a line in perspective can be actually a great number of shorter, unconnected lines in real space. These lines can be at various distances from the eye, but their image on the retina will be a single line as long as they are all in the same plane as the eye and the ends of each two of them collinear with the eye. In a widely discussed experiment Adelbert Ames arranged a criss-cross of wires in a room so that their ends seemed to coincide when seen through a peep-hole and the wires seemed to form a chair.[67] They were indeed perceived so by the subjects who looked through the peephole, which led Gombrich and Nelson Goodman to argue that what people perceive is arranged according to what they can recognise.[68] Today, it is known that this has

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[66] Ladislav Kesner, 'Exercising the demons of collectivism in art history', *Journal of Art Historiography*, 15 (2016), 9-10.

[67] W. H. Ittelson, *The Ames Demonstrations* (New York: Hafner, 1968).

[68] Goodman, *Languages*, 11-12; Ernst Gombrich, 'Mirror and Map: Theories of Pictorial Representation', in Ernst Gombrich, *The Image and the Eye* (London: Phaidon Books 1982), 172-214, 191; Ernst Gombrich, 'Western art and the perception of space', in *Space in European Art,*

nothing to do with recognition: the brain uses a set of simple rules (so-called 'constraints') when it constitutes representations of three-dimensional objects from two-dimensional retinal images.[69] For instance, if something appears as a straight line in the retinal image, it is interpreted as a three-dimensional straight line, even though it may be a set of unconnected smaller lines. Similarly, the brain assumes that two points whose projections on the retinal image are closer to each other than to the projection of a third point are also closer to each other in real space. Rules like these can generate mistakes (and following them we indeed sometimes misperceive objects) but in most cases these errors are easily corrected as soon as one changes the viewing position. In any case, they do not depend on the recognition of objects (based on one's previous experiences or cultural background)—they depend on geometrical analysis. It is therefore important to point out that the word 'classification' does not apply to the identification of the geometrical elements of that analysis (points, lines). Differentiation between geometrical elements of visual experience that happens in the visual module should not be taken to count as 'classification' in the sense this word is used when one talks about formalism as the view that aesthetic properties can be attributed independently of classification. This kind of caveat has a long history in formalist aesthetics. In less technical terms, Clive Bell made a similar point when he insisted that to appreciate a work of art one needs a knowledge of three-dimensional space in addition to the sense for form and colour; insofar as 'the representation of three-dimensional space is to be called "representation"', he says, he agrees 'that there is one kind of representation which is not irrelevant'.[70]

The assumption is thus that the processes that enable the understanding of two dimensional (perspectival, including retinal) images as representations of three-dimensional objects do not depend on conceptual cognitive capacities. An interesting implication for formalist aesthetics is the multiplicity of aesthetic objects in the case of perspectival representations. Let us consider a historical example. Leon Battista Alberti says in his *De pictura* that '[b]eauty is an elegant relationship between parts of bodies and the grace that comes about from the composition of surfaces'.[71] The implication is that the beauty of a painting is independent of its representational content or how we interpret it—it results purely from the way its surfaces are put together. While there may exist a tendency to expect Renaissance painters to be motivated by the representation of nature, Alberti strongly warns that a painting enthusiast, *studiosus picturae*, will be motivated by beauty in the first place and not similarity to the things

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Council of Europe Exhibition edited by Kokuritsu Seiyo Bijutsukan, 16-28, (Tokyo : Yomiuri Shinbunsha, 1987), 16-17.

[69] For a survey of such 'constraints' see David Hoffman, *Visual Intelligence* (New York: Norton, 1998). See also Zenon Pylyshyn 2006. *Seeing and Visualizing. It's not what you think* (Cambridge, Mass.: MIT Press, 2006), 107.

[70] Clive Bell, *Art* (Oxford: Oxford University Press), 1987, 27.

[71] 'Ex superficiarum compositione illa elegans in corporibus concinnitas et gratia extat, quam puchritudinem dicunt', Leon Battista Alberti, *De pictura*, 2.35. According to Leon Battista Alberti, *Das Standbild Die Malkunst Grundlagen der Malerei*, parallel Latin-German edition (Darmstadt: Wissenschaftliche Buchgeselschaft, 2000). For the translation of *concinnitas* as 'relationship between parts' see the analysis in [Author, removed for anonymity].

represented.[72] (This formalist reading of Alberti can be additionally supported by referring to his formalist programme in *De re aedificatoria*, but if some readers disagree with it, they should take my discussion here as hypothetical, and presented in order to introduce, by describing a historical example, the problem of multiple attribution of formal aesthetic properties. [73]) Considering that in the same treatise Alberti describes, for the first time in history, the use of perspectival representation in painting, one may ask: do these surfaces, whose relationships generate beauty, belong to the painting itself, or to the objects represented in the painting? Is a perspectivally-representing painting beautiful because of the composition of surfaces on the canvas or because the composition of surfaces of the objects that the painting perspectivally represents? A plausible response is that it is unnecessary to phrase the question in either-or terms. It is reasonable to say, and it may happen, that a beautiful combination of colours and surfaces on a canvas perspectivally represents an uninviting spatial environment, or that a beautiful assembly of spatial objects is perspectivally represented by an insipid combination of surfaces in a painting. Further complications can arise when other paintings or mirrors are perspectivally represented in a painting. All this suggests that the ascription of formal aesthetic properties can be multi-layered.

Something similar happens in architecture, when one considers the relationship between the building conceived of as a physical object and the space it forms. Starting with August Schmarsow, architectural theorists have often argued that what matters in architectural works is not their physical structure (the building) but the spaces that it forms—that the physical building is merely a tool to form spaces.[74] This would be the view that the actual aesthetic object of architecture is the negative of the building's materiality. For instance, in the case of the internal space of a baroque church, we are not supposed to think of the ornaments as attached to the wall (since the physical structure is irrelevant) but as parts of the surface that forms the space. Aesthetic properties are then attributed to the (shape of the) space thus formed. Similarly, facades of a city square should not be considered as parts of the buildings they physically belong to, but as elements that form and constitute the square as an aesthetic object itself. The view sounds plausible, and one is tempted to admit that in many cases aesthetic properties are attributed to the spaces buildings form and not buildings themselves. (One naturally thinks of the Pantheon; Guarino Guarini's churches are famous for his internal domed spaces but certainly not for his facades.) But in other cases, it is buildings themselves that matter. Here too, there is no reason why an architectural work could not be attributed different formal aesthetic properties when it comes to the building and to the spaces that the building forms.

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[72] '… picturae studiosus … non modo similitudinem rerum, verum etiam in primis ipsam pulchritudinem diligat.' Alberti, *De pictura*, 3.55.

[73] [Author, removed for anonymity.]

[74] August Schmarsow, 'Raumgestaltung als Wesen der architektonischen Schöpfung', *Zeitschrift für Ästhetik*, 9 (1914), 66-95.

Conclusion

Situations in which the contents of visual experience are affected by that what we know or expect may indeed exist and be subject to empirical research. The idea that *all* of human visuality is determined by such conceptual contents and inseparable from them is however, profoundly counter-intuitive: beings who could see only what they know and expect could not survive in real life. Certainly, survival also requires the brain to work very fast and quickly provide its interpretations of the things the eyes see. Nevertheless a different (new) classification, as in the case of duck-rabbit, does not change the visual content of visual experience. Except in the cases when the new classification re-interprets what one believes to have misperceived, it is a re-interpretation of the visual material that remains the same.

Detachability is a *conditio sine qua non* of aesthetic formalism, but it is a necessary, not a sufficient condition for the existence of aesthetic properties that could be attributed to aesthetic objects independently of how these objects are classified. Whether formal aesthetic properties exist, or whether any kind of aesthetic properties exist at all, is another question altogether. It is, however, fair to say that the dismissal of aesthetic formalism on the basis of the argument that the totality of human visual experience is undetachable from the classifications the perceiver operates with, that all seeing is seeing-as, cannot be sustained.