

FRANCISCO PEREIRA

Conceptual Content and Unattended Visual Features

Ideas y Valores, vol. 58, núm. 140, agosto, 2009, pp. 119-141,

Universidad Nacional de Colombia

Colombia

Available in: <http://www.redalyc.org/articulo.oa?id=80915466006>



*Ideas y Valores,*

ISSN (Printed Version): 0120-0062

[revideva\\_fchbog@unal.edu.co](mailto:revideva_fchbog@unal.edu.co)

Universidad Nacional de Colombia

Colombia

[How to cite](#)

[Complete issue](#)

[More information about this article](#)

[Journal's homepage](#)

[www.redalyc.org](http://www.redalyc.org)

Non-Profit Academic Project, developed under the Open Access Initiative

# CONCEPTUAL CONTENT AND UNATTENDED VISUAL FEATURES\*

*Contenido conceptual y elementos visuales desatendidos*

FRANCISCO PEREIRA\*\*  
Universidad Alberto Hurtado - Chile

## ABSTRACT

McDowell (1994) proposed a philosophical theory about perceptual content –call it “conceptualism”– that states that in every case the content of a visual experience necessarily involves concepts that fully specify every single feature consciously and simultaneously available during the experience. In this paper I will question conceptualism, arguing that some visual experiences carry information about so many objects, properties and relations at the same time that it is unlikely for subjects to possess and implement concepts for every feature represented simultaneously by the experience at that time. If this is the case, then McDowell’s conceptualism is insufficiently grounded.

*Keywords:* McDowell, perceptual content, conceptualism, experiential richness, sensory memory, attention.

## RESUMEN

McDowell (1994) propuso una teoría filosófica sobre el contenido perceptual –“conceptualismo”–, que establece que, en todos los casos, el contenido de una experiencial visual necesariamente contiene conceptos que especifican a cabalidad cada uno de los elementos disponibles a nivel consciente y de manera simultánea durante una experiencia. En este artículo cuestionaré la tesis conceptualista, argumentando que algunas experiencias visuales conllevan información acerca de tantos objetos, propiedades y relaciones en un instante, que parece improbable que los sujetos posean e implementen conceptos para cada uno de los elementos representados de forma simultánea por la experiencia en ese momento. Si esto es así, entonces el conceptualismo de McDowell carece de suficiente respaldo.

*Palabras clave:* McDowell, contenido perceptual, conceptualismo, riqueza experiencial, memoria sensorial, atención.

---

*Artículo recibido: 30 de octubre de 2008; aceptado: 7 de noviembre de 2008.*

\* I want to express my gratitude to the audiences of the 11 International Colloquium of the Chilean Society for Analytic Philosophy (Santiago, Chile) and the 11 Workshop on Language, Logic and Cognition (Córdoba, Argentina).

\*\* [francisco@correo.org.uk](mailto:francisco@correo.org.uk)

## 1. Introduction

McDowell (1994) takes the traditional analogy between perception and belief to a different level of discussion arguing that the contents of visual experiences and the contents of belief must be of one and the same fundamental kind, namely conceptual. You might think that perceptual contents are *conceptual* only in the sense that they cannot exceed our conceptual repertoire. However, as McDowell understands conceptualism, the thesis involves a stronger claim. Like most philosophers, he thinks that concepts are constitutive elements of belief and judgements. But, being what we might call an *unbounded conceptualist*, McDowell demands the same sort of compositional structure constitutive of belief contents for visual/perceptual contents.<sup>1</sup> From now onwards I will understand the conceptualist standpoint about visual content the way McDowell does. Let's define the thesis as follows:

[Conceptualism] The philosophical view that states that in every case the content of a visual experience necessarily involves concepts that fully specify every single feature consciously and simultaneously available during the experience.

It is extremely important to provide some clues about how to understand this thesis in order to avoid problems, especially if you think that some of the terms included in the definition allow more than one interpretation. First, I want to point out that according to conceptualism, this must be true *in every case*; that is, it must be true for *all* the contents of visual experience. Second, I am describing conceptualism as the view according to which contents “necessarily involve” concepts. This is a matter of necessity. Thus, you cannot entertain in any way the contents without possessing and implementing the relevant concepts. At the same time, I am using the verb “involves” in its core sense in standard modern English: “includes

---

<sup>1</sup> According to the standard Neo-Fregean interpretation that McDowell seems to accept, the conditions of possession of these concepts are individuated by sets of psychological abilities that subjects must possess and exercise in order to entertain a content of a particular type. As Evans (1982) argues, a subject cannot be attributed with the possession of a concept unless he exhibits some degree of generality at the level of implementation. In this sense, McDowell's proposal clearly follows Evans's (1982) generality constraint. Broadly speaking, Evans' followers seem to agree that the possession of a concept at least involves the ability to identify and re-identify things and properties that fall under that concept, the ability to perform inferences, the ability to apply the same concept to different things, and the ability to discriminate between what falls under that concept or does not, among other abilities. From now onwards I will use the label “conceptualism” exclusively to talk about McDowell's specific proposal. My criticisms are not targeted at alternative theories of concepts that may not share some or all of McDowell's Neo-Fregean commitments.

as a necessary part”.<sup>2</sup> It is crucial to emphasize that conceptualists think of this “involvement” as structurally essential. That is, as a way of pointing out that visual contents are *composed* of concepts.

Third, the compositional structural role of these concepts is *exhaustive*. It is necessarily valid *for every single feature represented simultaneously* during the experience. This is why conceptualism is often described as the view that states that visual/perceptual contents are always made up of concepts that subjects must possess and implement for every single feature consciously and simultaneously present during their experience. Finally, the definition highlights that these concepts *fully specify* all the features consciously present or represented simultaneously during a visual experience.<sup>3</sup>

We can see that conceptualists are not just saying that concepts play a definitive role in the proper *characterization* of the contents of visual experience or that these contents cannot exceed our conceptual repertoire. They also think that these requirements are sufficient for making these contents structurally conceptual in the way the contents of belief are. As McDowell says, “conceptual capacities, capacities that belong to spontaneity, are already at work in experiences themselves, not just in judgements based on them” (24). In other words, McDowell’s conceptualism does not stop at the *epistemic* level of content characterization, which reasonably may be regarded as fully determined by the subject’s conceptual repertoire. It goes beyond the epistemological realm making claims about the constitutive *metaphysical* dimension that determines what these contents are made of.<sup>4</sup>

---

2 The Concise Oxford English Dictionary (2001) explicitly acknowledges this constitutive interpretation.

3 In this paper, I have assumed that all the qualitative aspects of visual experience can be accounted for in representational terms. In this sense, when I say that concepts fully capture the fine-grained phenomenology of every feature represented simultaneously, I do mean that they fully capture or specify every single feature of conscious experience.

4 You might have two worries concerning my characterization of McDowell as an *unbounded conceptualist*. First, you might think that my account of McDowell’s conceptualism is *too strong*, especially if you think that his remarks about conceptual content are restricted to those aspects of perceptual content which are able to justify an empirical judgement at a given time. Second, on the basis of this consideration, you might also be inclined to think that McDowell’s conceptualism is actually compatible with some weak version of content nonconceptualism. I think that accepting these remarks is equal to simply misrepresent McDowell’s standpoint. It is true that the fundamental concern underlying McDowell’s proposal about perceptual content is an epistemic justification. However, the consequences of McDowell’s strategy are not limited to the elements of content that play a certain justificatory role at a given time. According to McDowell, perceptual contents are exhaustively propositional;

I will attempt to show that the unbounded conceptualist account proposed by McDowell is too strong. I do not see any problem with the idea that perceptual contents are in principle describable or characterizable by concepts. You may possess and implement the concepts required to fully characterize the content of the experience that you undergo when seeing a particular scene. However, I think that the content itself –the way your experience consciously represents the scene to be– may not be fully constituted or *composed* of those concepts. In the following sections, I will question some of the basic assumptions of McDowell’s conceptualism on the basis of the experiential or phenomenological *richness* that some visual experiences exhibit. I will suggest that there are ways to represent the world that do not require the exercise of conceptual abilities in the way McDowell demands.

## 2. Is Richness an Illusion?

It is often said that one of the main features that distinguishes perception from belief is that the contents of perception are *rich* in a way that the contents of beliefs are not. So far, some visual experiences can carry information about so many objects, properties and relations at one time, that it is thus unlikely for subjects to always possess and implement concepts for every feature represented simultaneously by the experience. The idea of experiential richness –simply “richness” henceforth– is not based only on the idea that there are many features that the experience could represent, but also on the fact that these features can be represented simultaneously.<sup>5</sup>

---

that is, to experience or to perceive something is always to perceive *that such and such is the case*. Moreover, if perceptual contents can be the contents of judgments, McDowell argues that they must be contents of a very specific *kind*, namely contents of a judgeable or conceptual kind. This last claim makes me think that McDowell is making a more extreme ontological claim about the intentional content of our experiences. Indeed, I do not seem to be the only one that thinks so. In his recent introduction to McDowell’s philosophical thought, Maximilian de Gaynesford (2004) has argued that for McDowell “experience is essentially a concept-employing exercise” and that “experiences are the impacts of the world on our senses; and those impacts already have conceptual content” (96). In summary, if for McDowell experiences are *essentially* conceptual and as sensorial impacts *already* have conceptual content, his version of conceptualism is indeed strong and goes far beyond the limits of what is actually playing a justificatory role at a given time. McDowell’s conceptualism is unbounded and incompatible with any version of content nonconceptualism. I want to thank an anonymous reviewer from *Ideas y Valores* that advised me to clarify this important point.

<sup>5</sup> We need to keep in mind that perception is a relational state involving introspective and non-introspective elements. When I say that subjects can represent “many” elements, the amount of information should be specified not only using subjective

It is important to clarify that philosophical arguments based on richness do not require an actual perception of *all* the features instantiated within the limits of our visual field or that we have to perceive everything in an *exhaustively detailed* fashion. In addition, arguments based on richness do not demand that we *always* perceive many objects. The arguments rest only on the plausible claim that we often have very rich visual experiences, that is, experiences that simultaneously carry information about very many objects, properties and relations in the subject's environment and at a specific time.

What is the importance of richness for the purposes of our present discussion? The relevance seems to be straightforward. Philosophers who challenge conceptualism think that if experiences do carry information about very many features simultaneously, it is unlikely that subjects could possess and implement concepts for *all* these features at the same time. Richness is used to undermine the constraints demanded by conceptualists about what we can visually represent at a given time.

In order to face the challenge, conceptualists can clearly take at least two different strategies. First, conceptualists may attempt to deny that visual experiences are actually rich in the specified sense. Second, conceptualists may grant experiential richness putting forward the thesis that richness doesn't undermine the basic commitments of conceptualism. Only the first strategy will be discussed in this section. In 2.1, I will consider the first line of argumentation, focusing the discussion on the thought that we only experience what we actually notice. Allegedly, if we only experience what we actually notice during a visual episode, then visual/perceptual contents are not as rich as it is often assumed by theorists who deny conceptualism. In 2.2, I will provide extra empirical and philosophical evidence that positively suggests that the content of visual experience is not fully constrained by what we actually notice. All these considerations will show us that there are solid grounds for the claim that visual experiences are often rich. Finally, in section 3, I will question the idea that richness doesn't undermine the basic commitments of conceptualism.

### 2.1 *Experiencing and Noticing*

A conceptualist might argue that we only have cognitive access to a visually represented object/feature when we actually *notice* or consciously *attend* to that object/feature.<sup>6</sup> The idea of limiting what we

---

criteria, but also with objective data obtained by scientists; for example, by specifying the number of things available for representation in the subject's visual field.

<sup>6</sup> I assume that in order to *notice* something we require at least being consciously attending to that feature. Therefore, one of the ways of undermining the claim that experiencing something requires noticing that thing is to claim that we can consciously

visually represent to conscious attention may explain, according to some conceptualists, why we don't acquire beliefs about those objects/features that remain unnoticed. It seems that you don't have to be a conceptualist to agree with this strategy, but it is clearly a line of argumentation that a conceptualist could take to block, from the beginning, any attempt to argue that some content is non conceptual, based on the alleged *richness* exhibited by visual representations. Following Chuard's (2007) comments on this strategy, the objection to *richness* might take the following form:<sup>7</sup>

- (1) A feature *F* is represented by a visual experience *E* at time *t*, only if the subject of experience *S* actually notices *F*.
- (2) Apart from *F*, there are several other features in *S*'s visual field at time *t*, which unlike *F*, *S* does not notice when undergoing *E*.
- (3) *S* does not represent many of the features in her/his visual field when undergoing *E* at *t*.

Given that condition, (2) states that the subject doesn't notice some of the features in the visual field and that (1) states that experiencing requires noticing; then, it follows that subjects fail to experience several features located within the spectrum of the visual field. The more objects, properties and relations are satisfying condition (2), the less plausible is the idea that contentful experiences are informationally rich. Indeed, some philosophers and psychologists have claimed that the content of visual experience is not as rich as we think it is. They claim that what we experience at a given time is exhausted by the objects, properties and relations to which we *consciously attend* at that particular time.

O'Regan and Noë (2001) think that the idea that we experience more than what we consciously notice, and the thought that our visual experiences are actually rich, are both literally a big illusion. Among other theorists, (Blackmore *et al.* 1995; Rensink *et al.* 2000) they explicitly endorse versions of assumptions (1) and (2) previously considered on the basis of psychological experiments like "change-blindness" or "inattentional-blindness" in which subjects fail to notice objects and changes that take place in their visual fields. Let us take a look at Noë's experimental cases and his conclusions:

The fact of change blindness is widely thought to have several important consequences. First, perception is, in an important sense, attention-dependent. You only see that to which you attend. If something occurs outside the scope of attention, even if it's perfectly visible, you won't see it. In one study, perceivers are asked to 'watch' a videotape of a basketball game and they are asked to count the number

---

experience *p*, without consciously attending to *p*.

<sup>7</sup> Some of my comments are clearly based on Chuard's (2007) excellent remarks on this topic. His influence will also be clear when discussing the argument from richness.

of times one team takes possession of the ball [...]. During the film clip, which lasts a few minutes, a person in a gorilla suit strolls onto the centre of the court, turns and faces the audience and does a little jig. The gorilla then slowly walks off the court. The remarkable fact is that perceivers (including this author) do not notice the gorilla. This is an example of inattention blindness. Second, perception is gist-dependent. Some changes, for example, in the features that affect the gist of the scene, are more likely to be noticed [...]. Third, it seems that the brain does not build up detailed internal models of the scene; that is, it doesn't perform the integration of information across successive fixations, contrary to the assumption of traditional orthodoxy [...]. (2002 5s)

Theorists who try to defend this view based on cases of change-blindness or inattention-blindness usually say that we have the *illusion* that we experience some phenomenon, even if we are consciously attending to that phenomenon. Imagine, for example, that your closet has an automatic light, so every time you open the door the light is actually on. This might lead someone to believe that the closet's light is on all the time. Similarly, Noë and O'Regan argue that every time we attend to something we become consciously aware of it, but this might produce the *illusion* that we are consciously aware of that thing even if we are not attending to it. Strictly speaking, they argue that because in those circumstances in which we are not consciously attending to those things, they don't look or seem any particular way to us, it seems more reasonable to claim that in those circumstances we do not *experience* those things.

I was very lucky to participate in inattention-blindness and change-blindness experiments conducted by O'Regan at the University of Sussex in 2004. I, like the 90% of the audience that followed O'Regan's detailed instructions in the former case, didn't notice that a person wearing a gorilla suit strolled from left to right on the screen during a span of 5 seconds. In the second case, something similar that involved change-blindness happened to me when I didn't notice that there was a shift in the location of an important feature of two similar images presented in short succession. I think that these experiments are very interesting and help us understand several facts about the limits of attention and the cognitive economy we apply when following a particular set of instructions. However, I don't think that we necessarily have to accept the conclusions of Noë and O'Regan about richness.

Consider, for example, the images typically used in "disappearance" change-blindness experiments. When shown one after another in short succession, subjects are usually not able to detect that in the second image there are some important features that have completely disappeared. According to the argument against



richness, as in the case of the “gorilla” inattentional-blindness, the evidence sufficiently supports not only the idea that we do not experience all the features in our visual field, but also that visual content is really sparse and does not go beyond what is consciously noticed by the observers.<sup>8</sup>

Despite the fact that this interpretation of change-blindness experiments has captured some theoretical interest, I do not think it is sufficiently convincing. Indeed, I think that we should not be forced to accept the alleged conclusion, especially if we think there is a plausible explanation for these phenomena which does not rest on the idea that we only represent visually what we actually notice, as Noë and O’Regan suggest. A perfectly good explanation for the famous “gorilla” inattentional-blindness case is that subjects do not notice the presence of the gorilla because their attention is mainly focused on one specific task, namely, on counting the number of passes between the members of one of the basketball teams as required by the “instructions”.

Similarly, a different and perfectly good explanation for change-blindness cases is that subjects fail to notice the difference between the pictures because, when searching for a difference, their attention is basically focused on the main features exhibited. Had the subjects been properly instructed, for example, to focus on the specific features that would later vanish, they would definitively have noticed the changes. As Tye (2006) points out, this alternative standpoint is fully compatible with the intuition that in fact we do experience changes and elements, even though we do not consciously attend or notice them under specific circumstances.

The fact that we do not notice, for example, changes in location or the absence of a relevant feature in a succession of images is perfectly consistent with the claim that these features do appear at the personal level of visual content and that they do determine what it is like for us to have a visual experience.<sup>9</sup> This is particularly clear in change-blindness experiments in which there is a change in the location of one of the objects. Subjects don’t see *that* there is a difference in the location, but the objects do appear in different positions (without that change being *noticed*). Fred Dretske (2007) has recently argued that the same happens in change-blindness experiments involving the comparison between two walls of bricks shown one after another,

---

8 For a good example of the kind of images used in “disappearance” change-blindness experiments, check Kelly *et al.* (2003). To understand why we might be able to draw a connection between inattentional-blindness experiments and the idea that visual content is really sparse, check Noë (2002).

9 When I say that a feature can appear at the personal level of visual content even if we are not *attending* or *noticing* its presence, I am assuming that the feature is actually a constitutive element of the phenomenal character of experience.

each with some bricks missing. In the case that Dretske considers an extra brick is added to the second wall and you are not able to see that there is a difference between the first and the second wall. Dretske thinks that a perfectly good explanation of what is going on in this experiment is that we do see the object that makes the difference, but we do not see *that* there is an object that makes the difference. That is why we do not see *that* there is a difference between the two walls. On the basis of alternative interpretations of this kind, and alternative interpretations about what actually happens in change-blindness experiments, we might reasonably argue that what we experience at a particular time might be not necessarily constrained by what we actually *notice* at that time. O'Regan and Noë's suggestions have important consequences about the limits of attention, but do not force us to accept that experiential richness is necessarily an illusion. The claim that *some* of our visual experiences carry information about very many objects, properties and relations in the environment is still a good premise that we might use as part of an argument.

### 2.2 *Sensory Memory and Phenomenal Consciousness*

In the previous subsection I defended the claim that some contentful visual experiences are rich, against those who think, on the basis of experiments involving inattentional-blindness and change-blindness, that this is actually an illusion. In this subsection I want to provide further empirical evidence and philosophical considerations that positively suggest that the content of visual experience is not fully constrained by attention and that there are grounds for the claim that visual experiences are often rich. I want to start the discussion with some remarks about the connection among perception, memory and conscious attention. After that, I will introduce some variations of Sperling's (1960) experiments on sensory memory that help to back up this line of argumentation.

Memory and perception have a strong connection; a reflection of this is the authority and force that memory states have regarding perceptual events in the past and our present beliefs. It seems that memory states can provide evidence of how things were in the past independently of what we actually believed at that time, moving us to form new beliefs that may affect our behaviour. Allegedly, you may remember having a visual experience of some sort, even if at the time of the original experience you did not pay attention to *that* thing. Some theorists (Dretske 1969; Martin 1992) have emphasized exactly this relevant point. Suppose last night you went to a gala dinner at the Royal Institute of Philosophy. Suppose you spent the dinner talking with a beautiful lady. You might have failed to *notice* the wrinkles near the lady's eyes, despite the fact that you were actually facing her for most of the night. Maybe you were too absorbed trying to understand

the lady's philosophical arguments to notice her wrinkles. However, surely you could hardly have failed to *see* the wrinkles, especially if we consider that the lady's face was literally in the centre of your visual field. This is why you might later realize that she actually had deep wrinkles, remembering how her face *looked*. In other words, you might recall that information at a time after the experience, by virtue of your sensory/perceptual memory.

The possibility of retrieving information about some object that wasn't noticed suggests that you did consciously perceive that object in the first place. In this particular example, assuming that perceptual memory is representational and it is working faithfully, you remember the way something –the eye wrinkles– actually appeared to you. Perceptual memory grounds the intuitive idea that something *p* consciously appeared to you, even if you didn't notice *p*.<sup>10</sup> If normal observers can literally remember *seeing* what they had not previously noticed, then it is *possible* for a subject *S* to have a contentful visual experience at time  $t_1$  involving a particular feature *F*, without necessarily noticing *F* at  $t_1$ .

The relevance of this sort of case for our present discussion –even if not conclusive– is at least suggestive and hard to deny. It clearly illustrates that visual experiences differ from beliefs in the sense that “experience can on occasion be inert with respect to belief –one can simply fail to notice how things are experienced–” (Martin 753). In addition, and more importantly, if the implementation of a concept for an object/property is actually *sufficient* for *noticing* that object/property, then the possibility of perceiving *x* without noticing *x* entails that subjects/creatures can be visually aware of *x* without forming a concept of it. In summary, contra conceptualism, the possibility of retrieving information about things that at first we did not notice, suggests that one can visually represent something without possessing or implementing a concept of it.

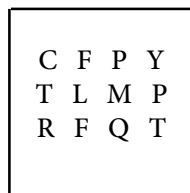
Finally, I want to make some comments based on Michael Tye's (2006) recent interpretations of Sperling's (1960) experiments on sensory memory. Tye's views provide further support not only for the thesis that we can visually represent more than what we actually *notice* at a particular time, but also for the idea of experiential

---

<sup>10</sup> A different strategy would be to argue that concepts are subpersonal psychological abilities that can be exercised by subjects unconsciously. This strategy could ground the idea that we can consciously retrieve information that was actually “conceptual” from the very beginning. However, the relevant idea of concept possession that McDowell's philosophical project integrates is very different from this psychological characterization of concepts at the subpersonal level. What matters for McDowell and for the philosophical debate about conceptual and nonconceptual content is what happens at the level of appearances at a given time; for example, when consciously seeing eye wrinkles without noticing their presence.

richness that we will use in the next section as part of the argument against conceptualism. Let's consider one particular case that Tye (*ibid.*) introduces as a variation of the experiments originally provided by Sperling in 1960.

In this variation, call it A, subjects were shown an array of letters, composed of three rows with four letters each. The array was presented in the centre of the subject's visual field for 50 ms, followed by a blank field; the subjects were then asked about what they saw under two different sets of conditions or instructions that they had to follow: (i) Please identify as many letters as possible or (ii) Please identify the letters present in a single row (to be determined by a tone immediately after the disappearance of the display).



Some of the results have interesting consequences. In A(i) subjects were typically able to identify at most 1/3 of the total of twelve letters displayed. In A(ii) subjects were normally capable of reporting three out of four letters. Interestingly, the accuracy level clearly decreased as the time gap between the tone and the disappearance of the array increased. Sperling explained these results hypothesizing that “there is a visual *sensory memory* that fades very quickly” (Tye 510). This is particularly striking in A(ii), a situation in which the subjects are still capable of reporting three out of four letters in a row of four, especially if we recall that subjects simply don't know the particular row until the tone sounds after the array display disappears. Apparently, subjects are able to report accurately three out of four letters in part because *sensory memory* preserves information about *every* letter shape displayed before the tone.

It is worth saying that what Sperling had in mind when he introduced the idea of *sensory memory* is what we would ordinarily call “the look or the appearance of the array” (Tye 511). The main idea is that in A(ii), when the array is no longer displayed, “it still *appears* to be displayed” (*ibid.*). This is very important for our purposes because it suggests that sensory memory operates at the level of appearances; that is, at the conscious level of representational awareness and not merely at the subpersonal early stages. This is not a conclusion that Tye justifies only on the basis of Sperling's experiments.

Other experiments support Sperling's position. For example, when subjects are shown two brief random dot presentations, one

after the other, that when superimposed form single letters, the subjects accurately report the letters, provided that the time gap between the presentations is 300 mseconds or less (Eriksen and Collins 1967). Evidently, the initial display appears to last longer than it really does by some 300 mseconds; the result is that the letters appear to “pop out” of the dot patterns, according to the subjects. (Tye 511)

The importance of these experiments for our discussion is that despite the possibility of having facts not captured in sensory memory, we can reasonably claim that our visual experiences represent, at the conscious level, information which is at least as rich as the information represented by our sensory memory.<sup>11</sup> Indeed, scenarios like *A(ii)* make it plausible to claim that the letters to which the subjects are not actually attending when following instructions are nonetheless represented at the phenomenal level, in a way that “*would* have enabled the subjects to identify them, *had* their attention been directed differently” (Tye 513), for example, if the subjects had been instructed to identify a different row of letters after the array’s disappearance. The representational content of some visual experiences is apparently unconstrained by what we can actually attend or judge during the experiences. If this is so, then our assumption that some visual contents are rich remains unharmed by considerations based on selective attention. It seems that it is possible to experience more than what we *notice*.

### 3. The Argument from Richness

#### 3.1 Introduction

The main thought underlying the idea of experiential richness is that visual contents represent information about so many objects, properties and relations at one time, that it is difficult to think that subjects can actually possess and implement Neo-Fregean concepts for every single feature represented at that time. Unfortunately, the idea of “richness” is often not clearly distinguished from the different thought that visual content is detailed or *fine grained*. It is important to keep these two aspects apart, especially if we observe that *richness* and *fineness of grain* might posit different challenges for conceptualism.

For example, imagine that you perceive two shades of green against a white background. We might say that despite the fact that your experience doesn’t contain information about too many objects/properties, the content of your perception nonetheless represents these shades in a very detailed and fine-grained fashion. In

---

<sup>11</sup> For more empirical data that suggest that the information is stored at the phenomenal conscious level and is not just retrieved from subpersonal computational states when required, check Tye (511).

this sense, *richness* and *fineness of grain* should be kept apart for argumentative purposes. A *fine-grained* visual experience doesn't necessarily need to be informationally *rich* in terms of how many objects or properties it represents. Similarly, a visual experience may carry information about many objects and properties, but this does not entail that this information is *detailed* or *fine-grained*. Keeping in mind that richness and fineness of grain may challenge conceptualism in different ways, I want to assess in this section whether or not it is possible to argue against conceptualism using the possibility of having experiences with informationally *rich* content. Let's start summarising the main idea of experiential richness:

[Richness] The content of a subject's particular visual experience *E* is rich if, and only if, it presents information about many objects, properties and relations to the subject at the same time.

It is important to mention that richness isn't something that has to be accomplished by all visual experiences. As we said before, it is not difficult to think about perceptual scenarios in which the amount of information is minimal or simply poor. At the same time, the idea of richness does not require *all* the objects or features located in the range of the subject's visual field to be represented. Nor does it require the objects/features to be represented in *full detail*. Richness only demands the possibility of having visual experiences representing several features (objects, properties, etc.) instantiated in the subject's immediate environment at the same time, that is, *simultaneously*.

In the previous section we provided empirical evidence that suggests that sometimes we do have visual experiences that represent more elements than those we actually notice at a particular time. In this respect, we might say that we have equated the notion of visual experience with what is noticeable or available in the content at the time of undergoing the experience. However, the fact that some of our experiences are rich does not by itself represent a problem for those who think that visual content is fully conceptual. Indeed, theorists who have played an important role in defining conceptualism, such as McDowell, fully accept that we have visual experiences with *rich* content. Following Chuard (2007), I think that if we want to challenge conceptualism, richness must be used only as a background assumption or premise of the following line of argumentation:<sup>12</sup>

[Argument from Richness] If it is possible for a subject *S* to have an informationally *rich* visual experience *E*, then it is possible that *S* does not possess or implement a concept for at least one of the many features (objects, properties and relations) consciously represented in *E* at the same time.

---

<sup>12</sup> I am greatly indebted to Chuard's (2007) interpretation on this issue.

The main idea underlying what we might call the “argument from richness” is that *some* visual experiences can carry information about so many objects, properties and relations in the environment *simultaneously*, that it is unlikely for subjects to always possess and implement concepts for *every* feature consciously represented by the experience at the same time. In the previous section we provided evidence that suggests that the antecedent of the argument is extremely plausible. Subjects can visually represent objects/properties instantiated in the environment without attending, noticing or forming conscious beliefs on the basis of them.

If we think that we can perceive unattended objects that nonetheless determine what it is like for us to have those experiences, then we could also claim that in these particular cases the relevant perceptual contents are *richer than* the contents of beliefs, judgements and other propositional attitudes that we may form on their basis. Allegedly, the contents of perception might contain more information than the content of beliefs because they rule out more possibilities. The idea of perceptual contents being *richer than* belief contents is clearly part, for example, of Dretske’s (1981) famous distinction between analog and digital ways of encoding information; and also of Crane’s (2001) view, in which the content of perception is replete in a way that belief-content is not. Indeed, he claims that “your belief that someone is smoking outside is neutral on whether this is a man or a woman, and therefore does not rule either possibility out; your perception might well rule out one of these possibilities” (Crane 151).

Assuming that all these considerations are connected with the antecedent of the argument from richness, we need to assess whether or not they can help to support the consequence, namely, the thought that it is possible for a subject to have a visual experience without possessing or implementing a concept for at least one of the many features (objects, properties and relations) consciously represented in *E* at the same time. In other words, we need to clarify in what sense the argument from richness represents a real challenge for conceptualism.

### 3.2 *Simultaneity and McDowell’s “Passive” Conceptualism*

Conceptualists need to accept that it is possible for a subject to have an informationally *rich* experience, denying that this entails the possibility of a subject entertaining an experience without possessing or implementing a concept for at least one of the many features represented. I understand that conceptualists generally think that perceivers do possess concepts for the different objects/properties manifested during a particular visual episode. Indeed, even if subjects sometimes do not possess sophisticated conceptual resources, it seems that they do possess some basic conceptual resources—such as demonstrative concepts—that can play that role. A

subject may not possess the concept *LLAMA*, but she is surely capable of referring to the llama by virtue of a demonstrative concept. She might refer to the llama as *that* thing even if she doesn't know that *that* is a llama. If conceptualists can reasonably say that for every single element represented in visual content there is always some demonstrative concept possessed by the subject, it seems that the conclusion of the Argument from Richness must be grounded in something else.

We said that conceptualism is the philosophical view that states that *all* visual contents include concepts (which subjects must possess and implement) as necessary parts that fully specify every single feature consciously available during an experience at the same time. I think that the main problems conceptualism has to face regarding the argument from richness are related to the demand for subjects to implement concepts for every single feature represented by the experience "simultaneously" (at the same time). Let's consider the following strategy that I think opponents of conceptualism may reasonably put forward:

1. It is possible for a subject *S* to have an informationally *rich* visual experience *E*.
2. [Conceptualist Assumption] Subjects generally do possess concepts for each object, property or relation consciously represented during a *rich* visual experience *E*.
3. However, subjects can only implement a certain number of concepts in any visual experience *E* at any given time.
4. Therefore, even if *S* does possess the required concepts, it is possible that *S* does not implement a concept for at least one of the many features (objects, properties and relations) consciously represented in *E* at a given time.

Conceptualists generally accept (1) and grant (2), which is a fundamental requirement for the idea of conceptual content. The main problem for conceptualists seems to be premise (3) that states that it is impossible for subjects to implement so many concepts simultaneously. Allegedly, the idea of *simultaneity* plays a central role as a formal constraint on the implementation of the concepts. In the prior section we used some of Sperling's experiments to show that we can consciously experience more than what we actually *notice* and that some visual representations are in fact rich.<sup>13</sup> I think that we can use similar data to establish that sometimes

---

<sup>13</sup> I would like to thank Laura Duhau for her comments on this part of the paper during the 11 Workshop on Language, Logic and Cognition (Córdoba, Argentina). They were helpful to clarify the use of some key expressions and to claim that, in this context, for a subject to be *visually aware of x* only means that the subject is consciously representing *x*, without *attending* or *noticing x* as present in her experience. Therefore, "awareness" or "consciousness" is not restricted to attention.



subjects fail to implement concepts for at least one of the features of the representational content of the experience. If we remember the experiments about sensory memory, it seems clear that there is empirical/psychological evidence suggesting that subjects represent more information than what they are actually capable of processing at the level of belief or judgement. In addition, subjects often fail to report more than 3 or 4 letters in these experiments mainly because *there isn't enough time* to process the information at what we might call the cognitive conceptual level. Even though subjects are not able to notice all the elements that determine the phenomenology of their experiences, information about *all* these elements is actually stored at the conscious representational level. Is this a genuine challenge for conceptualists?

On the one hand, it seems there are good reasons to say that these considerations do undermine the conceptualist strategy. One might think, for example, that we only implement concepts for the objects/features that we actually *notice* at a given time. If we visually represent more than what we actually notice, as Tye (2006) suggests, then it seems that it is possible for a subject to undergo an experience with a content involving a feature *F* (object, property or relation) without noticing *F*. If attention is a requirement for the implementation of concepts, then it is actually possible to claim that a subject can visually represent *F* without implementing a concept for *F*. On the other hand, a conceptualist could embrace the idea that subjects can implement concepts for unattended features during a particular visual experience, especially if we recall that concepts (or the conditions for possessing concepts) are specified in terms of possession and exercise of sets of psychological abilities, such as the ability to recognize and discriminate.<sup>14</sup>

In principle, it is open for conceptualists to claim that the allegedly unattended elements which figure in the content of experience are nonetheless conceptual. Conceptualists could argue that there are good reasons why subjects do not pay attention to these elements; for example, because they are somehow too familiar and not really relevant for the specific tasks that we perform on a certain occasion. They could insist that sometimes we don't attend or notice some objects, properties or relations which are consciously available during

---

<sup>14</sup> Perhaps a conceptualist could alternatively argue that bits of information that we did not consciously experience remain available at the subpersonal level and that it is only when this information becomes the target for selective attention that it becomes part of the conceptual representational content of experience. I don't think this is a good strategy, mainly because the whole point is that richness is something available for subjects at the phenomenological conscious level from the beginning. Therefore, to claim that something becomes part of the representational content only when attended and conceptualized begs the fundamental challenge.

a particular experience because we categorize or “conceptualize” those features as irrelevant for different reasons. For example, when you drive you privilege certain aspects of your visual experience by attending to them. You pay careful attention to cars, intersections, traffic lights and other things because you need to. However, you might not pay attention to some things, such as the colour of the dress of the woman that is crossing the street or the new shape of the advertisement on the corner. However, in what sense are these unattended elements still conceptual? I think that the main challenge remains intact, unless conceptualists provide a good explanation of how it is possible to deploy a concept for an unattended feature.

Probably one of the main reasons why we are moved to understand concept implementation as something that requires attention is that we intuitively think of “conceptualization” as a process that involves an ‘active cognitive engagement’ with those objects and properties presented in the content of the experience. We assume that *to conceptualize* is a mental process that involves a transition between states or events of one kind to states or events of a different kind. That is why we generally distinguish between the concepts that we possess, the process of applying those concepts and *what* (object/property/relation) is being conceptualized. I take it that *what* is being conceptualized—at least in perceiving the worldly objects/properties that constitute the content of experience—is not something intrinsically determined by the psychological abilities we possess or implement. On the contrary, the objects of conceptualization seem to be concept-free elements that figure in our experience *as falling* under a concept. In summary, we don’t think about the variety of elements that constitutes the types of visual experiences that we have as being, by themselves, conceptual.

Influenced by the work of McDowell, orthodox conceptualists argue that we can exercise concepts—even for unattended features—because the content of perception is constitutively conceptual, that is, literally composed of concepts. Despite the fact that we commonly think of conceptualization as something that we *do* (actively), those who endorse McDowell’s strategy think that we can *passively* exercise concepts in experience. Following Neo-Kantian intuitions, McDowell argues that concepts are cognitively available in experience because experiences are “constitutively” determined by concepts. If this is the case and experiential types are in fact fully determined by concepts, then we might be able to “passively exercise” these concepts as McDowell suggests:

I said that when we enjoy perceptual experience conceptual capacities are drawn on in receptivity, not exercised on some supposedly prior deliverances of receptivity. And it is not that I want to say they are exercised on something else. It sounds off key in this connection to speak of exercising conceptual capacities at all. That

would suit an activity, whereas experience is passive. In experience one finds oneself saddled with content. One's conceptual capacities have already been brought into play, in the content's being available to one, before one has any choice in the matter. (10)

This argument, that we can exercise concepts "passively", seems to be immune to the challenge based on perception without attention. Indeed, McDowell (1994) fully endorses all the commitments required by conceptualism as I am defining the view. He fully acknowledges that perceptual content is constitutively composed of concepts (Neo-Fregean) for every single feature of conscious experience. In his opinion, contents are built-up by concepts, and that is why "a judgement of experience does not introduce a new kind of content, but simply endorses the conceptual content, or some of it, that is already possessed by the experience on which it is grounded" (McDowell 48s) and emphasises that, strictly speaking, experience is just "a rich supply of already conceptual content" (*id.* 49). This approach demands conceptual constraints at the attributional level and also at the metaphysical constitutive level, on the basis of mainly epistemological reasons. Like Brewer (1999), McDowell thinks that if perceptual experiences can be reasons for empirical beliefs, then the contents of perception must be structured in the same way the contents of beliefs are.

In summary, conceptualists like McDowell might grant that some visual contents are rich and argue that it is perfectly possible to have a visual experience involving features that we do not notice, without accepting the alleged non conceptual nature of these unattended features. Given the constitutive link between concepts and contents, conceptualists think that we wouldn't have contentful visual experiences if we did not possess and implement –"actively" or "passively"– all the concepts required for a full characterization of those contents. Apparently, this view forces us to say that, during perception, it is not possible to isolate our concepts from what makes these concepts available. I understand that this is why McDowell insists on two important things. First, he says that even if we are not actively exercising those concepts in the form of belief or judgement, those conceptual abilities have been already "brought into play" or "drawn into operation in receptivity" (McDowell 10). Second, he adds that even in this passive modality *what we experience is*, for instance, "*that things are thus and so*" (*id.* 9). The former claim is just another way of stating his compositional-metaphysical commitment to what it takes for a content to be conceptual. The latter is a reminder that for him seeing is always seeing *that* such and such is the case and that perception is *fundamentally* propositional (not merely describable in terms of propositions).

I think conceptualism would be acceptable if these ideas were cogent enough. However, I think that McDowell's way of stating the position is highly unsatisfactory in two respects. My first worry is very simple: Is it possible to make sense of McDowell's beautiful metaphorical use of expressions in which concepts are said to be "passively exercised" by subjects and "brought into play" or "drawn on" in perceptual experience? My second worry is even more important: Is it possible to harmonize McDowell's conceptualism with explanatory roles allegedly played by experience in developmental theories of concept possession? I will finish this section discussing these two issues in turn and I will point out that conceptualism doesn't provide a satisfactory answer to these worries.

Let's start with McDowell's idea that concepts can be implemented in experience *passively*. For McDowell, a visual experience does not only make concepts available, but also these concepts are "drawn on" in having the experience. Some of these concepts require one to be "actualized" if we want to characterize how the experience represents the world in the form of judgement or belief. However, given that conceptualists think that contents necessarily "include" concepts for each feature, these concepts remain as essential constitutive parts of the relevant contents, even if they are not literally "actualized" or actively exercised. In other words, subjects can passively exercise those concepts even if they are not actualized in the form of a proper characterization. How do we make sense of this suggestion?

One option is to claim that concepts are *subpersonal* psychological abilities, which are exercised when a subject undergoes an experience of a certain type. These subpersonal psychological abilities may take part of the experience and can be "passively exercised" by subjects, even if these subjects do not consciously engage with them. Accordingly, concepts do constitute visual experiences, even if not all of them are consciously implemented in the characterization of the content of the experience. I think this strategy is misguided because not only conceptualism, but also and more generally, the crucial *philosophical* debate about conceptual and non conceptual content, is a debate about what constitutes the representational *contents* and not the *vehicle* of these contents. Indeed, McDowell seems to agree with me in this respect, when he explicitly distinguishes the abilities that animals and infants may possess at the subpersonal level from the conceptual abilities that human adults implement when visually representing the world, and points out that only the latter are philosophically relevant (*cf.* McDowell, especially chapter 6-7).

A second suggestion is that what is "passively exercised" –at least in the case of perception– is something conceptual that actually constitutes the world. Something similar to a "thinkable content", a conceptual entity that constitutes the world. I think there are good textual reasons for claiming that in McDowell's theory the contents

of perceptions are *facts*, which are literally built up out of concepts. Apparently, McDowell identifies *facts* with the actual constituents of the world that we represent during perceptual experiences. In other words, McDowell understands perception fundamentally as a fact-directed attitude. However, I think that understanding perception as a fact-directed attitude seems fully inadequate if we want to keep a realistic ontology about the actual constituents of the mind-independent world.

Why do I think that McDowell's characterization of perception as a fact-directed attitude is at odds with basic realistic ontology about the objects of perception? Well, mainly because we are naturally inclined to think that the actual constituents of the *fabric of the world* we consciously represent during perceptual experiences are not thoughts or judgements considered as true. Rather differently, we think about the things we represent as different from the thoughts we have about them. Indeed, our judgements and beliefs are said to be correct or incorrect in relation to them, so they cannot be identical with them. However, McDowell argues in the opposite direction and tends to identify what we see with what we judge to be the case. His theory does not capture what I take as a very plausible idea, namely, that perceiving essentially relates us to *concrete* constituents of reality and not to "thinkable contents". A philosopher who has recently unmasked the same point is Johnston (2006):

The decisive problem with the Fact-Directed Attitude View is that it does not earn the right to the metaphor of the senses taking in *concrete* reality. According to the View, the relation between what we sense and what we sometimes go on to judge is particularly intimate. It is identity. If the sensed scene is simple enough we can visually sense that *p* and then judge that *p*; here the very same item is sensed and judged. The objects of judgment are bearers of truth-values, and when their subject matter is contingent those bearers can be either true or false. Since the truth about the scene before the eyes is mostly contingent, most perceptual judgments are directed at truth-value bearers that might have been false. But *concrete reality* does not consist of items that could have been false. Concrete reality consists of items whose existence accounts for the truth of what is contingently true and for the falsity of what is contingently false. (269-270)

Johnston's comments are fully compatible with the primitive realist idea of perceptual states or episodes as relations with objects and properties that constitute a concrete and mind-independent reality, as opposed to relations to truth-value bearers or McDowellian "thinkable thoughts" fully made out of concepts that could have been false. In other words, my complaint is that the

reality or the world we perceive should not be described primarily as a world made out of thoughts.<sup>15</sup>

The previous remarks are directly connected with the second and final worry about conceptualism that I wanted to emphasize in this section. The conceptualist idea that visual contents constitutively demand the possession and implementation of concepts seems to underestimate the importance of developmental explanations of concept possession and the idea that experiences have a substantial explanatory role. My worry is that when we think that visual contents are always necessarily composed of concepts, we are misleadingly identifying our conceptual abilities with what makes these abilities available in the first place. Cognitive scientists have insisted several times, on the basis of evolutionary and naturalistic constraints, that *experiences* are what make conceptual abilities available and not the other way around.

We possess and are able to implement certain psychological abilities *because* our experiential interaction with the environment has had an enormous impact by modelling and determining how we think about objects and properties in the world. In this sense, visual representations *of* objects do not consist on something like grasping thoughts about objects. On the contrary, experiences provide us with the abilities to think about objects and not vice versa. For example, we are able to experience a particular object as being an instance of the concept *PENCIL* or as instantiating the property of *BEING BLUE* because experience has taught us to do so.<sup>16</sup> Conceptualists emphasize that perceptual contents do not involve more than our ability to possess and implement the concepts required for a full characterization of those experiences from a first-person perspective. However, their explanation of how

---

<sup>15</sup> This is particularly relevant if we bear in mind the possibility of having illusory experiences that are fully veridical (Johnston 271). The fact-directed view implicit in McDowell's conceptualism entails that the concepts which constitute the facts that we perceive are not only individuated in terms of the abilities that you possess and implement, but also that they are actual constituents of reality, which are identical with the things you are representing while veridically perceiving. However, if veridical illusions are possible, a subject can fail to be aware of what makes the thoughts in question true. Something similar happens if we allow the possibility of radical hallucinations and recognize (unlike McDowell) that we are talking about genuine contentful experiences. In both cases, I think subjects are literally *short of concrete reality*, despite the fact that they cognitively entertain "thinkable contents".

<sup>16</sup> In fact, we will see that there are grounds to claim that other creatures that do not possess the concepts required for the full characterization of some contents, such as infants and higher animals could equally entertain them. They have not evolved the way we have, but this does not mean that they do not represent objects and properties at the conscious experiential level.

we come to possess and implement those abilities in the first place seems unsatisfactory.<sup>17</sup>

#### 4. Final Remarks

In this paper we emphasized that some psychological experiments suggest that there are some important constraints in connection with the amount of conscious representational information that subjects can actually *notice* during experience. If sometimes subjects do not notice all the represented elements, then it seems possible that sometimes subjects do not implement a concept for at least one of the many features (objects, properties and relations) represented in *E* at a given time. Conceptualists may attempt to avoid this consequence by saying that those unattended features are conceptual, despite the fact that we do not actively engage with them in terms of attention.

McDowell's (1994) view is the paradigmatic example of radical conceptualism that accepts richness, but denies the alleged non-conceptual nature of unattended elements. According to McDowell, some elements are not "actively" conceptualized during perception. However, they are nonetheless conceptual because they are "passively exercised" abilities, which are "brought into play" or "drawn on" in perceptual experience. We have seen that these ideas involve serious problems, not only in connection with our basic realist understanding about the constituents of the world that are presented during perception, but also regarding the developmental and non-circular explanatory theories of concept possession. We can say, based on these important considerations, that conceptualism is not conclusively grounded and does not provide a satisfactory answer to the Argument from Richness. In principle, it is reasonable to claim that perceptual experiences can carry information about so many objects, properties and relations at one time, that it is difficult to think that subjects could possess and implement Neo-Fregean concepts for every feature represented simultaneously by the experience.

#### Bibliography

Blackmore, S., Brelstaff, G., Nelson, K. & Troscianko, T. "Is the Richness of Our Visual World an Illusion? Transsaccadic Memory for Complex Scenes", *Perception* 24 (1995): 1075-1081.

---

<sup>17</sup> In the last paragraphs of lecture six of *Mind and World*, McDowell points out that "it is not even intelligible to suppose a creature might be born at home in the space of reasons. Human beings are not: they are born mere animals, and they are transformed into thinkers and intentional agents in the course of coming to maturity" (125). McDowell seems to address, at least indirectly, my concern regarding the explanatory role allegedly played by experience in developmental theories of concept possession in this paragraph. Unfortunately, his picture of "initiation into the space of reasons" (*ibid.*) does not press the issue further and remains unsatisfactory.

- Brewer, B. *Perception and Reason*. Oxford, New York: Clarendon Press; Oxford UP, 1999.
- Chuard, P. "The Riches of Experience", *Journal of Consciousness Studies* 14/9-10 (2007): 20-42.
- Crane, T. *Elements of Mind: An Introduction to the Philosophy of Mind*. Oxford: Oxford UP, 2001.
- De Gaynesford, M. *John McDowell*. Polity, 2004.
- Dretske, F. *Seeing and Knowing*. London: Routledge & K. Paul, 1969.
- Dretske, F. *Knowledge and the Flow of Information*. Cambridge, MA: MIT Press, 1981.
- Dretske, F. "What Change Blindness Teaches About Consciousness", *Philosophical Perspectives* 21 (2007): 216-230.
- Evans, G. *The Varieties of Reference*. Oxford, New York: Clarendon Press; Oxford UP, 1982.
- Johnston, M. "The Function of Sensory Awareness". *Perceptual Experience*, ed. Gendler, T. & Hawthorne, J. Oxford UP, 2006. 260-290.
- Kelly, T., Chun, M. & Chua, K.-P. "Effects of Scene Inversion on Change Detection of Targets Matched for Visual Saliency", *Journal of Vision* 3 (2003): 1-5.
- Martin, M. G. F. "Perceptions, Concepts and Memory", *Philosophical Review* 101 (1992): 745-763.
- McDowell, J. *Mind and World*. Cambridge, MA: Harvard UP, 1994.
- Noë, A. "Is the Visual World a Grand Illusion?", *Journal of Consciousness Studies* 9 (2002): 1-12.
- O'Regan, K. & Noë, A. "A Sensorimotor Account of Vision and Visual Consciousness", *Behavioural and Brain Sciences* 24 (2001): 939-1011.
- Pearsall, J, ed. *The Concise Oxford Dictionary*. Tenth Edition. Oxford: Oxford UP, 2001.
- Rensink, R., O'Regan, K. & Clark, J. "On the Failure to Detect Changes in Scenes across Brief Interruptions", *Visual Cognition* (2000): 127-146.
- Sperling, G. "The Information Available in Brief Visual Presentations", *Psychological Monographs* 74/11 (1960): 1-29.
- Tye, M. "Nonconceptual Content, Richness, and Fineness of Grain". *Perceptual Experience*, eds. Gendler, T. & Hawthorne, J. Oxford: Oxford UP, 2006. 504-530.