

# *The Riches of Experience*

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Suppose you see a red ball. Unless you happen to be in a psychologist's lab, you are unlikely to see *just* the red ball against, say, a white background. Rather, a myriad of objects is *simultaneously* presented to you. For instance, you see the cricket bat beside the red ball, the table upon which they both lie, as well as what's in the background of the table: the wall, the lamp, the bookshelf on the right, etc. Needless to say, you also see the shapes of these objects, together with the manifold of spatial relations connecting them. And for some of these objects at least, you see their particular shade(s) of colour; even the texture of their surface(s).

Most of our visual experiences seem to be like that: we are typically presented with a wealth of objects, properties, and relations, etc. This owes partly to the fact that the visual scenes we encounter tend to be complex and 'contain' many objects—in contrast to the psychologist's lab. More importantly, though, each single experience has the propensity to convey a *rich amount of information* about the objects, properties, and relations, which make up such scenes—together with information about the scenes themselves.

This rich information characteristic of visual experience appears to raise a difficulty for advocates of *Conceptualism*—the view that perceptual experiences are *akin* to thoughts, in the sense that they represent the subject's environment in a way that *necessarily* engages her conceptual capacities. Thus, on this view, what is represented by an experience—and how—is determined by which concepts the perceiver deploys at the time of experience. As McDowell (1994: 66) puts it: "[e]xperiences have their content by virtue of the fact that conceptual capacities are operative in them". More precisely, Conceptualists like John McDowell (1994, 1998) and Bill Brewer (1999) seem committed at least to the following:

**Conceptualism:** for any object, property, relation, etc.,  $x$ , a subject  $S$  has an experience  $e$  which represents  $x$ , *only if*  $S$  possesses and deploys a concept for  $x$ .

The informational richness of experience is supposed to be problematic for advocates of such a doctrine, because it suggests that there is much more to perceptual representation than the deployment of concepts allows for.

If the deployment of concepts in thoughts is anything to go by (and Conceptualists seem to be taking the view that experiences are very much like thoughts in the way they represent the environment), it seems plausible, first, that normal perceivers do not always think about—and deploy concepts for—everything they see. For instance, you might let your eyes wander on the scene described above (the cricket bat on the table), while thinking about the latest test match between Australia and New Zealand. Whilst your thoughts (and the concepts you deploy to think about Australia, New Zealand, and cricket) are thus occupied, it's not as if you stop experiencing the many objects and properties in front of you.

Admittedly, this example has little to do with the rich information in experience. But it suggests that if you do indeed deploy concepts for what you are thinking about (cricket, Australia, New Zealand), it is far less clear that you can also simultaneously conceptualise what you are seeing at that very same time (the cricket bat, the cricket ball, the table, etc.). There seems to be certain constraints on how much information you can think about—and conceptualise—at any given time. And so, given that experiences can represent the very same scenes one can think and form beliefs about—*albeit* in a way that contains more information, it is *unlikely* that perceivers always think about—and 'conceptualise' or conceptually identify—*every* object, property, or relation, etc., represented by their experience at the time.

More importantly, when you are thinking about the objects you are visually experiencing, it seems natural that you should form very many distinct thoughts about each object, property, relation, etc., in the scene: the cricket bat is made of wood, it lays on the centre of the table, the cricket ball is on its left, the cricket ball is red, it isn't new, the table occupies the centre of the room, it is made of cheap mahogany, the bookshelf is on the left, etc. But entertaining such thoughts takes time. Even if you were to combine all these thought-contents into one long conjunction, it would still take time to consider such a thought. Your visual experience of the scene, on the other hand, presents you with the whole

scene—and the objects and properties that make up such a scene. It seems possible that your experience could convey such rich information about the entire scene and its constituents, whether it lasted a minute or only a couple of seconds.

Considerations like these motivate the claim that, given the rich information carried in visual experiences, it might, in fact, even be *impossible* for normal perceivers to deploy concepts for everything they see. In which case, Conceptualism turns out to be false.

The general line of thought can be encapsulated in a simple two-premise argument—call it the ‘Richness of Content Argument’ (RCA) against Conceptualism. Since, as we shall see, different attempts can be made to motivate the claim that the deployment of concepts in experience is outstripped by the rich information of experience, I shall present the argument as an argument-template, part of which—and premise (2) in particular—have to be further filled in.

- (1) *The Informational Richness of Experience*: for any single visual experience  $e$  of a subject  $S$ , there can be very many objects  $o_1 \dots o_n$ , properties  $P_1 \dots P_n$ , and relations  $R_1 \dots R_n$ , represented *simultaneously* in  $e$ .
- (2) *The Bridging Thesis*: if  $S$ 's experience  $e$  is rich in information, it is possible that  $S$  does *not* deploy a concept for at least one of the many objects  $o_1 \dots o_n$ , properties  $P_1 \dots P_n$ , and relations  $R_1 \dots R_n$ , represented *simultaneously* in  $e$ .

**Therefore,**

- (3) it is not the case that, for any object, property, and relation,  $x$ , a subject  $S$  has an experience  $e$  which represents  $x$ , *only if*  $S$  possesses and deploys a concept for  $x$ .

Premise (1) expresses the idea that experiences are very rich in information. Premise (2) has the form of a conditional, the antecedent of which summarizes premise (1). Its consequent is equivalent to the negation of the conceptualist thesis, since it presents a counter-example to the claim that perceivers must *necessarily* exercise concepts for *everything* they experience. Such a conditional can be treated as summarizing whatever additional assumption—or combination thereof—is needed to secure the entailment from (1) to (3): call this intermediate premise the ‘Bridging Thesis’. The conclusion (3) is the negation of Conceptualism. The argument is clearly valid, since it contains a single instance of *modus ponens*.

Before I discuss the premises of such an argument, it seems worth noting that (RCA) differs from a more familiar objection against Conceptualism, which exploits the so-called ‘fineness of grain’ of experience—the claim that experiences can represent particular objects and features in all detail and specificity. For instance, perceptual experiences are fine-grained in the sense that they allow a subject to discriminate the very subtle differences between, say, highly similar shades of red. In the literature on Conceptualism, however, the claims that experiences are (i) rich in information and (ii) fine-grained, are often conflated—or at least, rarely distinguished (see, e.g., Bermúdez, 1998: 50; Dretske, 1981: 147; Heck, 2000: 489; Martin, 1992a: 758; Peacocke, 1989: 315).

Thus, Fred Dretske, who advances an argument very much like (RCA), ends up running the two objections side-by-side. Here, Dretske uses the double analogy between visual experiences and pictures on the one hand, and beliefs and sentences on the other, to suggest that experiences are richer in information than beliefs:

[...] to say that a picture is worth a thousand words is merely to acknowledge that, for most pictures, at least, the sentence needed to express all the information contained in the picture would have to be very complex indeed. Most pictures have a wealth of detail, and a degree of specificity, that makes it impossible to provide even an approximate rendition of the information the picture carries in digital form (Dretske, 1981: 148; compare Heck, 2000: 489-90).

I’ll discuss the merits of Dretske’s objection below. For now, suffice it to note that, while Dretske begins with the claim that experiences (and pictures) contain a rich amount of information, he concludes with the idea that such information is also fine-grained—that experiences carry information that is specific about many of the particular details of the objects, properties, etc., thus represented.<sup>1</sup>

While experiences do indeed instantiate both characteristics, it is important to keep in mind that such characteristics are at least logically distinct. Thus, it could

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<sup>1</sup> Unfortunately, Dretske’s description of the problem raised by the fineness of grain of experience mistakenly suggests that the representational content of experience is somehow ineffable. Surely, however, the expert phenomenologist might be able to provide appropriate descriptions of the detail of specificity with which experiences represent. The problem raised by the fineness of grain of experience, rather, is that normal perceivers may not possess fine-grained enough concepts that match the fineness of grain of their experiences. Experience need not be necessarily ineffable to raise trouble for Conceptualism.

be that an informationally rich experience presents very many objects simultaneously to the perceiver, although such information is very coarse-grained, with no detailed information about the specific features of such objects. On the other hand, an experience might accurately represent two distinct shades of red in all their specificity against a white background, but nothing else: the content of such an experience is fine-grained, but relatively poor in information. (As we shall see below (§3.2), such characteristics also raise distinct problems for Conceptualism.)

In this paper, I shall be concerned solely with the claim that experiences contain a wealth of information, and leave aside the fineness of grain of such information. The question is whether this ‘Richness of Content Argument’ (RCA) can serve to refute the conceptualist view of experience. In order to answer this, two further questions need to be addressed. First, obviously, one must ask whether perceptual experiences *really* are so rich in information as premise (1) claims—and how this is to be established. The second question concerns the key premise in such an argument—the Bridging Thesis—and the sort of considerations that can be brought to bear in its favour. In short, if perceptual experiences are indeed so rich in information, what else contributes to making it the case that this fact falsifies the conceptualist view?

The paper has two main parts, each concerned with one of these two questions. After a brief outline of what Conceptualism amounts to in section 1, section 2 discusses the idea that experiences are very rich in information. I shall argue that, once properly understood, there are good reasons to accept this first premise. Unsurprisingly, premise (2) is where the trouble begins. Section 3 outlines four different ways to defend the Bridging Thesis, and assesses their respective merits. While the first three attempts lead nowhere, the fourth construal, I shall argue, proves more promising—although it remains inconclusive.

### **1. Perceptual Content and Concepts**

What, exactly, are Conceptualists claiming about experience? One difficulty is that Conceptualists like McDowell (1994) and Brewer (1999) do very little to flesh out their slogan that ‘the representational content of perceptual experiences is fully conceptual’. Indeed, they are typically elusive when it comes to the details of their conception of experience. This is not to say, of course, that such a

conception is completely unconstrained and unmotivated. In what follows, I only have space to offer a very minimal sketch of what Conceptualism amounts to.

### 1.1. *Intentionality and Perceptual Content*

One way of portraying the disagreement between Conceptualists and their opponents has to do with whether there is some crucial characteristic perceptual experiences have in common with beliefs (and perhaps other kinds of thoughts, such as desires, suppositions, regrets, hopes, etc.—*grosso modo*, the class of propositional attitudes). And more importantly, what might the nature of that characteristic be?

Of course, various features differentiate perceptual experiences and beliefs. For instance, Conceptualists admit that perceptual experiences and beliefs have different *functional roles*, and that they interact differently with other types of psychological states. In particular, Conceptualists accept that it is possible to see that an object is such-and-so, without *believing* that it is such-and-so—as with familiar instances of illusion like Müller-Lyer equi-longitudinal lines (McDowell, 1998: 439-41; Brewer, 1999: 176). The *phenomenal character* of perceptual experiences, too, seems radically different from whatever phenomenological traits—if any—can be associated with beliefs and thoughts (McDowell, 1998: 442).

In spite of such differences, there is one important feature common to perceptual experiences and beliefs. Both are *intentional* or representational psychological states, in the sense that they are ‘of’, ‘about’, or ‘directed at’, objects, properties, relations, etc. in the world. The intentionality of beliefs is traditionally thought of in terms of their *representational content*—for instance, the proposition that *there is a red ball on the table*. In this context, talk of ‘content’ or ‘representation’ comes with the idea of ‘representational accuracy’: if *A* represents *B*, there must be some condition(s) in virtue of which *A* can be assessed as correctly representing *B*. Thus, the proposition that *there is a red ball on the table* fixes a set of conditions according to which the corresponding belief can be said to be true or false (Crane, 2001).

The same applies to perceptual experiences. Consider your visual experience of a red kangaroo—Skippy—in the Australian bush. There is a particular *way* in which Skippy visually appears to you, as is revealed by reflection upon of the phenomenology of your experience. It seems natural to think of such a way as

constitutive of the representational content of your experience, since it contributes to determining whether or not the experience is representationally accurate (see, e.g., Peacocke, 2001: 240). Thus, it might be that Skippy does not in fact have some of the properties that it visually appears to have. In which case, your experience misrepresents Skippy.

Can the analogy with beliefs be taken one step further? This is where the dispute between Conceptualists and their opponents is to be located. Both sides agree that perceptual experiences are intentional and contentful psychological states. They disagree about the nature of the representational content of perceptual experiences, and whether such content is of the same *kind* as the content of beliefs and other thoughts.

### 1.2. *Content and Concepts*

According to Conceptualists, the representational content of perceptual experiences, like the content of beliefs, is of *one kind only*: namely, *conceptual* content. But what makes a given representational content *conceptual*? Consider again the belief that *there is a red ball on the table*. What sorts of conditions do you need to satisfy in order to entertain such a proposition?

First, unless you possess concepts like *RED*, *BALL*, *TABLE*, and the concept of something being *ON* something else, it is unlikely that you will be able to understand or ‘grasp’ the content of that belief. This fact points towards the requirement that one can have a belief with the content that *P*, only if one possesses a set of concepts  $C_1 \dots C_n$  which stand in a certain relation to *P*. Call this the ‘Possession Condition’:

**Possession Condition:** if a subject *S* is in psychological state  $\phi$  with the content that *o* is *F*, the content of  $\phi$  is conceptual *only if S possesses* concepts for *F* and *o* respectively.

Admittedly, this constraint raises some difficult questions—such as ‘What are concepts?’, ‘What is it to possess a concept?’, ‘What conditions determine whether a given concept is possessed by a subject?’, etc. At this point, however, I think we can afford to ignore such questions. Most views about concepts, I take it, would grant that whatever the ontological status of concepts, they are accompanied by—or even to be identified with—sets of psychological capacities, the having of

which constitutes *possession* of a given concept.<sup>2</sup> Which psychological capacities? Perhaps, different concepts will require different *types* of capacities. But surely, most concepts will include, for instance, the capacity to identify and re-identify instances of things that fall under the concept, to discriminate these instances from things which do not fall under the concept, or the capacity to draw certain inferences, and to apply the concept to a variety of things, etc.

Is satisfaction of the Possession Condition sufficient to make the content of a psychological state conceptual? Not quite. What matters isn't just the possession of certain psychological capacities, but their exercise too. For instance, your consciously entertaining the proposition that there is a red ball on the table seems to require both possession *and* deployment of the relevant concepts. Had you deployed the concept *GREEN* instead of *RED*, you would have entertained a different proposition. Given that you possess both concepts, possession of such concepts alone is insufficient to determine which content you actually entertained. This suggests a further requirement on conceptual content—call it the 'Deployment Condition':

**Deployment Condition:** if a subject *S* is in an occurrent psychological state  $\phi$  with the content that *o* is *F*, the content of  $\phi$  is conceptual *only if* *S* exercises concepts for *F* and *o* at the time.

But what does it mean to 'deploy' a concept? Nothing more than this: if a subject possesses both the concept *RED* and the concept *KANGAROO*, she only deploys the former when thinking about a red ball. The deployment of a concept *C* simply amounts to the *exercise* of some of the capacities constitutive of the possession of *C*. (Note that the Deployment Condition is restricted to non-dispositional states, or to the manifestations of psychological dispositions. A disposition with the content that *o* is *F*—a belief, say—need not be constantly accompanied with the *actual* exercise of concepts for *o* and *F*.)

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<sup>2</sup> Obviously, Conceptualists and their opponents will have to reach some agreement regarding *which* capacities are necessary for possession of which concepts—since there must be some independent criterion to adjudicate whether or not the content of a given psychological state counts as conceptual. Otherwise, the dispute will turn, not on an issue about the nature of perceptual representation, but on an issue about the possession-conditions for particular concepts.

We now have some very rough idea about what makes the content of a psychological state *conceptual*. One cannot be in a psychological state with the conceptual content that *P*, if either (i) one does not possess, or (ii) fails to exercise, the appropriate conceptual abilities relative to *P*.<sup>3</sup> Accordingly, the conceptualist view has it that the way an object is visually presented to a perceiver necessarily requires her to ‘conceptualize’ that object in some way or other—namely, she must possess and exercise some concept for the object of her experience. (Note that for Conceptualists, conceptualization of a perceived object *x* simply consists in the *deployment* of *some* concept for *x*. It does not require that (i) the subject *correctly* identifies *x*; nor that (ii) she actually identifies *x* as anything at all familiar. For instance, she might see something in the horizon and think of it as *THAT*—focusing her attention on the object—without being able to tell what *that* is. According to such a view, a perceiver can conceptualize the object of her experience, just by deploying a demonstrative concept for it (McDowell, 1994: 56ff; Brewer, 1999: 170-4).)

A third condition must then be added to capture the *scope* of the Conceptualists’ claim—since their slogan has it that the content of experiences is *wholly* conceptual. Presumably, what is needed here is some clause ensuring that nothing in the content of a given perceptual experience is left ‘unconceptualized’. Call this the ‘Completeness Condition’. Such a clause can be regarded as a *modifier* of the first two conditions: an intentional state, the content of which is fully conceptual, requires possession *and* deployment of concepts, for *every* object,

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<sup>3</sup> But what does ‘relative’ mean, here? Note that the two necessary conditions above only express some *dependence* between the content of a subject’s psychological state and certain of the subject’s conceptual capacities—and their manifestation. It is unclear whether they are also jointly sufficient for a given content to *be* conceptual. Hence, we might need an additional clause specifying why such contents *are* the *locus* of conceptual deployment, such as for instance:

**The Constitution Condition:** if a subject *S* is in a psychological state  $\phi$  with the content that *o* is *F*, such content is conceptual *if* it is *constituted* by *S*’s concepts for *F* and *o*, respectively.

Such a condition is controversial, though: some have claimed that it is incompatible with their favourite theory of mental content—see Stalnaker (1998), as well as Bermúdez (1995, 1998: 52; 2003), and Crane (2001: 150-7). However, russellian contents—or contents *qua* sets of possible-worlds—can in fact accommodate this *Constitution Condition* (provided one has a purely extensional theory of concepts—e.g., concepts as sets of individuals or as sets of individuals throughout possible worlds). In any case, only the Constitution Condition seems to specify a precise relation between concepts and content: without it, it seems mysterious how certain particular concepts relate to particular contents.

property, and relation, presented in its content. Putting these three conditions together, we obtain:

**Conceptualism:** for any object, property, and relation,  $x$ , a subject  $S$  has an experience  $e$  which represents  $x$ , *only if*  $S$  possesses and deploys a concept for  $x$ .

Conceptualists thus make a rather strong claim about the representational content of experience. On their view, an experience does not represent anything at all, unless it satisfies the three conditions above.

Such a conception of experience has been criticized on various counts. The general intuition behind such criticisms is that sensory perception seems essentially different from beliefs and thoughts: while the latter are the proper *locus* for the exercise of concepts, the former need not always involve—or do not involve at all—such concepts (see, e.g., Bermúdez, 1998; Dretske, 1981, 1993, 1995; Evans, 1982; Martin, 1992a; Peacocke, 1986, 1989, 1992, 1998a, 2001; Tye, 1995—compare also Pylyshyn, 1999). In the remainder of this paper, I shall be concerned with just one of the reasons apparently supporting such a contrast.

*To summarize:* we have seen that, while Conceptualists take perceptual experiences to be, in some crucial respect, of the same type as beliefs and other thoughts—but not as identical with beliefs—, one might take experience to be of an altogether different *type* of intentional psychological state. The dispute does not depend on whether experiences have features that beliefs lack (such as their phenomenal character, or their functional role). Rather, it hinges on the nature of the representational content of experience—and whether experiences represent the environment in a way that necessarily satisfies the three conditions above for conceptual content.

## **2. The Informational Richness of Experience**

With this brief sketch of the conceptualist view in hand, we are now in a position to see how the ‘Informational Richness’ of experience is supposed to be problematic for the advocates of such a view—provided, of course, that visual experience do instantiate such a feature. Hence, I shall begin by considering whether there is any good reason to accept the claim that:

**The Informational Richness of Experience (IRE):** for any single visual experience  $e$  of a subject  $S$ , there can be very many objects  $o_1 \dots o_n$ , properties  $P_1 \dots P_n$ , and relations  $R_1 \dots R_n$ , presented *simultaneously* in  $e$ .

Two cautionary remarks, to begin with, about the strength of this claim. First, to say that visual experiences often are very rich in information is not to say *all* experiences are. There are exceptions, of course. Think of the red ball against a white background in the psychologist's lab—or think of tunnel vision (Martin, 1992b: 207). Nor is it to say, second, that *every* perceivable object or property in the perceiver's visual field is perceived, let alone perceived *in all detail*. Clearly, visual experiences aren't *just like* photographs.

For instance, it might be that only those elements of a scene, which appear in the centre of the perceiver's visual field, are represented in any detail—whereas their surrounding isn't.<sup>4</sup> Still, a visual experience can present a very rich body of information—including information about hue, shape, size, location, etc.—if only about a single object located in the centre of the perceiver's visual field. What's more, as Dretske (1981: 152, 157) observed, information about objects in the periphery—perhaps not all of them—can be conveyed in the same experience. Even if such objects are not represented in *all* detail, information about their location, size, shape, as well as the spatial relations between them, is nevertheless available to the subject of that experience.

This latter *caveat* is important. (IRE) must be distinguished from the so-called 'snapshot conception of experience' (Noë, 2002b: 4). According to the latter, experiences aren't just rich in information, but they represent *every* object in the subject's visual field, and represent them in *all detail*. Since (IRE) doesn't claim as much, it is left untouched by various considerations raised against the 'snapshot conception'.

Thus, for instance, it has been observed that, when their attention is occupied with some specific task, normal subjects are often unable to notice other objects in their visual field—some call this phenomenon 'Inattention blindness' (Mack and Rock, 1998). Similarly, cases of 'Change blindness', in which normal subjects fail to notice an obvious change in some object well in sight, suggest that they do not see

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<sup>4</sup>This might have to do, in part, with the distribution of receptor cells on the retina. The centre of the retina (fovea) contains a high density of cones (cells sensitive mainly to colour) with very high acuity. In contrast, the periphery of the retina (parafovea) consists mainly of rods (receptor cells sensitive to lower light-intensity) which are more dispersed, and thus give rise to a much lower resolution. Hence, only 'foveated' stimuli are perceived in any great detail (see Bruce and Green, 1985: 25; and for a more complete survey, Findlay and Gilchrist, 2003: 11-18).

everything in their visual field (see, e.g., Simons, 2000). Such results, however, are perfectly compatible with (IRE). To repeat, (IRE) does not require that (a) one perceives *everything* in one's visual field, let alone that (b) one perceives everything *in the utmost detail*. Nor does it demand that (c) one *always* perceives *very many* objects and properties in one's visual field.

Furthermore, it's not even clear that such experiments succeed to undermine the 'snapshot conception of experience'—*pace* Noë (2002b: 7). For one thing, as Cohen (2002) points out, it might be that Inattentional and Change blindness only reveal failures to *notice* certain features—which is consistent with the claim that such features are perceived nonetheless.<sup>5</sup>

### 2.1. *What Ground for IRE?*

So what reason might one have to accept (IRE)? At first sight, the answer seems straightforward. By its very nature, (IRE) must be based at least on one's familiarity with one's own experiences and their phenomenology. Think again of your experience of the red ball described at the beginning—or of any similarly crammed scene—and try not to focus your attention on anything in particular: the phenomenology of your experience of such a scene ought to reveal that you are being presented with a multitude of objects, many (but not necessarily all) of their properties and relations (spatial and mereological relations as well as relations of chromatic difference and similarity, for instance). This is so, even if you briefly glance at the scene and close your eyes straight away.

Irrespective of what you focus upon and notice in a scene packed with distinct objects, it seems that the overall spatial arrangement of such a scene is represented in your visual experience. But this means that the shapes of the various objects which make up the display, together with their respective locations and the spatial relations that hold between such objects, must also be represented in your experience. And if you can perceive the shapes and locations of such objects, this must owe partly to the fact that their colours, and the chromatic differences with their respective backgrounds, are represented in your experience too.

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<sup>5</sup> See also the essays in Noë (2002a) and Coltheart (1999), as well as Braun (2001), Moore (2001), Rensink (2000a, 2000b).

Phenomenological reflections like these do suggest that a very rich amount of experience is indeed made available to you in experience.

What you make of such information is a different question. Consider the following example adapted from Fred Dretske (1993):

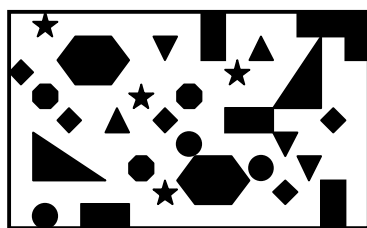


FIGURE A

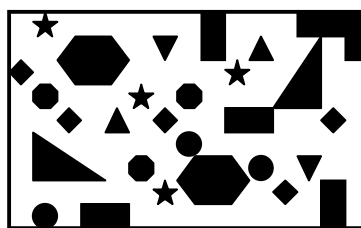


FIGURE B

No matter where you focus your attention, it seems as though the whole display of shapes in FIGURE A and in FIGURE B is represented in your experience. In fact, even if you fail to notice it, it is quite plausible that the particular shape marking the difference between FIGURE A and FIGURE B is represented in your experience too. After all, the two figures occupy the centre of your visual field—as you are presumably seeing them now from a reasonable distance. It would be surprising that your experience failed to represent a particular shape right in front of you, just because you didn't notice that shape. In such a case, the fact that you don't notice the additional shape in FIGURE A only shows that your experience contains too much information for you to process at once. The fact that you *can* notice the difference between FIGURE A and FIGURE B suggests that information about such a difference must be available in your experience.

As we shall see below, the temptation to restrict what is represented in experience to what the subject notices or attends to is quite congenial to Conceptualism. However, it seems that such a temptation must be resisted. For what remains unattended or unnoticed can nevertheless contribute to the phenomenology of experience in an important way. The point can be made quite vivid, with the help of an example from Barry Dainton (2000). Dainton imagines what the phenomenology of experience would be like, if visual experiences were indeed exhausted by what the subject actually notice:

You are sitting in an armchair, you have stopped daydreaming and have become engrossed in your book, which has taken an interesting turn, when suddenly the *entire* phenomenal background disappears, not just peripheral sound and vision, but mood and bodily experience too. The effect would be dramatic: it would seem as though the surrounding world had vanished, and your body with it. You would not feel the surrounding and supporting armchair; and since the surrounding room would no longer be present in your experience—save for the page of the book you were reading—you would be both surrounded and filled by void, physically and emotionally. [...]

Since the phenomenal background is not usually the object of our attention, we are rarely attentively aware of it. But it would be odd to say we have no awareness of it whatsoever, of any kind; it is, after all, a constant presence in our experience. (Dainton, 2000: 32)

Clearly, many of our visual experiences are unlike the one described in Dainton's thought-experiment. Phenomenologically, visual experiences seem to have a background: they represent more than just what is attended to or noticed. This holds for the background of visual experiences proper, as well as for what is experienced in other sensory modalities (as is emphasised in Dainton's example which uses the notion of 'background' in a broader way).<sup>6</sup> And so, visual information about some of the objects and properties in the background of visual experiences is a proper part of the content such experiences.

A final piece of phenomenological evidence for (IRC) is provided by the contrast between normal visual experiences and the experiences of subjects whose visual system appears to function less than optimally. Thus, consider the experiences described by subjects suffering from various perceptual deficits, from blindsight—'blind' area in the visual field—to apperceptive agnosia—to simplify greatly, a failure to perceive the whole shape of objects—and hemispatial neglect—in most cases, an apparent inability to perceive global scene structure (see, e.g., Farah, 2000: 56; 213ff; 296-7). Admittedly, it is hard to imagine—or 'picture'—the phenomenology of such experiences, where some perceptual

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<sup>6</sup> The notion of 'background' at play in this context, I take it, is determined in a contrastive way as what is not being attended to. In this respect, the background of experience need not coincide with the periphery of the subject's visual field. This is because the perceiver's attention may be attracted to items that are located in the periphery of the subject's visual field (and so, focus of attention need not coincide with the subject's direction of gaze: see Findlay and Gilchrist (2003) for a detailed discussion of this distinction). For instance, your attention might suddenly be attracted by the flashing light—in the corner of your eye, as it were—of the police car about to overtake (see also Campbell, 2002).

information seems unavailable to the subject (hence, their inability to perform a variety of perceptual tasks). Nevertheless, it isn't hard to imagine that, in contrast to such experiences, most of our visual experiences are at least quite rich in information.

Thus, if Conceptualists wish to resist (IRE), they must show either (i) that (IRE) mis-describes the phenomenology of our experiences, or (ii) that the phenomenology of our experiences is a poor guide to the nature of their representational content. In this section, I shall discuss what looks like one of the few strategies available to Conceptualists for resisting (IRE). By itself, such a strategy doesn't even attempt to address the phenomenological considerations that, I have claimed, support (IRE).<sup>7</sup> Rather, the strategy in question exploits a 'cognitive' constraint upon the content of experience. Such a strategy seems worth investigating, if only briefly. For if there is nothing to it, the phenomenological support for (IRE) will at least be on safer ground.

## 2.2. *Noticing in Experience*

For Conceptualists, perception is essentially a *cognitive* state. What a perceptual experience represents is intrinsically connected, on their view, with what the perceiver *cognitively accesses* in experience—that is, what the perceiver *would* form beliefs about, absent considerations that the world is not really as it seems. Hence, the important role of concepts in experience. On this view, the deployment of concepts allows the perceiver to form beliefs and thoughts *on the basis* of her experience. Otherwise, Conceptualists argue, such thoughts and beliefs cannot be linked *rationally* with the content of experience (McDowell, 1994, 162ff; Brewer, 1999: 158ff).

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<sup>7</sup> Of course, it could be supplemented with an account that 'explains away' the phenomenological considerations alleged to support (IRE). For instance, Conceptualists could resort to a so-called 'Dual-Component' theory of perception, according to which the phenomenology of experience is independent from its representational content. Given such independence, the phenomenology of experience is neutral as to whether the content of experience is rich in information. See Smith (2002: ch. 3), for a recent critical discussion of this option. It is worth noting that such a move is not available to McDowell and Brewer, who clearly deny any separation between the representational content and the phenomenal character of experience: the 'way it is like' to be in a given experience, they argue, must be intimately linked with what is presented in the experience (see Brewer, 1999: 156; McDowell, 1998: 442).

Besides conceptualization, it is natural to think that what perceivers *cognitively access* in experience is determined by what they *notice*. In general, a perceiver will have cognitive access to a perceived object *x* *only if* she has noticed *x*.<sup>8</sup> If she hasn't, one can rightly predict that her experience will not give rise to a belief about *x*—unless, of course, when it concerns the absence of *x*. On this ground, Conceptualists might try to exploit the following restriction upon what can figure in the representational content of experience:

(N) a feature *F* is presented in the experience *e* of a subject *S*, *only if S notices F*.

Given such a restriction, the following strategy might then be developed to resist the idea that visual experiences instantiate (IRE). Importantly, such a strategy rests upon an empirical claim according to which, quite plausibly, perceivers usually fail to notice a great deal of what makes up their visual field. The strategy can be reconstructed as follows:

- (1) a feature *F* is presented in the experience *e* of a subject *S*, *only if S notices F*. [(N)]
- (2) there are many other perceivable features in *S*'s visual field at the time when *S* experiences (and notices) *F*, which *S* does *not notice*. [empirical claim]
- (3) *S*'s experience *e* does *not represent* many of the features in *S*'s visual field. [from (1) & (2)]

The idea is that the more objects, properties, and relations *S* fails to notice in her visual field, the less plausible it seems that the content of her experience is rich in information. The strategy can then be repeated for any experience which allegedly instantiates (IRE). Crucially, the strategy relies on the fact that, if the empirical claim captured in (2) is at all plausible, this can be used to undermine the plausibility of (IRE).

The main problem for such a strategy, however, is that it leads to a dilemma. In light of certain intuitive examples, the combination of premises (1) and (2)

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<sup>8</sup> Martin (1992a: 758) emphasizes this conceptualist commitment. Admittedly, it is difficult to specify exactly what *noticing* a perceived object amounts to. Some (Graff, 2001: 928) have suggested that noticing involves at least (i) a belief about what is noticed, which is (ii) based upon the experience. According to Alan White (1964: 22-31), noticing *x* requires at least (i) a focus of perceptual attention on *x*, (ii) where *x* is discriminated against a background, and (iii) the subject 'realizes' the presence of *x*; it is also (iv) involuntary and (v) effortless—even though (vi) one can try to notice *x*, when one is looking for it.

becomes untenable: a proponent of the strategy must either reject (N), or amend the empirical assumption in (2).

### 2.3. *Perceptual Memory*

Here is, roughly, how the problem arises. Given certain familiar facts about (a) perceptual memory and (b) perceptual attention, it seems possible that, in some cases at least, subjects might experience an object without noticing it. If this is correct, it undermines (N). One obvious way in which Conceptualists might rescue (N) at this point is by insisting that, appearances notwithstanding, the subjects in such cases *do* notice what they perceive. Such a response, however, seems incompatible with the second assumption in their strategy against (IRE)—the empirical claim that perceivers typically fail to notice many elements of the visual scenes they are presented with.

What we seem to have here, interestingly, is some sort of ‘slippery slope’. In order to defend (N), Conceptualists are forced to revise the second empirical assumption, according to which little is noticed in experience. Yet, without such an assumption, Conceptualists are ultimately led to a position where (N) is in fact compatible with (IRE)—although (N) was supposed to ground their rejection of (IRE). The point of the discussion that follows is to emphasise that, whilst many of the responses I speculatively attribute to Conceptualists are *ad hoc*, they also completely fail to undermine (IRC).

Now with the details: cases of perceptual memory first. Fred Dretske (1969, 1993) and M.G.F. Martin (1992a) have argued that it is conceivable that a perceiver remembers an object she has previously experienced, even though she didn’t notice that object at the time. Suppose you spent the evening talking to the General at the Regiment’s party. You might have failed to notice the General’s thin moustache, despite the fact that you were facing him for most of the evening. Perhaps, you were simply too absorbed in the General’s conversation to notice his moustache. Surely, though, you could hardly have failed to *see* it in such circumstances.

What’s more, you might later realize that he had a moustache, by recalling the way his face *looked*. That is, you might retrieve such information at a time posterior to the experience, on the basis of your *perceptual* memory. The possibility that what isn’t noticed can nevertheless be recalled suggests that you did experience

the General's moustache in the first place. Perceptual memory is representational: the subject remembers the way something (e.g., the General's moustache) appeared to her. And if the memory in question is faithful, it must contain information about the way the General's moustache *actually* appeared visually to you (Martin, 1992a: 750-2).

This scenario suggests that there is information in the representational content of experience, which can go unnoticed. Hence:

(PM) it is *possible* that a feature *F* is presented in an experience of a subject *S*, although *S* does not notice *F*.

If Dretske and Martin are right, what is *cognitively accessible* in the representational content of experience is not necessarily *accessed* at the time of experience—although it might be accessed later.

Unfortunately, this sort of conceivability argument fails to undermine (N) in any conclusive way—as Martin (1992a: 753) seems to appreciate. For one thing, Conceptualists could deny that such a scenario is conceivable. Or they might insist that the General's moustache *must* in fact have been noticed, if it is possible at all for the subject to remember it.<sup>9</sup> At least, they will point out, if the subject does remember seeing the moustache, the claim that his moustache wasn't noticed the first time around is ungrounded. Or perhaps, they will argue that information about the moustache was processed only sub-personally, and didn't make it into the conscious representational content of the perceiver's mental state, *until* it was remembered.

Presumably, Conceptualists will be tempted to make similar moves in response to the case of FIGURE A and FIGURE B above. Such an example doesn't only suggest that visual experiences are rich in information, but also that the information conveyed goes beyond what the perceiver notices at the time. Of course, Conceptualists could insist that the shape distinguishing FIGURE A from FIGURE B isn't perceived unless it is noticed. More plausibly, they could claim that such a

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<sup>9</sup> Such a response seems less readily available with Martin's (1992a: 750) scenario, where a subject is looking for cufflinks in his cupboard, fails to find them, but later remembers that he has seen them in one of the drawers he searched. Here, had the subject noticed the cufflinks the first time, he would presumably have found them. Perhaps, though, Conceptualists will simply reject the intuition that the subject could later remember having seen

shape is in fact noticed by the perceiver *in some way*, even if she is attending to some other part of the figure at the time. Alternatively, they could say that information about such a shape is processed only by some sub-personal mechanism, but does not figure in the representational content of the subject's conscious experience.

This latter response, however, seems far more implausible. As Dainton's thought-experiment suggests, what figures in the background of an experience *does* contribute to the overall phenomenology of the experience. Hence, information about objects and properties in the background of experience is likely to figure in the content of the subject's *conscious* experience.

#### 2.4. *Perceptual Attention*

If Dretske and Martin's appeal to perceptual memory is inconclusive, other considerations must be found in support of (PM). Noticing seems to be constrained by attention: one can notice an object *x* *only if* one perceptually attends to *x* (if only very briefly).<sup>10</sup> For example, had you not attended to the red ball on your left, it is likely you wouldn't have noticed it.

But if it takes a focus of attention on a certain object to notice it, the converse doesn't seem to hold. It might be possible that one's perceptual attention is focused on an object *x* without noticing *x*. Suppose you are on the bus home, thinking about the best way to refute Conceptualism. Through the window, your perceptual gaze at times 'locks' upon, and follows, some object in the landscape. In this sense, you visually attend to such objects. But you do so without taking any notice of the objects: your thoughts are entirely occupied with the problem at hand. And nothing in the landscape succeeds to divert your thoughts from this problem.

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the cufflinks. Alternatively, they might argue that he might have noticed them in some way or other, without realizing *that* they were the cufflinks he was looking for.

<sup>10</sup> Perceptual attention is extremely difficult to characterize. Some simply equivocate attention with noticing, or think of it as some form of perceptual information-picking. Still, others conceive of perceptual attention as some kind of perceptual gaze or spotlight, while some distinguish between focal and cognitive attention. See Martin (1997, 1998), Peacocke (1998b), and White (1964). Pashler (1998) and Wolfe (2000) review the empirical literature and the various 'forms' that perceptual attention might take, including the difference between selective and divided attention, as well as cases of 'pop out'.

It also seems conceivable that, in some cases at least, one can perceive objects or properties without perceptual attention. Consider the following example, this time about auditory perception (Block (2002) uses a similar example). Think again of your encounter with the General and his moustache: a military choir has been performing at the other end of the room during the entirety of your conversation. Your attention was fully focused on the General's words, but it's not as if you were deaf to the sound of the choir. Rather, it seems that the sound of the choir was in the background of your auditory experience all along.

Thus, suppose that, although the sound of the choir remains objectively the same, your attention is suddenly attracted to it. This suggests that your experience of the sound, while unattended, was suddenly successful in causing a shift in the focus of your attention. In such a case, the presence of the choir's sound in the background of your experience explains why such a shift of attention is at all possible.<sup>11</sup>

Hence, it seems possible to experience an object *x* without attending to it. And if noticing requires attention, what isn't attended, it seems, cannot be noticed either. In which case, (PM) must be correct. The conceptualist constraint (N), on the other hand, rules out such a possibility: in a sense, it completely 'erases' the background of experience from the phenomenology of experience—that is, what is not attended by the perceiver. But, as Dainton's thought-experiment helps to make plain, such a consequence is phenomenologically counter-intuitive.

Again, though, Conceptualists might just reject such possibilities as incoherent, or insist that unattended objects can be noticed nonetheless. This is why, they might claim, the objects in question can be said to be perceived at all, in

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<sup>11</sup> There is some evidence that perceivers sometimes perceive without attention: for instance, Ben-Av et al. (1992), Braun and Julesz (1998), Braun and Sagi (1990), Fernandez-Duque and Thornton (2000), Iwasaki (1993), as well as Pashler (1998: 44-5, 51-5, 95, 137-9) and Wolfe (2000) for useful surveys. It might that perception without attention gives rise to little or no memory of what has been perceived, however (Pashler, 1998: 48, 55, 65-6; Wolfe, 1999: 88ff). But there is also evidence of some pre-attentive processing of visual information, as when certain items in the perceiver's visual field might seem to 'pop out' from a display of items, and thus attract the subject's attention: see Enns and Kingstone (1995), Hoffman (1979), Wolfe (1997), Wolfe (2000) Finally, there is some evidence that the background of experience can influence perception of what is presented in the foreground. For example, shape-perception depends in part on the chromatic and luminance contrasts between the object and its background: see, for instance, Moore and Egeth (1997), Kimchi (1992), Paquet (1992), Robertson et al. (1993), Wolfe (2000).

accordance with (N). They could also claim that, appearances notwithstanding, you did in fact attend to the sound of the choir, even if very briefly and without thinking about it. Likewise for the example of the bus-traveller: the fact that you do not think about what you visually attend to in the landscape does not show that you didn't notice it, or so Conceptualists might insist.

Needless to say, such responses are entirely *ad hoc*. More interestingly, though, they contribute to undermine the second premise in the conceptualist strategy against (IRE)—the empirical claim that perceivers fail to notice (and experience) a great deal of what is present in their visual field. Indeed, if it is true that perceivers notice more things than they in fact attend to, this means that they must notice a far greater deal of their visual field than what seemed initially plausible to assume. Conceptualists ought to grant that perceiver even sometimes notice what figures in the background of their experience. Thus, what is noticed in experience might be very rich in information indeed. At this point, then, (N) is unlikely to provide Conceptualists with any ground to undermine the claim that experiences instantiate (IRE). On the contrary, (N) itself is entirely compatible with (IRE).

*Wrapping up:* The claim that the representational content of perceptual experiences is rich in information (IRE) seems to be grounded primarily in phenomenological considerations. Given its scope, it is left unharmed by instances of change blindness and Inattention blindness. Nor does the strategy based on assumption (N) succeed to undermine (IRE). The representational content of perceptual experience doesn't seem to be constrained by (N). Perceivers can remember seeing what they hadn't previously noticed. And there is evidence that it is possible to perceive things without attention. When Conceptualists attempt to re-describe such examples to preserve (N), they are forced to admit that an awful lot of information can in fact be noticed by normal subjects—in which case (N) is compatible with (IRE).

### **3. How to Exploit (IRE) against Conceptualism?**

It looks like the first premise in the 'Richness of Content Argument' is fairly secure. Thus, in order to resist the argument, Conceptualists are more likely to direct their efforts towards the second premise:

**The Bridging Thesis:** if *S*'s experience *e* is rich in information, it is possible that *S* does *not* deploy a concept for at least one of the many objects  $o_1 \dots o_n$ , properties  $P_1 \dots P_n$ , and relations  $R_1 \dots R_n$ , presented *simultaneously* in *e*.

If Conceptualists grant the first premise (IRE), they might reject the second—to the effect that such a premise (a conditional) has a true antecedent but a false consequent. They might also argue that no consideration has been offered in support of premise (2). Unless proponents of the ‘Richness of Content Argument’ come up with an independent reason for the Bridging Thesis, Conceptualists might insist, such an argument poses no threat to their view. For instance, John McDowell notes the “characteristic richness of experience”, but does not seem to think that it raises any particular problem for Conceptualism: experience, he says, is just “a rich supply of already conceptual content” (1994: 49, n.6).

This is not quite correct, of course. Some of the considerations advanced in support of (IRE) also suggest that what is represented in experience outstrips what perceivers notice, attend to, or form beliefs about. In this respect, such considerations do not only support the claim that experiences are rich in information, but also the claim that experiences are richer in information than beliefs and other thoughts. This isn’t surprising. Think again of the experience of the red ball described at the beginning, and compare it with your belief that, say, there is a red ball on the table. The information making up the content of your belief might be limited to the proposition that there is a red ball on some table. Your experience, in contrast, contains much more information about the red ball, the table, and the surrounding elements. Hence, whereas your experience presents a particular visual scene, your belief is compatible with a whole range of distinct such scenes (Crane, 1992: 153; 2001: 151).

One of the crucial questions, at this point, is whether this difference between experiences and beliefs is relevant to the deployment of concepts in experience, and whether it is sufficient to support premise (2) in (RCA). Part of the answer ought to depend on how Conceptualists think of the deployment of concepts in experience. But Brewer and McDowell offer little detail about this aspect of their account of experience—and one is forced, again, to speculate. On the one hand, we have seen, Conceptualists might try to deny that objects and properties, which the perceiver fails to notice, attend to, or form beliefs about, can nevertheless be

represented in experience. On the other, Conceptualists may or may not adhere to the idea that perceivers deploy concepts in experience only for what they notice, attend to, or form beliefs about.

The difficulty thus lies in finding the right sort of additional claim(s) in support of the Bridging Thesis—claim(s), which Conceptualists must be likely to endorse. In this section, I review three possible strategies to motivate premise (2). The first (§3.1) relies on a comparison between perception and belief. The second explores the possibility that premise (2) is grounded in some kind of general limitation(s) about our concepts (§3.2). The third strategy focuses on a much narrower constraint upon the exercise of concepts in experience (3.3). None of these strategies is of any help, I argue. The point is to illustrate how difficult it is to motivate premise (2)—but I do not claim that the strategies considered here exhaust all possibilities.

In the final section (§3.4), I discuss a more promising approach, which does not directly attempt to motivate premise (2). The problem (IRE) raises for the conceptualist account of experience is essentially explanatory. In order to block the various possible versions of the Richness of Content Argument (RCA), Conceptualists must develop an account of the deployment of concepts in experience. Otherwise, it's unclear how Conceptualists can in fact escape the objection. The problem, however, is that a *coherent* account of the deployment of concepts in experience, which also takes care of the rich information carried in experience, is hard to come by—or so I shall suggest.

### 3.1. *Analog and Digital Representations*

Consider again the contrast between visual experiences and beliefs. It often seems as though such a contrast is the driving intuition behind the 'Richness of Content Argument' (RCA) against Conceptualism. The thought seems to go as follows: granted that the content of experience is usually richer in information than the content of beliefs, and assuming that beliefs are paradigmatic psychological states with conceptual content, this strongly suggests that the informationally rich content of experience might not be fully conceptual.

We can distinguish at least four claims at play in this line of reasoning. First, there is (IRE) proper, the claim that the representational content of visual

experiences is very rich in information. Second, there is the ‘comparative’ claim about beliefs and experiences:

(R+) the content of experiences is richer in information than the content of beliefs.

The third claim is the assumption that beliefs have conceptual content. The fourth, and central, claim exploits the idea that there is a correlation between deployment of concepts on the one hand, and the limited amount of information that seems carried in most beliefs on the other.

Thus, the suggestion goes, the quantity of information carried in the content of a given belief might have something to do with the number of concepts a subject must exercise in order to entertain the content of that belief. For instance, compare the content of the belief expressed by ‘there is a red ball, a bat, and a cap, on the middle of the table in the living room’, with that expressed by ‘there is a red ball’. The former is both (i) richer in information and (ii) seems to require the exercise of more concepts. In this respect, it could be that the more information the content of the belief contains, the more conceptual capacities it mobilizes. One might then hope to make use of such a correlation, together with (R+), to warrant the Bridging Thesis.

Indeed, this seems to be what Fred Dretske’s (1981) had in mind, when he first drew attention to the fact that perceptual experiences are very rich in information.<sup>12</sup> Dretske begins by distinguishing what looks like two *kinds* of representational content—or as he puts it, between two ways of encoding information:

[...] consider the difference between a picture and a statement. Suppose a cup has coffee in it, and we want to communicate this piece of information. If I simply *tell* you, ‘The cup has coffee in it’, this (acoustic) signal carries the information that the cup has coffee in it in digital form. No more specific information is supplied about the cup (or the coffee) than that there is some coffee in the cup. You are not told *how much* coffee there is in the cup, how large the cup is, *how dark* the coffee is, what the shape and orientation of the cup are, and so on. If, on the other hand, I photograph the scene and show you the picture, the information that the cup has coffee in it is conveyed in analog form. The picture tells you that there is

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<sup>12</sup> To be fair, though, Dretske’s primary target was not Conceptualism *per se*, but the view in Cognitive Science that sensory and cognitive phenomena are indistinguishable stages in our cognitive architecture. Yet, some of his remarks can be used against Conceptualism, and have often been interpreted in such a way.

some coffee in the cup by telling you, roughly, how much coffee is in the cup, the shape, size, and color of the cup, and so on. (Dretske, 1981: 147-8)

With such a distinction in hand, he argues:

The contrast between an analog and a digital encoding of information (as just defined) is useful for distinguishing between sensory and cognitive processes. Perception is a process by means of which information is delivered within a richer matrix of information (hence in *analog* form) to the cognitive centres for their selective use. Seeing, hearing, and smelling are different ways we have of getting information about *s* to a digital-conversion unit whose function it is to extract pertinent information from the sensory representation for purposes of modifying output. [...] The traditional idea that knowledge, belief, and thought involve *concepts* while sensation (or sensory experience) does not is reflected in this coding difference. (Dretske, 1981: 151)

The central point in this passage speaks directly to (R+): the comparative claim about the information conveyed in perception and belief. According to Dretske, *only some* information carried by perceptual states in analog form is *selected*—or ‘extracted’—to be encoded *digitally* by thought-processes. In other words, *a loss of information* characterizes the transition from perception to belief, and partly determines their interaction.

But how does this relate to the Bridging Thesis? Perhaps, the connection can be spelt out as follows. First, the fact that information is lost in the transition from perceptual experience to belief shows that beliefs and experiences have different kinds of content: while the content of experiences is informationally rich—and therefore, analog—that of beliefs is poorer and digitally encoded. Second, since the content of beliefs is typically conceptual, any limitation upon the information contained in beliefs might apply just as well to other states with conceptual content. Perhaps, the fact that beliefs have conceptual content can *explain why* their content is poorer in information—and so, why (R+) is true. In turn, this could serve to explain why subjects fail to conceptualize everything they perceive: *because* visual experiences contain much more information than what such subjects normally conceptualize.

Unfortunately, this attempt to use Dretske’s remarks leads nowhere. If the first step in this reasoning could successfully establish that the contents of experiences and beliefs encode information differently, it might support the claim that

experiences and beliefs have different *kinds* of contents.<sup>13</sup> But the second step in this reconstruction of Dretske's argument fails to show that such a *difference in kind* pertains to the allegedly *conceptual* (or non-conceptual) nature of the contents of experiences and beliefs.

Dretske's argument exploits three distinctions: namely, between (i) *analog* and *digital* ways of encoding information, between (ii) content that is *informationally rich* and content that is less so; and finally, between (iii) *non-conceptual* and *conceptual* content. The argument would prove problematic for Conceptualists, granted the assumption that, whereas the *conceptual* content of thoughts is typically *digital* and *poorer in information*, the analog and informationally richer content of experience is *non-conceptual*. But nothing in the argument supports the assumption that these three distinctions actually match one another in such a way.<sup>14</sup>

More importantly, Dretske's argument fails to provide any reason to think that psychological states with analog and informationally rich content cannot satisfy the three conditions determining conceptual content: namely, (1) the *Possession* condition, (2) the *Deployment* condition, or (3) the *Completeness* condition. In this respect, Conceptualists need not think of conceptual content as an entirely homogeneous kind. We have already seen that Conceptualists do not attempt to reduce perceptual experiences to beliefs: they acknowledge functional and phenomenal differences between these two kinds of psychological states. In a similar vein, Conceptualists could grant that, while perceptual experiences are analog and rich in information, beliefs are digital and poorer in information.

However, they will insist that such differences do not suffice to constitute two different kinds of content: one *conceptual*, the other *non-conceptual*. Rather,

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<sup>13</sup> Although it's not clear that such a difference in the amount of encoded information really suffices to ground a distinction between two *kinds* of content: *analog* and *digital* content. For one thing, Dretske seems aware that it might be possible to construct a very complex linguistic description (made up, perhaps, of a very long conjunction of simpler sentences), which captures in exact detail the information contained in the corresponding photograph. Such a description, presumably, is digital, and yet it is as rich in information as an analog representation (Dretske, 1981: 148).

<sup>14</sup> For instance, it could be that some conceptual thoughts are analog—mental images and perceptual beliefs, for instance (see also Jacob and Jeannerod, 2003: 26). To make it all the more perplexing, Dretske himself points out that “a signal carrying information in analog form will always carry some information in digital form” (1981: 147).

Conceptualists might claim, such differences capture a contrast between two different *types* of conceptual content: the conceptual content of perceptual experiences on the one hand, and the conceptual content of beliefs on the other. This is why any constraint on the conceptual content of beliefs need not apply to the conceptual content of experiences, according to Conceptualists. In which case, (R+)—together with the claim that the conceptual content of beliefs is informationally poorer—fails to support the Bridging Thesis.

The difficulties encountered here are instructive, nonetheless. They reveal how the following two desiderata must be satisfied by any attempt to exploit the informational richness of experience against Conceptualism. First, a connection must be established between the fact that experiences have a content that is rich in information, and the fact that such content isn't conceptual. For instance, one must show that conceptual content *cannot* be so rich in information. Second, the issue really concerns the role played by our conceptual capacities in *experience*. And therefore, considerations of the role played by concepts in other types of psychological states—like beliefs—is, to some extent, irrelevant.

### 3.2. *Limited Concept Deployment*

Given such desiderata, a perhaps more promising approach is to appeal to general limitations upon our conceptual capacities. Perhaps, the reason why (IRE) could defeat Conceptualism has to do with the fact that we are quite generally incapable of conceptualizing *simultaneously* the amount of information typically presented in visual experiences. Such a limitation on conceptual content must be quite general, and not based solely on the contents of beliefs.

Furthermore, such limitations must relate to the *deployment* of concepts, rather than to their possession. After all, the fact that experiences contain a great deal of information is not directly relevant to *which* concepts normal perceivers actually possess. To repeat, it is possible, in principle at least, that the rich amount of information typically carried in experience is very coarse-grained, so that normal perceivers do *possess* distinct concepts for each object, property, or relation, presented in their experience. Even if a perceiver possesses enough concepts, the problem seems to be that, given the informational richness of experience, she cannot *simultaneously* exercise these concepts for *every* object, property, or relation, presented in her experience at the time. Thus, (IRE) is supposed to threaten

Conceptualism only insofar as it serves to undermine the claim that experiences necessarily satisfy the *Deployment* and *Completeness* conditions for conceptual content. This marks another important difference between the ‘Richness of Content Argument’ and the ‘Argument from the Fineness of Grain of Experience’. While the latter targets the Possession-condition on conceptual content, the former is concerned with the Deployment-condition.

Perhaps, then, something like the following must be combined with (IRE) in order to derive the Bridging Thesis:

- (L) normal subjects can only *deploy* a certain number  $n$  of concepts in *any* psychological state  $\phi$  at *any* given time.

Thus, if  $n$  in (L) were to fall well short of the corresponding amount of information contained in experience, it would follow that a perceiver may be incapable to deploy sufficiently many concepts at a given time so as to match the amount of information presented in her experience at that time. The main questions surrounding (L) are what  $n$  amounts to, whether (L) is true, and how we can ever find out.

Of course, it’s hard to imagine what considerations could serve to establish the truth of (L). For instance, it seems that no phenomenological consideration—based upon our familiarity with the way we normally deploy concepts—will do. For one thing, phenomenology is primarily descriptive and concerns the experiences and thoughts we *normally* have. But (L) requires something stronger. Insofar as it embodies a general limitation upon our capacity to exercise concepts at a time, (L) must entail that it is *not possible* for perceivers to deploy so many concepts at the same time. But it seems fallacious to ground such a modal claim upon a mere description of the way thoughts, beliefs, and other mental states *actually* engage our conceptual capacities.

For the same reason, no empirical consideration seems appropriate either. It might be that normal subjects tend not to exercise their conceptual capacities to their maximum. In which case, an empirical investigation of the way we *usually* exercise such capacities may not reveal any limitation like (L). There is also the further difficulty that neither phenomenological, nor empirical, considerations can rest too heavily upon the way we exercise concepts in *beliefs* and other

thoughts—on pain of raising, again, the accusation that such considerations are irrelevant to the way we exercise conceptual capacities *in experience*.

Similar difficulties plague one of the few empirical considerations which proponents of (RCA) exploit to motivate the existence of conceptual limitations in experience. In order to show that normal perceivers are unable to deploy concepts for everything they see, Dretske (1981) resorts to Sperling's (1960) famous experiment(s):

Subjects are exposed to an array of nine or more letters for a brief period (50 milliseconds). It is found that after removal of the stimulus there is a persistence of the 'visual image'. Subjects report that the letters appear to be visually present and legible at the time of a tone occurring 150 milliseconds *after* removal of the stimulus. Neisser has dubbed his iconic memory—[...] it turns out that although subjects can identify only three or four under brief exposure, *which* letters they succeed in identifying depends on the nature of a later stimulus, a stimulus that appears only 150 milliseconds after removal of the original array of letters. [...]

What [Sperling's] experiments show is that although there is a limit to the rate at which subject can *cognitively* process information (*identify* or *recognize* letters in the stimulus array), the same limitation does not seem to apply to sensory processes by means of which this information is made available to the cognitive centres. Although the subjects could identify only three or four letters, information about *all* the letters (or at least *more* of the letters) was embodied in the persisting 'icon'. (Dretske, 1981: 159)

The natural assumption, I take it, is that what subjects identify in experience strictly coincide with what they deploy concepts for. The thought then is that Sperling's research establishes (a) that normal perceivers are unable to process and thus conceptually identify more than four or five items at the time, although (b) they can perceive more items, since they can retrieve information about the overall display on the basis of their iconic memory. While the first point (a) seems to support constraint (L) on the deployment of concepts in experience, the second point (b) is supposed to support a version of claim (R+), according to which experiences contain more information than is conceptually identified.

There are at least two problems with this. The first has to do with the interpretation of Sperling's data and its empirical significance for our understanding of the role of iconic memory in experience. Iconic memory (which is distinct from short-term memory, see Pashler, 1998: 102-9) of a display consists in the rapidly fading iconic persistence of information about the display a few milliseconds after the display itself has been removed and replaced by a blank

screen. This allows subjects to report more information that can be stored in their short-term memory (four or five items). Subjects make such reports when probed by a tone (the later stimulus mentioned by Dretske) to focus their attention on some other part of the display straight after its removal.

Dretske, like many others, seems to assume that the subject experiences the whole display, and that her iconic memory is causally dependent upon her *experience*. However, Conceptualists could describe the case slightly differently. Perhaps, the subject's conscious experience is itself determined by iconic memory, they might argue. Thus, iconic memory could be one of the sub-personal processes underpinning perceptual experiences. On this proposal, the subject's experience might involve a certain time lag. Indeed, it's unclear why the duration of the subject's experience should precisely coincide with the interval during which the stimuli are present—as it is assumed. Given this different description of the relationship between iconic memory and experience, one problem about the significance of Sperling's experiment becomes pressing.

One difficulty with iconic memory is that, in normal situations, displays are usually replaced, not by a blank screen as in Sperling's experiment, but by some other display. As Pashler notes:

[...] the conditions under which iconic memory is observed in the laboratory are not typically encountered in natural environments. [...] Usually, a fixation ends when the observer makes a saccadic eye movement to fixate some new object. When this happens, the portion of the retina previously fixated receives new input, rather than no input at all [...] (Pashler, 1998: 107).<sup>15</sup>

If so, iconic memory might play little role in real-life situations. And this fact could be interpreted by Conceptualists as evidence that experiences aren't usually so rich in information.

A second problem concerns the relevance of Sperling's research for the issues at hand. Sperling's results show that normal perceivers can report only four or five items in a display of nine letters, due to storage-limitations in their short-term memory. But it's not clear that the limitations to report items in the display revealed by Sperling's research supports the claim that such limitations have anything to do with the deployment of concepts in experience. The problem is that

it's unclear whether such limitations indicate a failure to conceptually identify all the letters in the display rather than a failure to report what the subject has identified. Without a full-blown psychological theory of concepts and how they relate to central information-processing mentioned by Dretske, there is no particular reason why the latter should be of any relevance to the former.

### 3.3. *Noticing and Conceptualizing*

The difficulties encountered with (L) suggest that a weaker requirement might have to do the job instead. Perhaps, it is simply *possible* that perceivers sometimes fail to conceptualize everything they experience at a time, even though they *can* conceptualize it in most situations. No need for a strong requirement like (L) on this third approach: all it takes to justify the Bridging Thesis is to show that perceivers occasionally fail to deploy a concept for at least one of the features presented in their experience. Indeed, this is just the sort of possibility mentioned in the consequent of the Bridging Thesis. Such a possibility directly falsifies the combination of the *Deployment* condition with the *Completeness* condition for conceptual content.

At first sight, this third approach seems easier to justify, since one only needs to argue that it is *possible* for perceivers to sometimes fail in conceptualizing objects or features they experience. For instance, such a claim might find some support in the thesis proposed by Dretske and Martin against (N):

(PM) it is *possible* that a feature *F* is presented in an experience of a subject *S*, although *S* does not notice *F*.

Given (PM), the suggestion goes, a subject of experience may *not deploy* concepts for those features she fails to notice.

But why think that a failure to notice a particular feature has to result in a failure to deploy a concept for it? The problem, here, is that the transition from (PM) to the Bridging Thesis does not come for free. An additional assumption is needed:

(CI) a subject *S* deploys a concept *C* for a feature *F* *only when S notices F*.

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<sup>15</sup> See also Coltheart (1976, 1980).

Unless one presupposes something like (CI), the inference from the possibility that a perceiver fails to notice a certain feature in her visual field to the possibility that she fails to deploy a concept for that feature seems unwarranted.

The question then becomes whether one is entitled to rely on (CI) against Conceptualists. Such a constraint embodies a rather ‘loaded’ conception of the deployment of concepts in experience, according to which one can conceptualize a perceived object *only when* that object is *noticed*. We saw earlier that Conceptualists might endorse the converse of (CI): when one notices a certain object in one’s visual field, one thereby conceptualizes such object—if only demonstratively. But (CI) should not be confused with such a claim: the fact that noticing is *sufficient* for conceptualization does not entail that it is *necessary* too.

Needless to say, Conceptualists might very well reject such a constraint on the exercise of conceptual capacities in experience. They could argue that, on their view, it is possible that perceivers deploy concepts even for what they fail to notice. After all, it was argued earlier that (i) noticing is likely to be constrained by what one attends to, and that (ii) it is possible to perceive unattended objects. If this is correct, Conceptualists might as well embrace the idea that perceivers can deploy concepts for experienced—but unattended—objects.

For instance, they could argue that the most likely explanation as to *why* such objects fail to attract the perceivers’ attention has to do with the fact that they are familiar to the perceiver. As such, they present no unexpected elements in the subject’s visual field. On this ground, Conceptualists might try to argue that the fact that such objects are familiar to the perceiver—and thus provoke no surprise—indicates that she must have conceptualized them in some way or other. If this is indeed possible, then perceivers might conceptualize objects and properties they experience without noticing them, or even focusing their attention upon such objects.

Hence, if Conceptualists have grounds to reject (CI), such a thesis cannot support the move from (PM) to the Bridging Thesis. In which case, the second premise in (RCA) remains unmotivated.

#### 3.4. *An Explanatory Challenge*

All three attempts to motivate the Bridging Thesis considered so far appear to fail. The key problem with such attempts owes to their reliance upon certain

constraints regarding the deployment of concepts, which Conceptualists need not accept. Admittedly, this is so partly because Conceptualists are elusive about the details of their own position, as I pointed out earlier. As a result, the second premise in the ‘Richness of Content Argument’ (RCA) against Conceptualism remains ungrounded. Of course, if the second premise in (RCA) is unmotivated, the same can be said of the putative responses made on the Conceptualists’ behalf to various possible motivations for such a premise. Most such responses are *ad hoc*, and whether they can be based on a substantial and coherent conceptualist account of experience remains to be seen.

Does this mean that any argument exploiting the fact that experiences are rich in information against Conceptualism is bound to fail? Not quite. So far, I have considered only deductive arguments based upon (IRE). The problems we’ve encountered arose mainly from the failure to warrant the second premise in such arguments. All this shows, however, is that no *conclusive* reason against the conceptualist conception of experience can be obtained from the fact that our experiences are rich in information. This is not to say that the informational richness of experience is unproblematic for proponents of Conceptualism. Perhaps, the ‘Richness of Content’ objection ought to be construed in a different way, as some form of abductive argument.

Thus, assuming that perceptual experiences tend to convey a rich amount of information, one might argue that the *onus* is in fact on the Conceptualists to show how their account of experience can accommodate such a fact. In particular, the challenge is to explain how perceivers deploy concepts in experience, such that experiences with a rich content nevertheless satisfy the three conditions Conceptualists impose upon conceptual content. Without such an account, Conceptualism easily falls prey to the objection that its requirement that perceivers conceptualise everything they experience makes for a highly implausible conception of experience.

Consider, for instance, the spatial structure of a visual scene, and the very rich spatial information carried in an experience of such a scene. Is it really plausible to suggest that perceivers, at the time of experience, exercise enough spatial concepts in a way that captures such information in its entirety? Surely, normal perceivers don’t attend to—or notice—all the spatial relations that make up such scenes.

Even if they did, it is unclear how the concepts they deploy for such spatial relations could match exactly the complex way in which these various relations make up the spatial structure of their visual field. In this respect, it seems that there is some pressure on Conceptualists to make their view more plausible—at least, to remove the appearance of implausibility.

As far as I am aware, most proponents of Conceptualism have ignored this challenge. Bill Brewer (1999) appears to be the exception. He writes:

To begin with, I entirely agree that there is more information available in perception than is conceptualized in perceptual demonstrative contents. This is the information which is being processed automatically by the early operations of the subject's perceptual systems, but is not attentionally selected for further processing and use by the subject in his deliberation—both theoretical and practical—and in the control and co-ordination of his action. Furthermore, this information is not just available in this sub-personal sense of systematically affecting various areas in the subject's brain; but it is also available *for the subject*, although not demonstratively conceptualized, in the sense that it is a *possible* focus for his selective attention, without further ado, either actively directed in the service of some ongoing project, or passively drawn by acquiring some other kind of salience. Thus, the central notion in understanding perceptual experience is therefore the attentional selection of information which is thereby conceptualized in perceptual demonstrative contents. More information is available than just this, though, both in the sub-personal-level sense of being processed automatically by the early operations of the subject's perceptual systems, and also in the personal-level sense of being the possible focus of deliberate attention without the need for any further uptake of information. (Brewer, 1999: 240-1)

Brewer *does* acknowledge in this passage that perceptual experiences are rich in information, and that such information is richer than what the perceiver identifies by deploying demonstrative concepts. He then goes on to distinguish various levels at which such information is available for the perceiver, only the last of which is conceptual—and, he says in the end, of real interest to him. Brewer's account of the rich information carried in experience is illuminating, but it also illustrates how difficult it is for Conceptualists to provide a coherent account of this aspect of experience.

Brewer's attempt to meet the challenge raised by (IRE) encounters, I think, at least three difficulties.<sup>16</sup> The first problem is that Brewer does not really account for (IRE). Rather, it looks as though he is really trying to 'explain away' such a feature. Brewer grants that there is rich perceptual information at the sub-personal level of a subject's perceptual state, in addition to the conceptual content at the personal level. Such rich information, he claims, is available at the sub-personal level, but can also be demonstratively conceptualized at the personal level, though only *when* it occupies the perceiver's attention.

This seems to suggest that, insofar as it isn't attended and conceptualized, the rich information in experience remains at the sub-personal level. And presumably, what occurs at the sub-personal level is not conscious: it isn't actually accessed by the subject. The idea, I take it, is that only conceptual content occurs at the personal level. Of course, this is one of the very claims opponents of Conceptualism take issue with: that is, whether or not there can be non-conceptual content at the personal level, which partakes to the phenomenology of experience. Thus, unless Conceptualists come up with an argument for such an assumption, it remains pure stipulation on their part.

The problem is that (IRE), as it was originally described, is an essentially *phenomenological* feature of experience. Part of what it means for experiences to be so rich in information is that we seem to be presented with whole scenes in experience, and many—but perhaps not all—of the objects making up such scenes. Even what remains unattended—and thus in the background of experience—makes its way into the phenomenology of experience, as Dainton's thought-experiment seems to show. Thus, the fact that experiences convey such rich information contributes in an important way to the subject's *conscious* awareness of the scenes she perceives. If so, one would expect that such rich information is actually constitutive of the content of experience available to the subject at the *personal level*.

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<sup>16</sup> Other difficulties are exegetical. Note that it isn't too clear what Brewer exactly means by 'availability': is available information (i) supposed to be *actually accessed*, or (ii) only *accessible* (possibly accessed) by the perceiver? Similar problems face Brewer's use of the notions of 'personal' and 'sub-personal' levels at which such information is available (for discussion of these notions, see Davies (1989, 2000)).

By Brewer's own lights (1999: 156), the phenomenology of experience is intimately linked with what is presented in experience. He writes:

[...] all phenomenology is a matter of the mode of presentation of certain states of affairs to a person, not anything distinct from and independent of such representations. (Brewer, 1999: 156)

Hence, the *phenomenological* intuition(s) behind (IRE), if correct, must have to do with the fact that our visual experiences are such that they *present* us, not just with few objects and properties, but often with whole scenes, which are represented with some level of complexity and detail. Accordingly, this rich information should figure in some way or other at the personal level, if it contributes at all to the phenomenology of experience.

In which case, either Brewer is really taking (IRE) into account—and so, his account fails to address the phenomenological nature of (IRE). Or he is in fact concerned with another thesis about the rich information processed sub-personally in perception, which has little to do with the way whole perceptual scenes strike us as visually appearing to us. Either way, it doesn't look as though Brewer's account really meets the challenge raised by (IRE).

Interestingly, Brewer seems aware of this problem, as he backtracks slightly from the claim that the rich information of experience is only processed at the sub-personal level. Near the end of the passage above, he writes as if there is a third intermediate level of information available in perception. He acknowledges that the rich information in perception, in addition to being available at the sub-personal level, can also acquire 'some kind of salience', so as to 'passively' attract the perceiver's attention.

I gather that what Brewer has in mind here is something like the following. It often happens that the subject shifts her attention from the foreground of experience—where her attention is focused at the time—to an object in the background. When so doing, the subject might herself be responsible for such attentional shifts, as when carrying out a visual search. Sometimes, though, the subject's perceptual attention is attracted by certain elements in her visual field, without her guidance, as it were. In such cases, it seems as though certain unattended elements of the subject's visual field become salient, thereby causing her attention to shift towards such elements.

This suggests that the rich information conveyed in experience can be salient at the personal level, not just as the actual focus of attention, but also as what can draw such focus towards certain objects in the periphery of the subject's visual field. This point raises an exegetical difficulty. Does Brewer mean to suggest that (a) there is another level of sub-personal content, which *would* be accessed by the subject, *were* it to become salient and attract her attention? Or does he rather intend that (b) perception also has a level of information salient at the personal level, which is unattended and unconceptualized, but can be demonstratively conceptualized by the perceiver when it is attended?

Neither interpretation is entirely satisfactory, however. *Interpretation (a)* amounts to little more than Brewer's initial claim that experiences contain a rich amount of information, but *only at the sub-personal level*. As such, it encounters the same problem as before. According to *interpretation (b)*, on the other hand, Brewer's account is compatible with the existence of *two kinds* of representational content in the subject's conscious life, only one of which coincides with the perceiver's attention, and is thus demonstratively conceptualized.

The problem with *interpretation (b)*—the second problem on our list—is that it looks very much like a renouncement of Conceptualism. By seemingly granting that there is perceptual information at the personal level, both (i) unattended (but which can attract attention), and (ii) as the actual focus of the perceiver's attention (which is demonstratively conceptualized), Brewer gives the impression that he is allowing for the idea that experiences have a conscious *non-conceptual* content. Since, he seems to assume, only what is attended is demonstratively conceptualized, what is not attended must be non-conceptual.<sup>17</sup>

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<sup>17</sup> At this point, Conceptualists might try to respond that this ignores the possibility that what the perceiver doesn't attend to is nevertheless *passively* conceptualised by her—and so, there is no need to appeal to non-conceptual content. This kind of move seems quite popular among Conceptualists, but to no avail in the case under consideration. For one thing, it's unclear what it means to “passively” deploy a concept. More importantly, the distinction between active and passive deployment of concepts is already used by Conceptualists to mark a contrast between the deployment of concepts in thought and in experience (see McDowell, 1994: 10–11). Thus, Brewer (1999: 185–6) himself argues that the deployment of demonstrative concepts in experience is passive. And so, it seems, the very same machinery cannot be used twice to account (i) for a difference between thoughts and experience, and then (ii) for a contrast between the deployment of demonstrative concepts and the deployment of concepts outside of the focus of attention. Surely, this is one use too many of such an obscure notion.

The third problem concerns this latter assumption. Brewer appears to commit himself to a rather restricted conception of the deployment of concepts in experience. In the passage quoted, he seems to subscribe to at least two constraints about the deployment of concepts in experience. First, perceivers primarily deploy *demonstrative concepts* in experience. Second, the deployment of such concepts is governed by the subject's attention, so that a perceiver deploys a demonstrative concept for an object *o* in her visual field, only if she perceptually attends to *o* (see also Brewer, 1999: ch. 6). The combination of these two constraints entails that no deployment of concepts takes place in experience outside the focus of attention.

And if Brewer was indeed committed to such a view, proponents of the 'Richness of Content Argument' would now be in position to motivate the Bridging Thesis. Since it seems possible to perceive things outside the focus of attention (and Brewer appears to grant this point), and since the deployment of demonstrative concepts in experience is constrained by attention, it now seems possible that one does not conceptualize everything one experiences. In which case, the 'Richness of Content Argument', in its deductive form, succeeds against Conceptualism.<sup>18</sup>

Provided I have read Brewer's remarks accurately, the three problems outlined in this section illustrate how difficult it is for Conceptualists to account for the informational richness of experience. In order to make (IRE) compatible with the commitments Conceptualists impose on the content of experience, not any conceptualist story will do. Conceptualists must ensure that their account is not only independently motivated, but also consistent. This means that, among other things, they will have to resolve the difficulties surrounding claims such as (N), (CI), or the connection between conceptual deployment and perceptual attention.

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<sup>18</sup> In response to this sort of threat, Brewer could help himself with the move described at the end of section 3.3. That is, he could insist that pre-attentive salience is to be explained conceptually. Something is salient enough to attract attention, he might argue, only if the perceiver conceptualizes it in some way. Presumably, if Brewer still wants to hold that demonstrative concepts require attention, he might have to say that only non-demonstrative concepts are deployed pre-attentively.

#### 4. Conclusion

The aim of this paper was to assess what sort of argument could be constructed on the basis of the informational richness of experience, and how such an argument might fare against Conceptualism. Conceptualists, we have seen, appear to be in no position to deny that the representational content of experiences is indeed very rich in information.

On the other hand, the fact that experiences instantiate (IRE) does not seem to offer a conclusive argument against Conceptualism. For there is little chance to find any consideration which would establish that, *because* of its informational richness, the content of experience is not conceptual. This difficulty is accentuated by the fact that Conceptualists remain silent on the details of their conception of conceptual content. Without such details, it is impossible to pin down on the advocates of Conceptualism a particular conception of the deployment of concepts in experience, and then use it in the argument. In this respect, Hume's dictum seem appropriate: "Tis impossible to refute a system, which has never yet been explain'd. In such a manner of fighting in the dark, a man loses his blows in the air, and often places them where the enemy is not present" (Hume, 1978: 464; from Cowie, 1999: 213).

Nevertheless, we saw how (IRE) might present an important challenge to the way Conceptualists develop their account of experience. It is difficult to imagine how perceivers might plausibly deploy concepts for everything they see at any one time, given the rich information carried in experience. And so, discussion of (IRE) ought to play a major part in the case against Conceptualism, at least insofar as it forces Conceptualists to substantiate their account of the representational content of experience.<sup>19</sup>

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<sup>19</sup> *Acknowledgments:* A first shot at this material was presented at the ANU Philosophy Society in Canberra in September 2002—thanks in particular to Laura Schroeter and Kim Sterelny for their incisive remarks. For helpful comments on various ancestors to this paper, thanks to Alex Byrne, David Chalmers, Nic Damnjanovic, Martin Davies, Janice Dowell, Daniel Friedrich, Frank Jackson, John O'Dea, Sally Parker-Ryan, Adina Roskies, Daniel Stoljar, and Susanna Siegel.

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