

## SYMPOSIUM

# Précis of *The Unity of Perception*

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How does perception justify beliefs and yield knowledge of our environment? How does it bring about conscious mental states? How does a perceptual system accomplish the feat of converting varying informational input into mental representations of invariant features in our environment? *The Unity of Perception* develops a unified account of the phenomenological and epistemological role of perception that is informed by empirical research (Schellenberg, 2018). As such, it develops an account of perception that in equal measures aims to answer the first two questions above, while being sensitive to evidence from neuroscience, cognitive psychology, and psychophysics in addressing the third. Most accounts of perception focus on one or the other of these three questions and struggle to provide plausible answers to the other two questions. What makes my view distinctive is that it answers all three questions in terms of one fundamental property of perception: the employment of perceptual capacities. Indeed, a two-word summary of the book is: capacities first.

The book treats capacities as explanatory basic and analyzes perceptual content, consciousness, evidence, and knowledge in terms of employing capacities. The relevant capacities are capacities to discriminate and single out particulars in the environment. Employing perceptual capacities constitutes phenomenal character as well as perceptual content. The primacy of employing perceptual capacities in perception over their derivative employment in hallucination and illusion grounds the epistemic force of perceptual experience. In this way, the book provides a unified account of perceptual content, consciousness, and evidence. Due to the grounding role of perceptual capacities, I call the view *capacitism*.

Such a unified account of perception opens up a new understanding of the nature of perceptual content, perceptual particularity, the phenomenological basis of evidence, the epistemic force of evidence, the origins of perceptual knowledge, the relationship between content and consciousness, as well as the relationship between consciousness and reference. Moreover, it clears the way for solving a host of unresolved problems, such as the relation between attention and perceptual knowledge, and the perceptual basis for demonstrative reference.

A central theme of the book is that perception is particular and general all the way down. It is particular all the way down because every case of perception involves perceiving and representing at least one particular, where that particular could be an object, event, or a property-instance in the environment. Perception is general all the way down because we perceive particulars by employing perceptual

capacities, that is, capacities to discriminate and single out particulars. So the particular element of perception is provided by the particulars perceived, while the general element is provided by the perceptual capacities employed by means of which one discriminates and singles out those particulars.

These ideas are developed in Part I of the book: the foundations on which the rest of the book builds. The central role of perception in our epistemic and cognitive lives is to provide us with knowledge of particulars in our environment, justify our beliefs about particulars, ground demonstrative reference, and yield singular thoughts. I tackle the problem of perceptual particularity, teasing apart its different aspects. In light of this discussion, I defend the particularity thesis, that is, roughly, the thesis that a subject's perceptual state is constituted by the particulars perceived. I do so by arguing that perception is constitutively a matter of employing perceptual capacities that function to discriminate and single out particulars.

Drawing on work in cognitive psychology and neuroscience, I then provide a comprehensive theory of perceptual capacities. It includes an account of the function of perceptual capacities, their individuation and possession conditions, the physical and informational base of perceptual capacities, as well as their repeatability, fallibility, and the asymmetry of their employment in perception on the one hand and hallucination and illusion on the other.

One larger aim of *The Unity of Perception* is to bring back mental capacities as a way of analyzing the mind. The notion of a capacity is deeply entrenched in psychology and the brain sciences. Driven by the idea that a cognitive system has the capacity it does in virtue of its internal components and their organization, it is standard to appeal to capacities in cognitive psychology. Critical in the advent of the notion of capacity in cognitive psychology was Chomsky's distinction between competence and performance, where a competence is a cognitive capacity, and a performance is generated by employing a competence.

In contrast to the centrality of capacities in psychology and the brain sciences, questions about mental capacities have been neglected in recent philosophical work. This is surprising given their importance throughout the history of philosophy, especially in the work of Aristotle and Kant. Until the beginning of the twentieth century, capacities and related concepts such as abilities, skills, powers, and categories featured prominently in philosophical and scientific work on perception. Indeed, it was standard to analyze the mind in terms of capacities. With the linguistic turn the norms changed and it became standard to analyze the mind in terms of representational content instead. No doubt the linguistic turn brought with it much clarity and precision. However, in sidelining capacities a great deal was lost. The good news is that we are not forced to choose between analyzing the mind in terms of capacities and analyzing it in terms of representational content. Indeed, I argue that employing mental capacities constitutes the representational content of mental states. So while my account of perceptual capacities is based in contemporary empirical research, it also harks back to a long tradition of analyzing the mind in terms of capacities. It turns out that we can use contemporary insights and tools to modernize that tradition.

But why modernize that tradition? Analyzing the mind in terms of capacities has many advantages. For my purposes, the central advantage is that it allows for a counterfactual analysis of mental states on three interrelated levels. A first level concerns the function of mental capacities. A second concerns the mental capacities employed irrespective of the context in which they are employed. Here the focus is on what perception and corresponding cases of hallucination and illusion have in common. A third level concerns the mental capacities employed, taking into account the context in which they are employed. Here the focus is on the difference between cases in which a capacity fulfills its function (perception) and cases in which it fails to fulfill its function (hallucination and illusion).

The rest of the book exploits this view of the general and particular elements of perception to develop a unified account of content (Part II), consciousness (Part III), and evidence (Part IV). Before

I say a bit about each part, it will be helpful to locate capacitism within the wider philosophical landscape.

First, capacitism grounds mental states, consciousness, evidence, and content in the physical, non-mental world. In doing so, these features of the mind are rendered no less amenable to scientific investigation than any other features of the world. The naturalistic and physicalist view of perception presented shows how perception is our key to the world while situating perception within that world.

Second, capacitism is an externalist account of perceptual content, consciousness, and evidence. It is an externalist account since the perceptual capacities that constitute these features of the mind function to discriminate and single out particulars in our environment. Due to this function, perceptual capacities connect us to our environment. While capacitism is an externalist view, it is one that does justice to the internalist elements of perceptual experience. In contrast to, say, orthodox versions of reliabilism, it makes room for the cognitive and epistemic role that conscious mental states play in our lives. Moreover, the capacities employed in perception can be employed derivatively in hallucination and illusion. While they do not fulfill their function when employed in hallucination and illusion, the capacities nonetheless function to discriminate and single out particulars, thereby providing a relation to how things would be were they to fulfill their function. By doing justice to the internalist elements of perceptual experience, capacitism is a modestly externalist view.

Third, capacitism is a common factor view of perception. The same perceptual capacities can be employed in perception, hallucination, and illusion. The perceptual capacities employed constitute a metaphysically substantial common element. This common element shared by perceptions, hallucinations, and illusions presents itself on three levels: representational content, perceptual consciousness, and phenomenal evidence. Thus, capacitism is at its core non-disjunctivist.

Fourth, despite being non-disjunctivist, capacitism is nevertheless an asymmetric account of perception, hallucination, and illusion. It holds that perception is metaphysically and explanatorily more basic than hallucination and illusion. After all, the function of perceptual capacities is indexed to perception. Perceptual capacities function to discriminate and single out particulars. They have this function, even when employed derivatively in hallucination or illusion.

It should be noted that throughout the book makes certain realist assumptions. It approaches questions about the nature of perception within the framework of anti-reductionist realism. The world is a certain way independently of how we perceive it to be. In most cases, there could have been other ways in which we could have perceived that same environment. The difference in these ways in which our environment can be perceived is due to differences in the perceptual capacities employed. Any given particular can be successfully singled out with a range of different perceptual capacities. I can successfully single out the color of a pomegranate with my capacity to discriminate red from other colors or with my capacity to single out cochineal from other colors. I could not successfully single out the color of the pomegranate with my capacity to discriminate and single out blue from other colors. The world sets the limits as to when a perceptual capacity is employed such that it succeeds in singling out a particular.

Part II develops Fregean particularism, my account of perceptual content. Fregean particularism advances a new understanding of singular modes of presentation. It argues that the representational content of a perception, hallucination, or illusion is constituted by the perceptual capacities employed and the particulars (if any) thereby singled out. These modes of presentation can be individuated at the level of content types and token contents. Perceptions, hallucinations, and illusions with the same phenomenal character are constituted by employing the same perceptual capacities; they thereby share a content type. But the token content of perception, hallucination, and illusion differs at least in part. If one perceives a particular, one employs a perceptual capacity that successfully singles out that particular. The token content of the relevant perceptual states is thereby constituted by the particular

singled out and is thus a singular content. If one fails to single out a particular (perhaps because one is suffering an illusion or hallucination), the token content is gappy.

Fregean particularism offers a non-disjunctivist account of perceptual content that synthesizes relationalist and representationalist insights. Relationalists argue that perceptual experience is constitutively a matter of a perceiver being related to her environment. Representationalists argue that perceptual experience is constitutively a matter of a perceiver representing her environment. However, the standard views in the debate are either austere relationalist or austere representationalist. According to austere relationalists, perception is constitutively relational but not constitutively representational. According to austere representationalists, perception is constitutively representational but not constitutively relational. Fregean particularism avoids the pitfalls of both austere views by arguing that perception is constitutively both relational and representational. The history of philosophy is a history of false dichotomies. The dichotomy between relationalists and representationalists is one such false dichotomy.

Having developed Fregean particularism, I take a step back and trace the way in which excessive demands on the notion of perceptual content invite an austere relationalist account of perception. I argue that any account that acknowledges the role of discriminatory, selective capacities in perception must acknowledge that perceptual states have representational content. The chapter shows that on a relational understanding of perceptual content, the fundamental insights of austere relationalism do not compete with representationalism. Most objections to the thesis that perceptual experience has representational content apply only to austere representationalist accounts—that is, accounts on which perceptual relations to the environment play no explanatory role.

Part III exploits the thesis that perception is constitutively a matter of employing perceptual capacities to address the problem of consciousness. It develops mental activism, that is, the view that perceptual consciousness is constituted by a mental activity, namely the mental activity of employing perceptual capacities. In order to set the stage for this view, it will be helpful to take a brief look at the history of analyzing consciousness.

Orthodox views analyze consciousness in terms of sensory awareness of some entities. Such views differ widely on how they understand the nature of those entities. According to one cluster of views, they are understood to be strange particulars, such as sense-data, qualia, or intentional objects. According to a different cluster of views, they are understood to be abstract entities, such as properties. According to yet another cluster of views, namely austere relationalist views, they are mind-independent particulars in our environment, such as objects, property-instances, and events. What these views have in common is that they all analyze consciousness in terms of sensory awareness of some entities.

There are problems with all three versions of the orthodox view. In a nutshell, the problem with sense-data and qualia theories is that if the goal is to explain consciousness, it is unclear what the explanatory gain is of appealing to awareness of obscure entities, such as sense-data and qualia. On the face of it no explanatory progress has been made. The problem with explaining consciousness in terms of sensory awareness of abstract entities is that abstract entities are neither spatio-temporally located nor causally efficacious. It is unclear what it would be to be sensorily aware of such entities. Leaving aside complicating details, the problem with austere relationalist views is that it leaves unexplained how we could be conscious when we are hallucinating rather than perceiving.

Mental activism breaks with this tradition. It avoids the problems of the orthodox view of analyzing consciousness in terms of sensory awareness of some entity. Insofar as employing perceptual capacities constitutes representational content, mental activism is a form of representationalism, that is, it grounds consciousness in representational content. Now, representationalism explains nothing unless an analysis is given of what it is about representational content such that it grounds consciousness. Mental activism argues that employing perceptual capacities constitutes both consciousness and

representational content in such a way that consciousness is grounded in representational content. Thus, the view explains how and why consciousness is grounded in representational content.

Part IV provides an account of perceptual evidence that is sensitive to the nature of appearances. It sheds light on a host of issues at the mind-epistemology interface: the phenomenological basis of evidence, the rational source of perceptual evidence, and the ground of perceptual knowledge. Building on the distinction between the content type of a perceptual experience (which perceptions, hallucinations, and illusions can share), and the token content of perceptual experience (which represents perceived particulars if things go well), I introduce a distinction between two levels of evidence. The content type furnishes a weak type of evidence, namely phenomenal evidence: evidence that corresponds to how our environment sensorily seems to us. In the case of an accurate perception, the token content furnishes a strong type of evidence, namely factive evidence: evidence that is determined by the environment to which we are perceptually related such that the evidence is guaranteed to be an accurate guide to the environment.

Illusions and hallucinations can mislead us: they may prompt us to act in ways that do not mesh with the world around us and they may lead us to form false beliefs about that world. Capacitism provides an account of evidence that shows in virtue of what illusions and hallucinations mislead us and prompt us to act: in hallucination and illusion we have phenomenal evidence. Moreover, it gives an account of why we are in a better epistemic position when we perceive than when we hallucinate: when we perceive, we have not only phenomenal evidence but also factive evidence. So in the good case we have more evidence than in the bad case.

I argue that the rational source of both phenomenal and factive evidence lies in employing perceptual capacities that function to discriminate and single out particulars. I thereby show that the epistemic force of perceptual states stems from the explanatory and metaphysical primacy of employing perceptual capacities in perception over their employment in corresponding hallucinations and illusions. Perceptual states have epistemic force due to being systematically linked to mind-independent, environmental particulars via the perceptual capacities that constitute those perceptual states. Hence the ground of the epistemic force of perceptual states lies in properties of the perceptual capacities that constitute the relevant perceptual states and thus in metaphysical facts about perceptual experience.

I discuss the repercussions of capacitism for the justification of beliefs, the credences we should assign to perceptual beliefs, the luminosity of mental states, and I explore its consequences for familiar problem cases: speckled hens, identical twins, brains in vats, new evil demon scenarios, matrices, and Swampman.

From one's perspective one does not know whether one is perceiving, hallucinating, or suffering an illusion and one does not know whether one knows or fails to know. Not only does one not know whether one does not know, one does not know whether one knows. I develop a sufficient evidence requirement for knowledge, by arguing that while factive evidence is sufficient for knowledge, phenomenal evidence is not. This sufficient evidence requirement for knowledge allows for an analysis of Gettier cases without appealing to any factor beyond evidence.

In perceptual Gettier cases, it is standardly thought that the subject has sufficient evidence for knowledge, but fails to know for some other reason. Once we recognize the distinction between phenomenal and factive evidence, we can say that in perceptual Gettier cases, the subject has mere phenomenal evidence. Since she does not have factive evidence, however, she fails to have knowledge. In this way, perceptual Gettier cases are analyzed without appeal to any factor beyond evidence. Capacitism rejects the belief condition on knowledge and gives substance to the idea that knowledge is a mental state.

By grounding the epistemic force of perceptual experience in facts about its metaphysical structure, capacitism is not only an externalist view, but moreover a naturalistic view of the epistemology

of perceptual experience. In contrast to standard externalist and naturalistic views, capacitism does not invoke reliability to explain the epistemic force of mental states. Moreover, in recognizing a metaphysically substantial common element between perception and hallucination, it avoids any commitment to disjunctivism. While capacitism makes room for phenomenal evidence, it does not amount to an internalist attempt at isolating a non-factive mental component of factive evidence. After all, phenomenal evidence is constituted by employing perceptual capacities—the very same capacities that also constitute factive evidence. Insofar as both kinds of evidence stem from properties of the perceptual capacities employed, capacitism provides a unified account of the rational source of perceptual evidence.

Thus, capacitism is a distinctive externalist view of content, consciousness, evidence and knowledge that remains steadfastly naturalistic, does not invoke reliability, and in recognizing a metaphysically substantive common element between perception and hallucination avoids any commitment to disjunctivism.

## REFERENCE

Schellenberg, S. (2018). *The Unity of Perception: Content, Consciousness, Evidence*. Oxford: Oxford University Press.