Perception is our key to the world. It plays at least three different roles in our lives. It justifies beliefs and provides us with knowledge of our environment. It brings about conscious mental states. It converts informational input, such as light and sound waves, into representations of invariant features in our environment. Corresponding to these three roles, there are at least three fundamental questions that have motivated the study of perception:

**Epistemology Question:** How does perception justify beliefs and yield knowledge of our environment?

**Mind Question:** How does perception bring about conscious mental states?

**Information Question:** How does a perceptual system accomplish the feat of converting varying informational input into mental representations of invariant features in our environment?

To be sure, many other questions have motivated the study of perception. To list just a few: What is the nature of the perceptual relation? What is the object of perception? How does perception guide action? What is the relation between perception and thought? But the way these questions are answered hinges on what stance is taken on the three fundamental questions.

The last decade has seen an explosion of work on the mind and information questions in both philosophy of mind and cognitive science. While there has been fruitful interaction between work in these two fields, little has been done to integrate this work with issues in epistemology. Theories motivated by addressing the mind and information questions have been developed largely independently of concerns about how perception furnishes knowledge of our environment and how it justifies our beliefs. Similarly, theories motivated
by addressing the epistemology question have been developed largely inde-
pendently of concerns about how perception brings about conscious mental
states. To be sure, most accounts of perceptual justification rely heavily on
the idea that perception justifies beliefs in virtue of its phenomenal character.
However, such accounts typically take it as given that perception provides
evidence and immediately proceed to address the question of what the rela-
tionship is between such evidence and relevant beliefs.

This split between philosophy of mind and cognitive science on the one
side and epistemology on the other has hindered our understanding of per-
ception. Questions in philosophy of mind are intimately connected with ques-
tions in epistemology, in particular with regards to perception: the role of
perception in yielding conscious mental states is not independent of its role in
justifying our beliefs and yielding knowledge. If this is right, then perception
should be studied in an integrated manner.

The Unity of Perception develops a unified account of the phenomeno-
logical and epistemological role of perception that is informed by empirical
research. As such, it develops an account of perception that provides an
answer to the first two questions, while being sensitive to scientific accounts
that address the third question.

The key idea is that perception is constituted by employing perceptual
capacities – for example, the capacity to discriminate and single out instances
of red from instances of blue. Perceptual content, consciousness and evidence
are each analysed in terms of this basic property of perception. 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 epi-
stemic force of perceptual experience. In this way, the book provides a uni-
fied account of perceptual content, consciousness and evidence. What unifies
the account is perceptual capacities. Due to the grounding role of perceptual
capacities, I call the view capacitism. In a nutshell, the book could be summed
up with: capacities first. The view treats capacities as explanatory basic and
analyses representation, consciousness, evidence, justification and knowledge
in terms of the capacities employed.

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, the linguistic analysis of perceptual re-
ports, the relation between acquaintance and awareness, the rational role of
perceptual experience and the perceptual basis for demonstrative reference.

One larger aim of The Unity of Perception is to bring back mental capa-
cities as a way of analysing 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 perform-
ance, where a competence is a cognitive capacity, and a performance is
generated by employing a competence. In the case of language, a competence
is a tacit grasp of the structural properties of a language and the performance
is the production of utterances (Chomsky 1995).

In contrast to the centrality of capacities in psychology and the brain sci-
ences, questions about mental capacities have been neglected in recent philo-
sophical work. This is surprising given their importance in the history of
philosophy, in the work of Aristotle and Kant in particular. Until the begin-
ning of the twentieth century, capacities and related concepts such as abil-
ities, skills, powers and categories featured prominently in philosophical and
scientific work on perception. Indeed, it was standard to analyse the mind in
terms of capacities. With the linguistic turn, the norms changed and it became
standard to analyse the mind in terms of representational content instead. No
doubt the linguistic turn brought with it much clarity and precision. How-
ever, in side-lining capacities a great deal was lost. The good news is
that we are not forced to choose between analysing the mind in terms of
capacities and analysing it in terms of representational content. Indeed, I
argue that employing mental capacities constitutes the representational con-
tent of mental states. My book develops the notion of capacities in light of
empirical work in cognitive psychology, neuroscience and developmental
psychology. While it is based in contemporary empirical research, it also
harks back to a long tradition of analysing the mind in terms of capacities.
It turns out that we can use contemporary insights and tools to modernize
that tradition.

Analysing the mind in terms of capacities has many advantages. One cen-
tral advantage is that it allows for a counterfactual analysis of mental states
on three interrelated levels. On one level, we focus on the function of mental
capacities. On a second level, we focus on 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. On a third level, we focus on 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 fulfils its function
(perception) and cases in which it fails to fulfil its function (hallucination
and illusion). These terms are explained in detail in Chapter 2 of the book
(Schellenberg 2018).

The book has four parts: foundations, content, consciousness and evi-
dence. Each part develops a component of capacitism. 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 (Chs. 4 and 5), perceptual consciousness (Ch. 6) and phenomenal evidence (Chs. 7 and 8). 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.

Thus, capacitism is a distinctive externalist view of content, consciousness and evidence 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.

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Schellenberg’s Capacitism
BY ALEX BYRNE

The Unity of Perception offers a grand synoptic vision of how perception, consciousness and knowledge fit together. It is a remarkable achievement. A short comment can only address fragments of Schellenberg’s picture; naturally I will look for weak spots.

The key idea of the book, Schellenberg explains, is that:

perception is constituted by employing perceptual capacities – for example the capacity to discriminate and single out instances of red from instances of blue. (2, emphasis added)\(^1\)

I will start by discussing some issues raised by the italicized phrases, and then segue into an examination of the ‘Particularity Argument’, presented in the first chapter. Finally, I will raise a general worry about capacitism. There is an enormous amount of valuable material in The Unity of Perception that will go unmentioned.

But before all that, a brief note on Schellenberg’s starting point. What are perceptual systems good for? Why do animals have them? A very appealing answer is that animals have them because perceptual systems supply useful information – more exactly, useful knowledge – about the (external and internal) environment. Even a philosopher who thinks that human perception is somehow fundamentally different from that of other animals can endorse a version of this point: after all, one of McDowell’s books is Perception as a Capacity for Knowledge. No doubt the capacity to ‘single out and discriminate particulars’ is important for gaining knowledge, but why put that capacity front and centre, as opposed to the capacity to know?

1. Discrimination and singling out

This is how Schellenberg explains the pertinent notion of discrimination:

\(^1\) All references are to The Unity of Perception unless otherwise noted.