Consciousness: Introduction

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The phenomenon of consciousness is at once exceedingly familiar and notoriously difficult to define or explain. Once largely neglected by philosophers, it has received increasing attention since 1974, when Thomas Nagel posed it as the chief challenge to physicalism in his article “What Is It Like to Be a Bat?” Recent years have seen the publication of numerous books on consciousness and the founding of three journals devoted exclusively to this topic: Consciousness and Cognition (1992–), Psyche: An Interdisciplinary Journal of Research on Consciousness (1993–), and the Journal of Consciousness Studies (1994–). “Consciousness” can mean many things, but philosophical discussion has focused on “phenomenal” consciousness—the feeling of “what it is like” to be in a conscious mental state, the first-person experience of the distinctive qualitative character of such a state. The four papers in this issue of Essays in Philosophy explore various aspects of phenomenal consciousness.

In “Wherever You Go, There You Are: On Individuative Subjective Phenomenology,” Keith E. Turausky argues that an adequate phenomenology of consciousness must include not only an account of the qualitative character of consciousness (“what-it’s-like-ness”) but also its subjective character (“for-me-ness”). He believes that most philosophers of mind have focused on the former and neglected the latter—that their phenomenologies of consciousness have been limited to the experience of consciousness and ignored the subject of experience. They perhaps assume that a full account of conscious experience will yield an account of the subject. Rejecting the reducibility of the subject to experience, Turausky presents a theory of “individuative subjective phenomenology.”

To set the stage for his theory, Turausky presents the views of two philosophers who have explored the subjective character of consciousness: Dan Zahavi and Uriah Kriegel. Zahavi
discusses the case of the Perfect Twins, two individuals who have identical physical and mental characteristics. From the third-person perspective, the phenomenology of my twin would be indistinguishable from my own. Yet, Zahavi points out, my experiences have a first-person mode of presentation that my twin’s experiences do not. Zahavi sees this “first-personal (self-)givenness” as a non-qualitative, non-duplicable property that enters directly into all and only my experiences. It is this property that individuates my subjective phenomenology and makes it differ from that of my Perfect Twin. Kriegel, like Zahavi, examines the subjective character of consciousness, but explains it as a representation of a representation: the subject experiences representations of objects in the environment, and subjectivity consists in a higher-order representation of these representations. But Kriegel does not explain why a higher-order representation is necessarily subjective. And, Turausky points out, even if it is subjective, this would not account for the individuative character of experience.

Borrowing Duns Scotus’s notion of haecceitas (“thisness”), Turausky explains the unique individuality of the experiencer by positing haecceity, “an essential, individuative, non-qualitative, non-duplicable phenomenal property shared by no other subject in this or any possible world.” A subject has a direct, pre-conceptual awareness of his or her haecceity, and this awareness is an essential component of all his or her experiences. So even though the phenomenological qualities of my experiences are the same as those of my Perfect Twin, my experiences are unique because of their non-qualitative haecceity.

Much of the recent literature on consciousness draws on neurobiological research that shows correlations between specific states of consciousness and specific neural regions and mechanisms. Prominent proponents of the theory that neural correlates explain consciousness include Francis Crick, Christof Koch, and Gerald Edelman. In “The Neurogenetic Substructures of Human Consciousness,” John K. Grandy argues that these studies of the neural correlates of consciousness do not go deep enough: they ignore the genes that underlie and make possible human, neuron-based consciousness. Grandy distinguishes three neurogenetic phases in neuron-based consciousness: its emergence, the continuum of its functioning, and its degeneration. In each phase, specific genes play an active role, serving as the substructure that supports neural activity and makes consciousness possible. “Underneath the functioning of every neuron, every compartmentalized brain region, and every multimodal integrated brain system there is the cascade of DNA, several RNA subspecies, proteins, and multiple epigenetic factors.”

Grandy’s theory that consciousness has a genetic substructure is based on his claim that DNA possesses a degree of consciousness—a hypothesis proposed by Carl Johan Calleman and Chun Yang. It is this proto-consciousness of DNA that gives rise to human
consciousness, and it does so in the three phases mentioned above: emergence of neural consciousness, its functioning, and its degeneration. Each phase has its own neurogenetic correlates—that is, “gene or gene products (e.g., transcription factors or splice-variants) that have an objective and causal effect on the process of consciousness.” These neurogenetic correlates of consciousness underlie and operate in tandem with the neural correlates of consciousness discussed by Crick, Koch, and Edelman. In the latter part of his article, Gandy gives examples, for each of the three neurogenetic phases, of specific genes that are part of the genetic substructure. When discussing the first phase, he contends that the complexity of gene interactions required to produce the brain is evidence that the process is not random; it is guided by DNA consciousness. In his concluding paragraph, he points out that his thesis about the neurogenetic underpinnings of consciousness leads to questions about the nature and locus of human consciousness.

In “Mapping Others: Representation and Mindreading,” Adam Green discusses the role that mental representation plays in mindreading—the ability to attribute psychological states and processes to others and to anticipate the behavior resulting from such states. The two dominant accounts of mindreading are theory theory and simulation theory. Theory theory holds that mindreading depends on the agent having a tacit theory (a “folk psychology”) about the mind, while simulation theory holds that, without employing any theory, we represent the psychological states of others by simulating these states in ourselves, using our own mind as a model of the minds of others. Both accounts assume that mindreading is a kind of representation of the other person’s mental states. This assumption has been challenged by enactivists, who maintain that mindreading depends on active, embodied, nonrepresentational engagement with the persons whose minds we read.

Green begins by presenting the views of enactivist Daniel Hutto, who holds that our responses to others are generated primarily by “intentional attitudes” that are instinctive and do not involve a representation of others’ mental states. Green agrees that intentional attitudes (which he calls “subconscious know-how”) guide our social interactions, but thinks that Hutto goes too far in claiming that they contain no representational elements and convey no information. Green proposes to modify Hutto’s theory to accommodate representation by incorporating insights from Ronald Giere’s analysis of the representational features of maps and models. Giere explains how, in science, maps and models represent things by bearing a similarity to what is represented. And these maps and models need not contain or make reference to propositions. The representing is not done by the map or model itself, but by the person using it, who picks out the relevant similarities.
Green contends that our knowledge of others is representational in the way that maps and models are. He develops this thesis by discussing “mirror” neurons, which were discovered first in monkeys and then in human beings. When we observe the motor or emotional behavior of another, the same neurons in our own brain fire as those that fire in the brain of the other person and cause his her behavior. Mirror neurons create maps and models of other persons, which we use to guide our interactions with them. Refining these maps and models requires know-how. Green thus agrees with Hutto about the importance of know-how in mindreading, but he rejects his claim that mindreading is devoid of representation.

A central issue in the study of consciousness is the connection between the physical elements and processes of consciousness and phenomenal experience. David Chalmers famously called this the “hard problem,” contrasting it with (relatively) easy problems about the various mechanisms of consciousness, which can in principle by solved by science. Chalmers finds science unable to answer his question, “Why should physical processing give rise to a rich inner life at all?” In the final article in this issue, “Causal Realism in the Philosophy of Mind,” Ben Gibran argues that this hard problem of consciousness, along with other problems in the philosophy of mind, assumes the truth of causal realism, and that if we reject this doctrine these problems disappear.

Gibran defines causal realism as the view that “causation is a structural feature of reality, a power inherent in the world to produce certain effects, independently of the existence of minds or observers.” Causal anti-realism, by contrast, maintains that “causation is not a fundamental property of a mind-independent world, but of how some observers purposively interpret ‘the world.’” Gibran discusses two explanations that anti-realists give for the origin of the idea of causation: anthropomorphism and logical entailment. According to the former, the idea derives from the analogy of intentional human actions; according to the latter, it stems from an interpretation of the world as a wholly deterministic system. While Gibran’s thesis does not hinge upon any particular account of the origin of the notion of causation, he finds the anthropomorphic view more plausible.

In this article, Gibran does not mount a defense of causal anti-realism; his aim is simply to point out the implications for the philosophy of mind if the theory is correct. He does, however, cite Bertrand Russell and John D. Norton as two philosophers who hold that causality is no longer a useful concept in science. Gibran also explains that accepting causal anti-realism does not preclude the usage of causal terms, since this theory is compatible with causal pragmatism, which focuses on the practical usefulness of causal language rather than on its theoretical basis.
If causal anti-realism is correct, the hard problem of explaining how physical elements and processes cause phenomenal consciousness dissolves, because there is no causation. Other problems in the philosophy of mind also disappear, such as how thoughts (on the assumption that they are nonphysical) can generate effects in the thinker’s body, or how free will can exist in a causally determined world. We tend to think that we experience consciousness, thoughts, free agency, and other mysterious and unobservable mental phenomena. But on the anti-realist view, these things are not present in experience; we simply attribute them to ourselves in attempt to give causal explanations. As other philosophers have argued, problems about mental phenomena are not really about ontology but about the origin of our concepts of these phenomena. And Gibran’s claim is that their origin is an interpretation of experience that assumes causal realism.