Describing Inner Experience?

Life and Mind: Philosophical Issues in Biology and Psychology

Kim Sterelny and Robert A. Wilson, editors

Cycles of Contigency: Developmental Systems and Evolution, edited by Susan Oyama, Paul E. Griffiths, and Russell D. Gray, 2000

Coherence in Thought and Action, Paul Thagard, 2000

Evolution and Learning: The Baldwin Effect Reconsidered, Bruce H. Weber and David J. Depew, 2003

Seeing and Visualizing: It's Not What You Think, Zenon Pylyshyn, 2003

Organisms and Artifacts: Design in Nature and Elsewhere, Tim Lewens, 2004

Molecular Models of Life: Philosophical Papers on Molecular Biology, Sahotra Sarkar, 2004

Evolution in Four Dimensions, Eva Jablonka and Marion J. Lamb, 2005

The Evolution of Morality, Richard Joyce, 2006

Maladapted Psychology: Infelicities of Evolutionary Psychology, Robert Richardson, 2007

Describing Inner Experience? Proponent Meets Skeptic, Russell T. Hurlburt and Eric Schwitzgebel, 2007

Describing Inner Experience?

Proponent Meets Skeptic

Russell T. Hurlburt Eric Schwitzgebel

A Bradford Book The MIT Press Cambridge, Massachusetts London, England

© 2007 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

For information on quantity discounts, email special_sales@mitpress.mit.edu.

Set in Syntax and Times Roman by SNP Best-set Typesetter Ltd., Hong Kong. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Hurlburt, Russell T.

Describing inner experience? : proponent meets skeptic / Russell T. Hurlburt, Eric Schwitzgebel.

p. cm.—(Life and mind)

"A Bradford book."

Includes bibliographical references.

ISBN 978-0-262-08366-9 (hardcover : alk. paper)

1. Consciousness. 2. Introspection. I. Schwitzgebel, Eric. II. Title.

BF311.H87 2007

153—dc22

2007002122

10 9 8 7 6 5 4 3 2 1

Proponent Meets Skeptic

On a remarkably thin base of evidence—largely the spectral analysis of points of light—astronomers possess, or appear to possess, an abundance of knowledge about the structure and history of the universe. We likewise know more than might even have been imagined a few centuries ago about the nature of physical matter, about the mechanisms of life, about the ancient past. Enormous theoretical and methodological ingenuity has been required to obtain such knowledge; it does not invite easy discovery by the untutored.

It may seem odd, then, that we have so little scientific knowledge of what lies closest at hand, apparently ripe for easy discovery, and of greatest importance for our quality of life: our own conscious experience—our sensory experiences and pains, for example, our inner speech and imagery, our felt emotion. Scientists know quite a bit about human visual capacities and the brain processes involved in vision, much less about the subjective experience of seeing; a fair bit about the physiology of emotion, almost nothing about its phenomenology.

Philosophers began in earnest in the seventeenth and eighteenth centuries to describe and classify our patterns of conscious experience. John Locke (1690/1975), for instance, divided experienced "ideas" into those that arise from sensation and those that arise from reflection, and he began to classify them into types. David Hume (1739/1978) distinguished what we would now call images from perceptual experiences in terms of their "force" or "liveliness." James Mill (1829/1967) attempted a definitive classification of sensations into the traditional five senses (sight, hearing, touch, taste, and smell) plus muscular sensations and sensations in the alimentary canal. However, despite such efforts, not even the most basic taxonomy of experience was agreed upon, and it is still not agreed upon.

The study of conscious experience acquired a more scientific look with the introspective psychologists of the late nineteenth and early

twentieth centuries. Researchers such as Gustav Fechner (1860/1966), Wilhelm Wundt (e.g., 1896/1897), and E. B. Titchener (1910/1915) presented carefully measured stimuli to subjects who had been trained to "introspect"—to take careful note of their immediately occurring (or just passed) experiences. These psychologists aimed to understand how these introspected experiences covaried with changes in stimulation. However, as is well known, after a few decades, behaviorism (which stressed measuring relationships between stimulus and behavioral response rather than stimulus and introspected experience) won the day in mainstream experimental psychology, driving out or marginalizing the study of consciousness. Subsequent elaborations of behaviorism, and later "cognitivism," allowed more room for the postulation of internal states and mechanisms mediating behavioral responses, yet these internal states and mechanisms were generally assumed to be nonconscious.

Central to the behaviorists' complaint about the introspective study of consciousness was the unreliability of the introspective method. Several decades' work had yielded little consensus on even the most fundamental issues. John B. Watson, the early standard-bearer for behaviorism, criticized the lack of consensus in introspective psychology:

One psychologist will state with readiness that the attributions of a visual sensation are *quality*, *extension*, *duration*, and *intensity*. Another will add *clearness*. Still another that of *order*. I doubt if any one psychologist can draw up a set of statements describing what he means by sensation which will be agreed to by three other psychologists of different training.... I firmly believe that two hundred years from now, unless the introspective method is discarded, psychology will still be divided on the question of whether auditory sensations have the quality of 'extension', whether intensity is an attribute that can be applied to color, whether there is a difference in 'texture' between image and sensation and upon many hundreds of others of like character.... The condition in regard to other mental processes is just as chaotic. (1913, pp. 164–165)

The considerable truth in this complaint partially explains the success of the behaviorists' overthrow of introspective methodology. The fact that introspective psychologists had failed to reach consensus about such issues revealed a serious weakness in their methodologies. Furthermore, much of the consensus they did manage to reach was undermined by an early-twentieth-century shift, among those still interested in consciousness, away from the early introspectionists' focus on the basic "elements" of experience and toward a more holistic conception of a sensory "Gestalt" that could not be divided into individual elements. Thus,

despite the obvious importance of conscious experience to our lives, and its apparent ready availability for research, conscious experience had largely resisted systematic attempts at scientific description, and its study fell into disrepute.

Although research on consciousness has enjoyed a considerable resurgence since the 1990s, the most basic structural and methodological questions remain unanswered. With little examination, introspection has re-entered psychology and philosophy. Even hard-nosed cognitive neuroscientists ask their subjects about their subjectively felt experience while in the fMRI magnet. However, it should be clear from the history just described that such casual and haphazard introspection cannot be trusted to yield robustly replicable results and accurate generalizations. Furthermore, it seems to us that the introspective methods employed by most current researchers in consciousness studies are less careful than the methods used by introspective psychologists a century ago. Unless better methods can be found, we fear, the scientific study of consciousness may again stall. And if there simply are no better methods, the scientific study of consciousness may prove wholly impossible in principle: vacuous without introspective report, intractably conflictual with it. Scientists could perhaps elude this difficulty if they could find a way to study consciousness without the help of introspective report. We doubt that such an enterprise makes sense, but we will not argue the point here. We will assume that any science of consciousness must take, as a fundamental source of data, people's observations and descriptions of their own experience. Thus, a re-examination of the adequacy of introspective reports is of central importance to consciousness studies.

That leads us to the question that stands at the heart of this book: To what extent is it possible accurately to report conscious experience? Russ Hurlburt has argued that we can profit from the demise of classical introspection and create methods for reporting conscious experience that largely avoid the old pitfalls. He has developed one such method, Descriptive Experience Sampling (DES), that, he has claimed (Hurlburt 1990, 1993; Hurlburt and Heavey 2006), provides largely accurate descriptions of experience. Eric Schwitzgebel, without addressing DES in particular, has argued that introspective reports in general are greatly prone to error, even in what would seem the most favorable of cases (Schwitzgebel and Gordon 2000; Schwitzgebel 2002a,b, 2004, 2006, in preparation).

In this book, Russ and Eric confront each other directly and concretely on the adequacy and accuracy of introspective reports, using the

particular reports of an actual subject as the starting point. Throughout the book, we use the term "introspection" to refer only to the observation of particular instants of experience as they occur, or immediately thereafter. Sometimes, but not in this book, introspection refers to chewing over, musing, reflecting—to a certain type of self-oriented, retrospective or prospective contemplation. Our usage is quite specific: we wish to discuss whether, or to what extent, it is possible for people to report what is ongoing in their experience as it is happening.

1.1 The Origins of This Book

In April 2002, at an interdisciplinary conference in Tucson called Toward a Science of Consciousness, Russ presented a paper titled "Describing inner experience: Not impossible but also not trivially easy." This paper, co-authored with Chris Heavey, criticized earlier attempts at introspection but argued that if one employed a proper method it was possible to describe the features of inner experience (thoughts, images, feelings) with considerable accuracy. Russ had been working for decades to develop just such a method.

At the same meeting, Eric presented a paper titled "Some reasons to distrust people's judgments about their own conscious experiences." In this paper, Eric argued that the introspection of emotion, sensory experience, imagery, and thought—which together constitute much if not all of our experiential life—is unreliable, and that even in favorable circumstances of extended reflection on these aspects of our mental lives as they transpire, we often make gross mistakes regarding their basic features. Thus, he advocated a skeptical position that seemed to be considerably at odds with Russ's cautious optimism. Eric was in the midst of publishing a series of papers defending this view. (See the citations above.)

We had not met before the 2002 Tucson convention, but the papers and our conversations showed that we shared a substantial intellectual history, despite Russ's training in psychology and Eric's in philosophy. We had both independently encountered the introspective literature on conscious experience and concluded that there was good reason for skepticism. We had both examined the methodology of the early introspectionist school and had written criticisms of those practices (Hurlburt 1990; Schwitzgebel 2002a). We had both written criticisms of the armchair introspections that underlie philosophical and psychological

thought about consciousness (Hurlburt 1990; Schwitzgebel and Gordon 2000; Schwitzgebel 2002a,b, 2003a,b).

Despite these similarities, by 2002 we had reached opposing positions. Russ had responded to the methodological inadequacies of introspection by creating, in the late 1970s, a method of exploring inner, conscious experience that sought to avoid the pitfalls that had doomed earlier introspective attempts. This method came to be known as Descriptive Experience Sampling (DES), and the project had culminated in two books (Hurlburt 1990, 1993). Russ argued in those two books, as well as in the paper he presented at the Toward a Science of Consciousness meeting, that his method solved enough of the methodological problems that DES could be taken as providing largely correct descriptions of inner experience (and perhaps other methods could as well). Russ will describe DES more completely in chapter 2, but for now it is enough to know that DES uses a beeper to signal the subject to pay attention to the "inner experience" that was ongoing at the moment of the beep. Subsequently, the subject and the investigator meet to discuss the details of such beeped moments.

Eric was not won over. Over the centuries, many people had made enthusiastic claims about the accuracy of their introspections, and most if not all of them had not proven credible. Why should Eric regard Russ's claim about DES any differently? He agreed that the DES beeper did seem likely to overcome some of the difficulties of introspective report, but it appeared to aggravate other difficulties, and he thought it likely that, all things considered, substantial doubt would still be warranted. Yet he had never examined the DES methodology closely.

We both recognized that it was crucial to determine whether it was possible to provide trustworthy accounts of conscious experience. Both in psychology and in philosophy, pressure to explore inner experience, consciousness, and the phenomenology of thought and emotion was increasing. If Russ was right, then we should redouble our efforts to explain to psychologists and philosophers how it is possible accurately to observe conscious experience. If Eric was right, even the most apparently credible reports of inner experience should not be accepted at face value without substantial independent support from non-introspective data.

We agreed that Eric would serve as a DES subject for a few days, right there at the Toward a Science of Consciousness conference. This would give Eric the opportunity to explore Russ's approach from the inside, to

gain a more direct and intimate knowledge of it. Furthermore, it would provide a series of concrete occasions on which to discuss introspective methodology. We would thus move from the realm of general statements to the realm of concrete particulars. Eric's being a subject would turn Russ's method inside out, would let the fox explore the chicken coop from the inside. It would also test Eric's commitment to skepticism when his own experiential report was the one on the table.

We recognized that Eric was by no means a typical subject. He was open to participating in DES, but he had already thought extensively about the difficulties of introspection, and he was on the public record as a harsh critic of it. Thus, whereas most of Russ's subjects are simply trying to report the features of their experiences, Eric was trying both to report and to examine the limits of that reporting.

These interviews initiated a conversation that was continued by email over the next 6 months. We wrote each other at length, discussing the history of introspection, examining Eric's experience as a subject, and considering and reconsidering both of our skepticisms and Russ's explanations of how DES attempts to limit the risks inherent in earlier methods. That correspondence could be simplified as follows: We agreed that the history of introspection showed that most introspective reports were not to be trusted. But we disagreed about the extent to which the failure of earlier methods reflected *general*, *ineliminable* difficulties in introspection. Russ was optimistic. He argued that an interviewer like him, carefully avoiding bias and focusing the interview on individual moments of experience, could often generate largely accurate reports. Eric remained relatively pessimistic, even when he was the subject.

1.2 Sampling with Melanie

To continue the conversation usefully, we felt that Eric needed more experience with interview techniques in which his roles as skeptic and investigator wouldn't be complicated by his simultaneously serving as the subject. So Russ proposed a new endeavor. We would jointly take the role of investigator and interview a naive subject, someone who had not previously been interviewed by Russ. In these interviews, Eric would be free to cross-examine the subject in whatever way he found useful, probing the subject's opinions about her sampled experiences without being confined to DES interviewing principles. For the role of subject, Russ found Melanie, a friend of a friend. Melanie had just graduated from college with a joint degree in philosophy and psychology and was

new in town, looking for a connection to the local psychology scene. Before coming to town, she had had no prior direct contact with either Russ or Eric or their views.

Until then, our conversations had been either about introspection in general ("Should we trust introspective reports?") or about Eric's atypical DES experience. The first topic was too broad. The second topic was confounded by Eric's dual role and by his earlier investigations. Now, however, the questions would be specific, concrete, and relatively straightforward: Should we believe Melanie's report about her experience at 11:34:21? We could explore the question in any way we wished. To what extent would we agree with one another when faced with specific, individual reports? Would we disagree broadly about all the reports, or would the disagreement be concentrated on just a few reports, or a few aspects of them? We would be faced throughout with a concrete person, Melanie. It would not be adequate to say the impersonal "I don't believe introspective reports." We would have to be concretely personal: "I don't believe Melanie's report."

Our aims were also personal. Russ wanted candidly to expose his views to Eric, who seemed an open-minded but unsympathetic audience, to gain a skeptic's perspective on his methodology, to refine his own skepticism, to reconsider how much skepticism about Melanie's reports might indeed be warranted. Eric was exploring the limits of his skepticism, wavering between the radical pessimism about introspection with which he was flirting in his papers and a more nuanced caution that admitted the possibility of progress and discovery. Our collaboration was intended to be a private conversation between the two of us, facilitated by Melanie's willingness to be questioned. We did not begin with the intention of making our conversations public.

After half a dozen sampling interviews with Melanie, spread over a month or so, we felt we had sufficient material to drive our discussion to the next phase, so we thanked Melanie for her participation and had the interviews transcribed by Sharon Jones-Forrester, one of Russ's students. The transcription was intended to serve as the basis for our continuing personal conversation about the trustworthiness of Melanie's reports in particular, and about DES reports and introspective reports in general. We independently read the transcripts and emailed comments about specific details to each other. We then replied to each other's comments and replied to those replies and so on, back and forth until we judged we had reached a point of diminishing returns. Over the course of the interviews and subsequent discussions, we gradually came to think that our

concretely based considerations of the limits of skepticism, designed originally to be a private and candid conversation, might have value to others facing some of the same issues. Thus this book was born.

1.3 The Format of This Book

The sampling interviews that are the heart of this book were thus intended to be a personal confrontation between Russ and Eric. Because these interviews were real-time exchanges, we occasionally meandered, repeated ourselves, misunderstood each other, assumed shared knowledge unavailable to an outsider, phrased things poorly. In making these interviews available to the reader, therefore, we cut such portions of the transcripts; these cuts were never made unless we both agreed the remaining interview material stayed faithful to the original whole. We also slightly eased the remainder, removing some of the vocalized pauses and false starts, for example—again only where we jointly agreed to the fidelity of the alterations. Our aim was to remove unnecessary distractions, thus focusing the remainder more sharply on what we took to be the issues of greatest general interest. We will make the complete, unaltered interview sound files and their transcripts available on the World Wide Web (http://mitpress.mit.edu/inner experience) for those who wish to compare.

This book presents the transcripts of our interviews with Melanie and 88 boxed discussions of issues raised in those interviews. To a large extent, those boxes are streamlined versions of the personal e-mail exchanges between Russ and Eric as we tried to hammer out our similar or differing evaluations of the adequacy of some particular aspect of our interviews with Melanie. We could have presented our views in the more traditional format for a co-authored pro-and-con book, each writing a discursive essay and a reply. However, we felt that the presentation of a verbatim transcript, with inserted comments and replies, would have substantial advantages over the more standard format. The transcript format forces the reader to begin with, and constantly confront, the particular. Most other discussions of introspective method begin with abstractions and general considerations, invoking particular instances, if at all, only selectively for the advancement of the author's more general thesis. While there is nothing inherently wrong with such an approach, we feel that there is something salutary in presenting the reader with randomly obtained particular reports, one at a time, before reaching general conclusions, confronting each report on its own terms before proceeding to

the next. Russ's and Eric's reactions and comments, both in the course of the original dialogue and in their later amplifications, may help the reader get some bearing on the kinds of doubts that may reasonably be raised and the resources available for responding to them.

Although this book focuses on the reports of one particular subject (Melanie), the reader will swiftly discover that the issues it raises are quite general. If the reader finds some of Melanie's claims about her experience to be believable and others to warrant doubt, as we think most readers will, this book invites consideration of what might drive these evaluations, and it offers different and sometimes conflicting suggestions on that topic. Temporarily replacing the factious and general debate about the trustworthiness of introspective reports with a personal and particular look at the details of Melanie's reports will, we think, take us a long way toward honing or refining, trimming or amplifying, shifting or otherwise altering the skepticism that is desirable when encountering reports about conscious experience.

Thus, this book is not a debate between opposing partisans, each trying to convince the other. Instead, it is a forthright *collaboration* between opposing partisans, each genuinely seeking to refine his own level of skepticism and to replace partisanship with balanced critical judgment. The result, we hope, is an illumination of some of the major issues from two sides at once.

Our confrontation and dispute has also produced one potentially very useful by-product: an examination, in unprecedented detail, of random moments of one person's experience. To the extent that they accept Melanie's reports, readers will find a wealth of information about imagery, emotion, self-awareness, inner speech, and sensory experience as experienced by a particular individual at particular moments in time. We comment frequently on general issues pertaining to such experiences, such as the bearing of Melanie's reports on various psychological or philosophical theories and the apparent similarities and differences between Melanie and other subjects we have read about or studied, including ourselves.

A Note to the Reader

Chapter 2 presents the general rationale behind Russ's belief that satisfactory introspective methods may exist, and chapter 3 presents Eric's general rationale for doubting such claims. We are ambivalent about including these chapters here rather than near the end of the book. On

the one hand, this background seems worth presenting at the outset. On the other hand, we have just argued for the value of starting with concrete instances instead of theoretical generalities, and on that logic it would be better for you to dive right into our interviews with Melanie beginning with chapter 4. The interview transcripts don't assume knowledge of chapters 2 and 3, though you may have a fuller sense of what is at stake if you read these chapters first. We encourage you to follow your inclinations in this matter.