

## REZENSIONEN / BOOK REVIEWS

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William A. Adams. *Scientific Introspection: A Method for Investigating the Mind*. (e-book, Februar 2012, <http://williamadams.blogspot.com>)

Even though introspection belongs to those topics in the field of consciousness and personality research which have recently been re-discovered and increasingly investigated, this development does not at all mean that introspection is part of the official canon of psychological research methods. Too influential remains the general approach of the behaviouristic paradigm set a hundred years ago, by which the young science of psychology tried to rescue itself into what it considered the safe haven of the natural sciences. Its initial success in doing so is demonstrated by the psychological research practise consolidated in the last century and considerably extended both in scope and profundity, which follows - similar to medical research - the "gold standard" of randomised double-blind studies and has, thus, acquired those methodological tools that had already leveraged the great successes in physics and chemistry (cf. Kiene, 2001). Also, the "cognitive turn" of the 1960s, which helped avoid the criticism of the methodological biases and reductionist models of behaviourism and led to a new appreciation of the intrinsic value and the relevance of mental phenomena, could not bring about any fundamental re-orientation of the research practise. However, it propelled a shift in interest from externally measurable behaviour towards internally experienced states and processes. Thus, a significant increase in psychological studies in the field of introspection and meditation research has been noticeable for about twenty years - studies, which deal with internal action and experience from a first-person perspective as a topic, but, at the same time, consider themselves

largely bound to the paradigms of a behaviouristic, i.e. third-person research approach. This ambivalent position is surely not only explained by the standard habits of academic research practise, but also by the underlying premise "that the whole variety of psychic phenomena represents a performance of our most complex organ, the brain", as renowned psychologists point out (Prinz et al., 2005, p. 56). And neuronal processes cannot be monitored by introspection, as is well known.

Hence, the title of William A. Adams's book may initially be regarded as a provocation. For today, at best its status as a serious research project is considered scientific in introspection. To justify it, beyond that, as a scientific method for the research of consciousness is, from an academic perspective, quite a precarious venture -, which Adams undertakes in his 147-page e-book. In ten chapters, he works towards this goal under methodological, philosophical, and spiritual aspects as well as aspects of the history of science -, in order to eventually demonstrate his introspective method on an exemplary investigation carried out by him for that matter. In doing so, the catchily-worded book gets by with relatively few technical terms, complex issues are explained by descriptive examples and are vividly conveyed not least by Adams's direct and humorous style. That way he focusses his basic theme on the ironically-connoted self-contradiction of modern psychology of wanting to acknowledge and to investigate a consciousness capable of thinking, experiencing and acting as the central criteria of human existence on the one hand, but, at the same time, only taking anatomical facts, physiological findings and externally measurable variables into account. With this methodical repertoire, we will ultimately fail to come closer to the subject of investigation, the phenomenal consciousness; but instead of admitting this, the obvious gap is bridged by trivialities and unhedged conclusions - which leads Adams to his sober assessment of psychology being a "quasi-science"<sup>1</sup>:

1. Comparable with T. S. Kuhn's term of "Proto-Science", a discipline still on its way to becoming a real science. (cf. Kuhn, 1967)

“I call scientific psychology a ‘quasi-science’, because it has the trappings of science, but fundamentally it is only half a science. Half of it is based on scientific observation of bodies and their behavior, followed by the other half, wild speculation, unjustified presumption, or at best, marginally plausible inference. The second half is not, of course, scientific.” (p. 5/6)

With this fundamental criticism of psychological consciousness research, Adams establishes an argument basis from which his approach appears in line with the methodological ideal of natural sciences: Do not guess, but observe - and in fact as directly as possible. And that means: observation of contents, states and processes of consciousness from the first-person perspective, which is after all the matter of interest. For everything we know about our consciousness we know ultimately from introspection. No physical, chemical, biological or behavioural information leads to the conclusion of there being a consciousness, let alone of how it may be natured (Chalmers, 1995). Why should the option of a cultivated introspection, therefore, not be scientifically utilised?

From a methodological perspective, however, such a venture is facing some major challenges. Conventional standards do not seem to apply readily: First, it is unclear whether and how a methodical line between the researching subject and the object under research could be drawn, that is in which sense one could speak of an independence of the research results from the researcher (objectivity). Second, it is questionable whether and how variables as well as interferences can be controlled (internal validity); and third, one would have to formulate conditions for replicability, which is ultimately the crucial point to the possibility of a generalisation of introspective findings (external validity). A modern form of introspective consciousness research should not fall behind these quality criteria. At the same time, it is clear that these standards cannot be imported blindly, but would rather have to be adjusted to this field of research, taking the specific conditions of introspective observation into account. It has already been mentioned that there are some attempts to this end by academic researchers (e. g., Petitmengin & Bitbol, 2009; Piccinini, 2003; Jack & Roepstorff, 2003; Heavy & Hurlburt, 2008). As to how Adams positions himself in this emerging landscape of research and which concept of his own he develops, shall now be put forward in more detail.

As a first step, the author sketches the historical development from psychophysics (Fechner) to the introspectionism of the late 19<sup>th</sup> and early 20<sup>th</sup> century (Wundt, Titchener). He diagnoses the failure of the latter phase in the disproportion between immense data collection and rather limited regularities hardly exceeding the Weber-Fechner Law, that is only quantitatively relating physically measurable stimuli to the strength of a subjective sensation. On the one hand, the area of higher mental phenomena (learning, motivation, intelligence, etc.) remained unconsidered, on the other hand, a trans-categorical concept of consciousness processes that could be connected to the remaining psychological research could not be established<sup>2</sup>. Above all, Adams criticises here Wundt’s and Titchener’s lack of readiness to methodologically address the positivistic verdict that introspective observation was not possible, because *in* a unitary mind - different from external observation - the observer and the observed could not be separated simultaneously (Auguste Comté). Notwithstanding that, the introspectionists proceeded from the assumption that external and internal perception should be handled completely analogously and that introspection was nothing but internal perception. The separation of subject and object thus shifted inwardly and may appear still practicable for the introspective observation of simple reception processes, but leads to an unclear relation between observer and observed. Higher mental functions, will then easily end up in an infinite regress of recursive observation instances. Hence, both positions are insufficient.

Before this background, Adams investigates the currently debated “perceptual model of introspection” (p. 30). Thereby, he stresses the consistent validity of an epistemological dualism for introspection on the one hand - as a distinct relation between observer and observed -, but comes to the result on the other hand that the notion of observation oriented towards sensory perception cannot be adequately applied to introspection. In his reasoning for this, Adams first grasps any observation as a dynamic relation between subject and object:

“In both perceptual and introspective observation, we can visualize the two electrodes of a storage battery, the observer and the observed, or alternatively, subjectivity and objectivity, and between them a flux of process that completes a cycle that defines an observation.” (p. 36)

2. For since J. S. Mill it has been known that the cataloguing of correlations does not at all imply any causal regularity.

This process always proceeds from the subject and begins with its “intentionality” of wanting to observe something. Actually achieving this requires furthermore an “accommodation” of the subjective intentionality to the object to be observed. If this can be performed, an object is observed. And in the observation success related to an object, the subject ascertains itself by means of referring back to elementary sensory contexts<sup>3</sup>. So Adams tries to grasp in more detail sub-steps of perception that psychology mostly flatly treats as unconsciously running »implicit processes«. Through this itemisation, he seeks to illustrate that any perception process already contains introspective parts - namely in the form of the mentioned reference and the scope of the “conceptualization” required for perception. For only by way of conceptualisation and its application the observer may bring himself into a conscious, cognitively developable and memorisable relation to his perceptive experience. According to Adams, this introspective component of perception, normally running automatically and subconsciously, may be observed just as consciously as the target objects of perception. As a difference between perceptive and introspective observation he points out that the former always features some somatic side effects, whereas the latter does not. Confining this argument to the peripheral sensory organs, one must well consent to it; a total independence of introspective observation from somatic support processes, however, seems to be questionable in the light of respective neuronal correlations (e. g. in the prefrontal cortex, cf. Fleming et al., 2010).

As a further difference between perceptive and introspective observation, the author discusses the aspect of conceptualisation, which he necessarily assigns to the latter, but only optionally to the former, namely only in cases where something is perceived *consciously*:

“Conceptualization is thus a unique mental activity integral to introspection but not necessarily for perception.” (p. 33)

Also this argument is not entirely conclusive, as far as I am concerned, because for Adams, too, the (still) unconscious (but to be made conscious) introspective component of perception plays an important role. Therefore, also a non-conceptualised

introspection would have to exist - which, viewed from that angle, however, would have the status of a potential perception. On the other hand, one would have to ask whether unconscious perception without conceptualisation would have any reconstructible content at all. - The only sustainable one of Adams’s arguments is ultimately just the different formation of the “raw data” of perceptive and introspective cognition. In the former case, they are sensorially conveyed and, thus, “given as ready-made”, that is comparatively passively. In the latter, however, they stem from a mental process which may relate to both the former and to itself and, hence, be rather active or “given as produced” respectively. Both equally require a conceptual pervasion - if they are to become conscious. The appropriate differentiation between the alien- and own-perceptible (Steiner, 1962; Witzmann, 1983) would put Adams’s categorical dismissal of the “Perceptual Model” into perspective, but would, at the same time, strongly consolidate his argument regarding an introspective component in the constitution of the subject-object relation<sup>4</sup>.

By the rejection of the naïve aspects of the perception model and by maintaining the epistemological dualism, Adams is trying to mediate between the intentions of introspectionalism and the methodological criticism of positivism - that way preparing the ground for his own concept. This consists of an *oscillative model*, in which mental activity plays *both roles* timewise transposed, that of the unconscious producer of mental objects and that of the observer who keeps dissociating himself (“time-sliced model”, “switching theory”, p. 34). Thus he affirms the epistemological dualism for introspection and avoids at the same time an all too static opposition of subject and object. Conceptually, however, the possibility of an integrative element connecting the two phases is thereby also called into question. He does, for instance, not consider a simultaneous self-certainty of mental activity intensifiable in its degree of awareness, which would warrant an existential and contextual linkage of the two roles or phases respectively. Without a mediating or continuous element it remains unclear, however, how the observer role should become aware of the producer role. Adams is aware of this problem and tries to solve it by the passed involvement of own

3. Also an investigation carried out by P. Benson et al. (2012) about the dependence of visual fixation on personnel centring and dissociation respectively illustrates the constitutive role of introspective self-reference for an elementary perception.

4. Actually Adams argues at a later stage that the usual perception processes are the “fodder” (p. 53) for a scientifically motivated introspection - and, thus implicitly admits that these do in fact represent a certain form of the (own-) perceptible.

activity being recognisable by some kind of “patina” or “trace” of the objectified acts (“patina of its former subjective status”, “recognizable trace”, p. 57). Such recognition, however, would have to include a self-recognition from the part of the original mental activity, which would not correspond to a (mere) observer role, though, but (at least partly) to the producer role. Here we have a conceptional blur through which Adams tries to escape the logical abyss of a simultaneous self-referentiality, but in doing so allows for the subject-object split to gain too much methodical significance. For, after all, there is a number of phenomena to be experienced consciously, in which the strict subject-object split subsides or is entirely rescinded (flow, meditation, near-death experience, out-of-body experience).

The consequence, as far as Adams is concerned, is that introspection is in principle retrospective and, hence, requires two cycles: First the usual and unconscious execution of mental activity in the context of perception and cognition processes and, second, their retroactive objectification (“reification”) by means of a projective conceptualisation. Thus, Adams assigns a predominantly dissociating, even “alienating” role to conceptualisation (p. 53). This appears conclusive within his dualistic-retrospective methodology, but does not do justice to the total scope of what conceptualisation is able to perform. For by means of deictic concept formation and application, formerly unheeded fields of perception - and that also includes the own mental acts - are only just made accessible. Appropriate structures of meaning (view-directing concepts in the form of language and symbols) only enable the contact to any (external and internal, current and retrospective) phenomena and connect the observer to an “observed” for that matter. This integrative aspect of conceptualisation does get touched on in some parts, e. g., in the form of “apprehension” (p. 53), which retains, however, only an abstract feature once dissociation has occurred. That conceptualisation cannot only have an individualising, and further an abstracting and dissociating effect, but also exhibits a universalisingly integrative deep layer - which, in a phenomenological sense may also be experienced in reality - has been pointed out by consciousness researchers from different schools (Steiner, 1962; Witzmann, 1983; Maslow, 1973;

Assaglioli, 1976)<sup>5</sup>. Adams only takes the nominalist dimension of conceptualisation into account though, which also transpires from his detaching this ability from the single individual and assigning it to the sphere of sociality and culturality in a constructivist manner. - as a summarily composed “Social Self” to be acquired (p. 62).

Consequently, the author displays the integrative aspect of mental and introspective activity as a nonconceptual “annexation” of the object by the subject (p. 54). Because, thus, the epistemological dualism comes to a temporary breakdown, this phase may also be conceived as a non-dual “knowing by being” (p. 54).

“At that moment, epistemological dualism is lost, since at that moment the object is no longer separate from the subject. Yet that is the moment at which the former object is truly known. This is the paradox of introspective knowledge. What begins as epistemological dualism, a required separation of the subject and object, ends as a moment of non-dualism where subject and object are one.” (p. 55)

This phase, in which the separation of subject and object collapses, has a high profile in Adams’s concept, because this is where the “true knowledge” regarding the introspective objects is supposed to emerge. However, at that point the introspector is in being or producing mode and exactly not in observing mode, which means that, at this moment, he does not know anything about his “knowledge”. This explains why Adams comprehends scientific introspection as a sequence of various components intended to embed and avail this special but epistemologically hardly graspable state in a methodological order: 1. Intellectual reflection on the chosen topic (e. g., the redness perceivable in a tomato), 2. Phenomenological observation of a relevant sample object as well as the observations made on it, 3. Yoga meditation (as per Patanjali), supposed to eventually lead to the state of Samadhi, a complete merging in the observed object. While the first two components still fall well within the mode

5. There is not only a judging-dissociating use of concepts and language, but also a deictic-view directing one. The latter does exactly not separate the observer from a (e. g., mental) object, but offers reversely the opportunity to approach it empirically. A deictic use of terms does not mean the abstract side, but the motivational one, i.e. concepts cannot only solicit differentiation, but also acting in a certain way and unite with something in this action. Then I know, though, that I am active in that way and also notice which mental states may be reached by this action and further, which structural elements enter into these states.



of epistemological dualism, this does not apply to the third one anymore.

Because Adams regards the state of Samadhi as “non-empirical” (“black hole of non-experience” (p. 129)), he lays a special emphasis on the bi-directional transits between the first two and the third phase the demarcation of which he calls a “fold” (p. 118). In the transitions of a subject-object split that is collapsing and re-constituting itself, Adams expects to find information on these mental processes as well as the topical object (e.g., the redness). His main result - the procedural relation of the quality to be observed in the object (“redness”) to the own activity of the observer - conveys the connection between subject and object as opposed to the separation aspect.

Problematic remains, however, the intrasparent status of a state of mind, which is supposed to play a central and constitutive role in the context of a methodology coming along with an empirical-scientific claim. What is the difference between this state and unconscious sleep?<sup>6</sup> Extracting knowledge from a state which is in principle unobservable on the basis of the transitions which are - still or gradually become again - conscious and the effects occurring in them (“I now recognized myself in redness.”, p. 126) appears epistemologically questionable. That Adams is treading an undoubtedly interesting, but methodologically unhedged path is also demonstrated by other meditation researchers describing higher states of consciousness not at all just by the absence of the subject-object split and, particularly, not as “non-experiential”, but in a very differentiated manner based on formal and content-related features that can be experienced (Steiner, 1962; Witzenmann, 1983; Maslow, 1973; Assagioli, 1976). And also Patanjali’s Yoga sutras do not indicate that the state of Samadhi is a “non-experience” - how could it otherwise be reported on?

Apart from that, Adam’s concept contains useful arguments and clues in line with a scientifically founded introspection. His emphasis on the epistemological dualism apparently allows for the criteria of objectivity for the reflective-phenomenological scope to be fulfilled. Against the exclusive privacy of introspective observation he also argues that nothing weighs against the assumption

that men are not only physically, but also mentally in principle equally constituted. For a genuinely introspective display of this structural equality, high quality standards as for the observation reports are indispensable as a condition for consensus building. For that matter, however, an introspective methodology does not differ fundamentally from natural science being oriented on sensory observation and measuring (cf. Jack & Roepstorff, 2003).

There as here, the development of a terminology as exact and view-directing as possible as well as an alignment of findings of various researchers (cf. Petitmengin & Bitbol, 2009) is critical. And like in other scientific disciplines, this requires both theoretically and experimentally trained experts (cf. Piccinini, 2003). With his book, Adams wishes to contribute to and incite such a professionalised exchange and alignment of introspective findings.

On the whole, “Scientific Introspection” delivers new impulses both for the introspection and meditation research and for an educated criticism of a psychology narrowed by reductionist views. An important step, which makes this book clearly go beyond existing concepts, is the combination of introspective and meditative components - even if both are still treated predominantly dichotomously here. From this angle, Western approaches to meditation, which exhibit a natural affinity to the natural-scientific method through their inherent systematics and their consequential empiricity also leading beyond the subject-object split, could contribute constructively to Adams’s methodology. An exchange aiming in this direction seems both desirable and promising.

6. “After a few minutes I was gone and did not immediately come back. By “gone” I mean I have no recall of thinking about redness or of myself; no recall of having any experience at all.” (p. 126)

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