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Introspective Self-Rapports

Shaping Ethical and Aesthetic Concepts 1850–2006
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1.

This volume contains the slightly transformed contributions to the workshop *Introspective Self-Rapports: Shaping Ethical and Aesthetic Concepts 1800-2006* that took place at the Max Planck Institute for the History of Science in May 2006.

The initial idea for this workshop developed out of an encounter with the British artist Neal White, who works in an art collective named “The Office of Experiments”. In the context of his artistic research concerning self-experimentation White contacted me in 2005, having read about my PhD project entitled “Self-Experimentation. Crossing the Borders between Science, Art, and Philosophy”. We met in London some time later to talk about our common fascination with self-experimental practices. White had spent some time at various scientific research centers, trying to talk about the researcher’s self-experimental engagement into his or her research-projects. His conclusion was more or less, that self-experimentation – especially in medical and pharmacological research – takes place constantly but also, that it mostly remains backstage. Scientific publications usually don’t mention self-experiments as they smack of subjectivism and thus of pseudoscientific humbug; they mostly hide the self-experimenter under pseudonyms like *subject A* and the like. One of the artistic results of White’s research was his piece *The VOID* and with it the limited-edition newspaper entitled “The Selfexperimenter”. The piece consists of an inflatable transparent room in which White sits isolated from the audience at a table. Through a little window he hands out pills. “The Selfexperimenter”, informs about possible risks and side effects of the methylene blue pill that dyes the urine blue for up to five days. In order to receive one of the pills and thus to become a self-experimenter one has to take on the risks by providing a signature and pass it through to White. As the closing event of the workshop White presented this piece in a gallery in Berlin.³ His contribution to this volume can be read as a third-person report of what happened during his presentation at the Max Planck Institute during which he tested, and experimented on the risk-appetite of the other participants, thus introducing the program of the “Office of Experiments.”

Whereas self-experiments remain mostly under cover within the scientific realm, the culture of modern individualism can be described as a fundamentally self-experimental one. With the end of a divinity controlled universe, each person gained some responsibility for his or her condition. This primarily implied the invention of self-preserving techniques but furthermore also an active testing of the thresholds of self, consciousness, life, and reality. The modern subject is thus an experimental subject. “Whenever we talk about the individual we mean a subject that is entangled in the adventure of its self-preservation and that experimentally wants to find out the best way of life”, Peter Sloterdijk claims. And as a diagnosis about self-related techniques in contemporary post-religious culture, Sloterdijk puts forward the formula: “Self-Preservation plus Self-

³ A documentary film of the event can be found in the back of this volume.
Experimentation equals Self-Intensification”. Observing contemporary culture, however, it seems that the idea of self-preservation has become the most powerful one. A complete industry of security techniques is taking over, based upon an almost pathological drive to avoid risks. This extreme striving for security however not only protects from dangers; it also reduces the possibility for novelty to happen. To experiment on the other hand implies risk in so far as it implies a readiness to discover hitherto unknown realms that might put habits, attitudes, practices, and perspectives into question. Therefore risky experimental practices of the self are the first step in a process of opening new spaces of experience and thus of reality. Starting from this assumption the workshop aimed at investigating various approaches to self-experimentation in historical and cultural context. In doing so, participants touched on different topics and approaches such as historical works about self-experimenters, the concept of attention and self-awareness in the psychological context, actual reports of self-experimental practices, and the ethnographic question of observation of self and others on a more general scale.

2.

Self-experimentation was initially included in the official course of pharmacological research towards the end of the 18th century. Due to ethical concerns about the legitimacy of human experimentation, it was thought that the researcher himself should “go first” in taking primary risks. The enlightened scientist at the same time embodied a representative organism that would generate knowledge about ‘normal’ effects and reactions to a substance. At the same time self-experimentation gained enormous importance within the big counter-project to enlightenment: Romanticism. As Jürgen Daiber shows in his contribution “Experimenting with Your Own Body”, for Romantics like Tieck, Novalis, and Ritter the experimenter turned into the experiment itself. Their interest transcended the purely physical realm as well as the ethics of risk-management as they hoped to gain an understanding of a great unified theory (Totalentwurf der Natur) or the original formula (Urformel) through their self-experiences.

Whereas the subject-object identity implied by self-experimentation was not a major problem within Romantic thought, it was all the more for psychology, which started to evolve as a scientific discipline in the 19th century. Already Kant had questioned the possibility of a scientific psychology, since introspectively gained information could neither be quantified nor compared but was purely subjective. Psychology therefore had to find strategies of objectification by including techniques from measuring disciplines like physiology. With this strategy however, psychology ran the risk of reducing its object to an assemblage of clearly defined, quantifiable entities. One of the main critics of such psychological practices was the psychologist and philosopher of Pragmatism William James, whose concept of attention is the object of Luciana Caliman’s contribution: “The Concept of Attention in William James.” She presents attention as a malleable concept in so far as it has been defined in various, often contradictory, ways: as an ability, a mental function, a predisposition or conscious decision, a duty, or a gift. The question of how to control attention has thus played a major role in discussions concerning self-discipline, efficiency, and productivity. With James, as Caliman presents him based on his Talks to Teachers, it is however possible to follow another line – not disciplined attention alone but also distraction
and thus the malfunction of attention, according to James, are crucial for a creative acquisition of reality as they enable previously unknown relations to surface.

Starting from William James’s concept of experience as an epistemic activity of creating relations between hitherto separated realms, my own contribution “Self-Experience as an Epistemic Activity” asks how it is possible to access the interior experiences or self-experiences of others, notably of non-human actors. Referring to James’s reading of Gustav Theodor Fechner’s reflections on the soul-life of plants, I discuss the self-experimental practice of inventing new perspectives that would widen our spectrum of experience and thus enrich reality. Such experimentation implies a readiness to risk one’s own seclusion by entering into an open-ended process of exchange.

Fechner, who pleaded for the endless invention of new perspectives, also argued for a bottom-up aesthetics based on introspectively observed sensory perceptions that could only proceed inductively. With this proposition, he was part of a development in which aesthetic theories shifted their interest from the objects of arts and “the beautiful” to the subject that perceived and felt; not something was aesthetically pleasing but a subject, someone underwent an aesthetic experience. Such a concept culminated in the surrealists’ practices that are at the center of Annette Bitsch’s text - the only German text in this volume - “Psycho-automatische Selbstexperimente im Surrealismus und in der Psychoanalyse”. Surrealism appears as a campaign for madness and hysteria, fantasy, and objective contingency, as a practice of pluralizing experience and of populating reality with implausible things. At the same time, however, these practices have one of their crucial origins in the Freudian talking cure, the ideas of free association and equally tempered attention. Accordingly the founders of surrealism strongly protested against being identified as a new artistic style. On the contrary, they claimed to form a scientific enterprise researching the mysterious. The automatic methods that are by definition methods of distraction, however, had been imported into the surrealists’ circle by Gertrude Stein and others from the interior of psychophysical laboratories that addressed as their founding father Gustav Theodor Fechner.

The next two contributions by Nicolas Langlitz and Honza Samotar, both titled “Tripping in Solitude”, belong together. The two researchers met in a psychopharmacological research laboratory. Langlitz spent some time there as an ethnographer of science, while Samotar is doing a PhD there on the effects of hallucinogenic drugs on the brain. Samotar is a passionate self-experimenter. In fact his real name is not Samotar; this is only his self-experimental identity. As a psychiatrist he cannot talk about his practice officially. Self-experimentation and especially experimentation with drugs, as Neal White experienced as well, have no place within serious science. Samotar, as Langlitz points out in his introduction to his work, was strongly influenced by the work of the American physician John Lilly who in 1954 invented the isolation tank in the context of his research on the reticular activating system of the brain stem and the physiology of waking and sleeping. The isolation tank was designed to produce a condition without any exterior stimulation in order to experiment on neurophysiological functions. However, it turned out that under such circumstances the mind starts to develop an animated life of its own; the self thus turned into the object under investigation. Lilly’s experiments can be seen as a transformed continuation of his psychoanalysis. He describes the isolation tank as a space optimal for “exploring, displaying, and fully experiencing new states of consciousness.” Moreover, it became a space in which new beliefs could be tested and thus the self could be transformed and worked
on, not just researched. Samotar followed Lilly’s techniques asking a rather different question: is there such a thing as a minimal self, something that remains no matter how strongly we alter our states of consciousness with the help of a variety of drugs and their respective combinations? His empirically obtained answer is: No.

Using pseudonyms like Honza Samotar or subject A is also an ethnographic convention. Mark Butler’s article “Experiential Observation – the Playful Challenges of Self-Experimentation” deals with the ethnographic method of participatory observation as a technique of the self. Butler claims that this empirical method intersects with aesthetic and ludological reflections. In all cases self and other cannot be strictly separated. Instead such habitual distinctions give way to a liminal zone of “as well as” in which new experiences can be made. He illustrates this by quoting his field notebook while playing the computer-game “Call of Cthulhu,” thus taking the playful and aesthetic aspects of experiential observation literally.

To sum up, the historical, practical and theoretical investigation of self-experimental practices proved to open various fields of reflection. What appears as an obstacle within a certain scientific context – subjectivity, blurry thresholds, and malleable concepts –, might prove to be at the center of the creative construction of novelty somewhere else. The closeness to the object under investigation that we encounter in self-experiments seems to render a specific kind of knowledge that cannot be obtained otherwise. The contributions to this volume highlight on different levels inventions and executions of self-risking and self-transforming practices that aim at an enrichment of experience and thus pluralize reality.
Introduction

The Office of Experiments (OoE) presented works and concepts by the artist Neal White within the framework of self-rapport and introspection. In particular, and with reference to Articles 1 & 4 of the Principles document of OoE (see below), the methods used by White for the presentation were in the here and now, as the fleetingly spoken word, as visual references (the realm of the visible), and also as an event-based experiment. Whilst this essay or report of events uses language, it also acknowledges the limitations of a description through language over the experience itself. White’s work addressed this critical issue of experience and description through certain self-experiments, including the work “The Void”.

The Office of Experiments
Let’s Experiment with Ourselves:
Key Relations – Art, Power, Trust, Viewer, Participant
Neal White

“There are no objects, only event-structures”

White described early works in which he found himself working within institutions of science, such as the Human Genome Mapping Project in 1998. The path that led him there was at once technical, based on an understanding of computer languages and applied fields such as bioinformatics, but which led to a more expansive narrative-driven enquiry whose focus was on the structures and interpretation of not only the administrative institution itself, but the social hierarchies, knowledge classifications and power relations of the culture therein. In many senses, and from comments and feedbacks of the seminar group White agreed that this was possibly the first example of what can be described as invasive, parasitic or embedded research, where collaboration with the institution is secondary to the interests of the experimenter. Drawing out these issues White pointed to the clearly dysfunctional apparatus that constitutes the scientific research institution. Along the lines of Bruno Latour and Steve Woolgar’s sociological interpretation of laboratory life, White described the increasingly narrow filaments of specialized knowledge that lead the scientist into blinkered situations. In these cases, paradigmatic shifts are only possible or inevitable in a top-down fashion. In addition to the complex network of actors in these situations, such as staff, funding, and knowledge, White introduced another, that of the artist, eschewing all normal power relations, and acting as a locus for issues of power, trust and communication.

Through concepts based on constructive discourse, such as the introduction of very personal narratives, White was able to break down, from the bottom-up, the power structure in which mistrust and expectation of the artist was felt. White clearly stated that his intention was never to communicate on behalf of science or an institution, even though this may be their expectation, but to examine the conditions that give rise to what is possible in art. White went on to state that in each consequent placement inside an institution, scientific or not, this cycle of trust, power and shared focus of the artist with others, was repeated. This experience led to evolving and identifying the process of ‘the self-experimenter’.

As a way of examining White’s attitudes towards the conditions in which this art is made it is worth considering the framing of this event. Katrin Solhdjju, the author of the event, addresses the idea of ‘self-rapport’ and White’s work with the notion of bottom-up aesthetics as an observation of the interrelation between this aesthetic in the field of art and science and its historical precedents:

Gustav Theodor Fechner argued for a bottom-up aesthetic based on introspectively observed sensory perceptions that could only proceed inductively. As psychological experimentation at the time was based mainly on physiological measurements, however, aesthetic perception was now linked to measurable vital functions on the one hand and to subjectivity on the other.
Aesthetics shifted its interest from the objects/works of arts and The Beautiful to the subject that perceived and felt; not something was aesthetically pleasing but a subject, someone underwent an aesthetic experience.

In many ways, Solhduj has identified this shift to bottom-up aesthetics as a grounding concept that unifies many of White’s interests, and one to which we will return. As for the condition of art, Solhduj’s observation of the shift from the idea of beauty being held by an object (the event structure), to it being a perception of the viewer, has become a renewed sensibility, a renewed question of aesthetics in the processes of art.

However, we must understand this in its proper context of a general discourse in contemporary art. Many current critical commentators\(^1\) of art argue that it is not the assertion of the author that can be valued and interpreted in an object or artifact (nor its meta-reading), nor even the subjective reading of the perceiving viewer, but it is through the context from which the work is both disseminated and from which it arrives that the work is ultimately read and then valued. These contingent, relational elements form a network of meaning that informs our reading of the artwork, demonstrating complexity.

The artist too is no longer an individual with a voice, but represents a broader group with a shifting hierarchy of associations mainly to minority groups such as artists, migrants, activists, and feminists. According to these ideas, very little is stated about the viewers and their associations as it is mainly the subject of study, not the profile of the audience, that shapes context. This multiplicity of positions and readings spells the end of the former universal evolutionary artistic movements or ‘isms’ (that give rise to massive paradigm shifts), and as an alternative, we witness the facilitating and deliberate expansion of multiple threaded practices with their own reliant economies (see the massive expansion of the number of art biennales in different international contexts, for example, the Berlin Biennale, which was running during this event). From this we can see indications that the condition of art, with respect to all its elements, its knowledge and its experiments, is fluid.

In 1982, the Artist Placement Group (APG, now known as O+I) declared “context is half the work” in reference to the process that provides the conditions for art and its potential. White, now a member of the board of O+I, cited this historical approach as giving rise to a new attitude in which a different set of values could be ascribed to measuring the impact that work and experiments have outside of the context of the usual practice, the gallery, the art world. This value system was generated initially by what APG referred to as the open methodology. White tied this system of values and the question of ‘context’ back to self-experimentation, itself a method with which to regard the context of art and the context of science as half the work. White outlined how theoretical elements of both fields become real through this approach, not just as observable objects, but, as Solhduj pointed out in Fechner’s approach, as aesthetic experiences from the bottom up, with all the inherent risk for the individual. The aesthetic experience becomes a potential transformation not only in terms of psychology, but also in the properties of matter as events, while the physiological self is itself transformed.

Taking a room full of academics meeting to discuss the topic of self-experimentation, self-rapport or introspection, White highlighted how context is clearly dislocated in terms of its

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\(^1\) See – Critical Practice – Chelsea College of Art.
operation and its subject. Observation of the subject was still privileged over the experience of the subject. Bearing this and the limitations of language in mind, White challenged the group to take part in a small experiment. He supplied a cup of water to each potential participant into which he dropped a small amount of liquid from an unmarked bottle. A limited amount of information was given to the participants about the liquid. It was relatively safe. It was not licensed for use in Europe. It was a low dose. The participants were asked to make a choice of whether to drink the mixture or not. The process was unresolved and was returned to through the rest of the presentation.

White went on to discuss the machinations of his placement at The National Institute for Medical Research UK, London, based on his experience developing his work “The Void”, and its associated limited-edition newspaper *The Self-Experimenter*. The placement itself made use of White’s previous experiences of mistrust and the instrumental power relations of such contexts. His objective was to research and uncover evidence of ‘self-experimentation’, and as he suspected, he discovered that its real place in science was in myth, and outside of the authorized operation of the institutionalized body. As a way of bringing his interests to bear, White chose to recreate an experimental process in which the participants had the opportunity to become self-experimenters. By restaging Yves Klein’s private view of his exhibition ‘Le Vide’, he invited participants to take a cocktail that would turn their urine blue. The only way forward it seemed was to develop a clinical trial, which was done. However, as the basis of the trial was not clinical but cultural, it was turned down by the ethics committee. Informally they suggested it could be done in an art gallery though... Thus “The Void” was born. On this work, Solhdju comments:

"The aesthetic experience was thus materially induced into the body with lasting effects; the recipient was transformed into a self-experimenter, a bottom-up aesthetic in a Fechnerian way; and White was seriously confronted with the concerns of an ethics commission thus negotiating on the threshold between ethics and aesthetics."

Through self-experimentation, it is possible that transformation can take place, but it need not be an act of participation; it can also be an act of refusal. During the event “The Void” at *Die Bar* on Karl-Marx-Straße, Berlin on a Saturday evening, White handed out many small packages that contained the required chemicals for turning the pee blue. While there were those who took the opportunity to become ‘self-experimenters’, many chose instead to keep the work as an object of value in itself. That the object itself was viewed by White as a loose event structure with latent energy perhaps indicated how the study of such events can ultimately lead to more complex bottom-up aesthetics.

In Principle 3 below, you will see that the OoE will collect, but not analyse data, and so we cannot report on the numbers of academics who actually consumed the solution of water and liquid melatonin at White’s presentation. However, based on responses such as “Why should we trust you?” to “This is just about a power game,” a number of academics left their water. Some of those who waited to find out the ingredients didn’t view it as worth while to drink it. Others did not subscribe to the rationale of the experiment and its method, its trajectory, or its likely conclusion.
OoE – Office of Experiments

Principles and definitions

1. The definition of ‘Experiment’ as a repeatable recurring fixed event which gives rise to repeatable consistent reading (leading to truth) cannot take account for the variability of all events between the readings. The definition is therefore annulled as inconsistent (leading to non-truth).

2. OoE ‘experimental’ logic will take account for events as affective on other events and therefore all knowledge, which in turn is continually in flux.

3. Experiments and other data will be collected in the non-verbal state.

4. The basis of the principles of the research is only possible through the non-verbal idiom, and the acceptance of the non-extended state as a part of the condition of the event.

5. OoE is committed to the development of evenometry as it describes the nature of events through time, in the way that geometry describes the object through space.

6. The OFFICE of the OoE itself can only occur as a manifestation of energy, is non-fixed and is concomitant of its immediate surrounding events and context. It is therefore not fixed in space, but is fluid in time.

7. OoE regards time as an event base that gives rise to and maintains all structures, objects, matter and systems, and also reclaims all structure, objects, matter and systems.

9. There has been a shift.

10. There is a void.

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2 Not to be confused with the Heisenberg principle, or observer/observed arguments.

3 Spoken language is slippery too and other than an event in itself, is also almost always a shadow of the real event. As it always also in the now, it also has no extended state (unlike the written word). See Flat Time Event Theory.
I.

At the beginning of June 1772, Ludwig Tieck, a 19-year-old student at the Faculty of Theology in Halle, underwent an experiment on his own body and mind, which aimed at testing his capacity to experience sensations.

Tieck planned to read aloud the 800 pages of Der Genius, a gothic novel by Karl Gross, to two fellow students in only one session. Afterwards the young romantic would spend the night sitting on a chair, looking out of the window in expectation of the morning. Tieck started reciting from Der Genius at 4 o’clock in the afternoon. Towards midnight, his two listeners, who initially followed his lecture “außerordentlich interessiert” (with extraordinary interest), started “alle Augenblicke an einzuschlafen” (falling asleep at every moment). This, however, could not irritate Tieck because:

ich war in einer zu schönen Stimmung, alle Menschen waren mir so lieb, die Welt so theuer geworden, daß ich mich darüber gar nicht ärgern konnte, sondern ich las stets weiter mit eben dem Enthusiasmus, mit eben dem ununterbrochenen Eifer, nach 2 Uhr war das Buch geendigt.

After a ten-hour reading marathon, the two fellow students lay down their heads to sleep in the room next door. Tieck sat on the chair looking out into the night. Now the euphoric state caused by the declamation was to be enjoyed to the full extent; the subject wanted to enjoy the feelings he had produced, and he wanted to lose himself in jener schönen erhabnen Schwärmerei (in this wonderful sublime enthusiasm). However, the sleep of reason gave birth to monsters. The brief moment of the subject’s pure pleasure was followed by a harsh downfall. Out of the blue, the psyche revealed its dark side, which Tieck was now feeling on a bigger scale.

Ich stand gedankenvoll mit dem Arm auf einen Stuhl gelehnt, in jener schönen erhobnen Schwärmerei verloren, nur für Schönheit empfänglich, süße Töne wie abgebrochene Gesänge schwärmten um mein träumendes Ohr, rosenfarbene Bilder umgaukelten mich mit blauen Schmetterlingsflügeln, – als plötzlich – [...] wie in einem Erdbeben all diese Empfindungen in mir versanken, alle schöne grünen Hügel, alle blumenvollen Thäler gingen plötzlich unter, und schwarze Nacht und grause Todtenstille, gräßliche Felsen stiegen ernst und furchtbar auf, Schrecken umflog mich, Schauder die gräßlichsten bliesen mich an, alles ward um mich lebendig, [...] mein Zimmer war als flöge es mit mir in eine fürchterliche schwarze Unendlichkeit hin, alle meine Ideen stiegen gegeneinander, die grosse Schranke fiel donnernd ein, vor mir eine grosse wüste Ebne, [...] ich fühlte wie mein Haar sich aufrichtete, brüllend stürzte ich in die Kammer.

Further effects of the reading marathon on Tieck’s psyche can be neglected beyond this point. The crucial point to which the quoted episode leads us is the method of the reading adventure chosen by Tieck. I would like to call this method “self-experimental”. In short, the term “self-experiment” can be defined as a process in which a subject intervenes in his own nature in an orderly way without knowing the result in advance.

In Tieck’s experiment, the orderliness of this intervention can be identified through the following features: the methodological choice of his technical aids (book, chair); the sequence of the experiment, which was set in advance (time, place, quantity of reading); and the integration of controlling parameters (fellow students). On the other hand, Tieck’s experiment, in many ways, does not fulfill the criteria defined by enlightened science in the tradition of Galileo’s and Newton’s physics: the self-experiment cannot be mathematised (reductio), the observed effect will not necessarily be identical when the same experiment is repeated on the same system (compositio), and essential parts of the experiment cannot be captured in an empirical manner (resolutio).

The most important difference from classical experiments, however, is a feature that will be investigated more thoroughly and systematically in the following. This feature, I would like to suggest, marks the essential transition from the strictly empirical description of experiments in the age of enlightenment to a specific form of romantic experiment, which purposefully leaves behind pure empiricism. This feature can be found in the following: Tieck did not experiment on something, that is to say on an object in the surrounding environment, but he experimented on himself, on his own body and mind. Tieck staged a self-experiment, turning his body into a measuring instrument in which psychologically generated reactions of his mind expressed themselves in a physical manner. Examples are the hair ruffled in horror, the acoustic signal of his scream, the fast pulse that accompanied the procedure. Thus Tieck’s experimental arrangement forms an example of those experiments characterised by the increasing involvement of the experimenter’s body in the experiment. This example cannot be subsumed under the rules of science anymore.

This kind of self-experiment forms the endpoint of a development that originated with the strictly empirical conception of scientists in the enlightenment. Subsequently, in the experiments of romantic science and natural philosophy, the self-experiment increasingly mingled with speculative elements. In the course of this development, the physical experiment with the outside world increasingly turned into the inner experiment, to the self-experiment of the romantic subject. In a nutshell: Within this romantic experiment, the experimenter turns into the experiment.

By means of his body, Achim von Arnim argued, man is provided with the *empfindlichste Elektroskop* (most sensitive electroscope). In a letter to Zelter written in 1808, Goethe described the body as the *genauesten physicalischen Apparat den es geben kann* (the most exact physical apparatus that can exist). This is the point where romantic experimenters and their speculative extensions of classical experiments join in. The human body and its behaviour shed light on the

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2 Ebd. S. 48f.
4 Goethe, Weimarer Ausgabe, Abt. IV, Bd. 20., S. 90.
analogous body of nature. Even more so: As the human body represents the highest element in the chain of life, an understanding of its construction guarantees access to the understanding of nature.

Behind all this can be found a romantic vision of a great unified theory, of a *Totalentwurf der Natur*, in which all stages of life are seen to be connected with each other under a single principle. The human body reveals the way to such a theory. Johann Wilhelm Ritter, whose experiments I will use in a moment to support my point, attached a Galvanic chain to his own eyeball, Novalis drew so-called *magnetische Striche* (magnetic lines) on the body of his fiancée Julie von Charpentier, Alexander von Humboldt produced wounds on his shoulder blades with blister-plasters and exposed the injuries to electric shocks of different strengths. In all these cases, the target was the same: One’s own body and its reactions are supposed to uncover the energy of the analogous body – nature. Novalis noted in the *Allgemeine Brouillon*:

> Durch Experimentiren lernen wir beobachten – Im Experimentiren beobachten wir uns selbst etc. und lernen dadurch von den fremden Phänomenen auf die Einheit sichere Schlüsse ziehn – oder richtig beobachten.5

Ideas of this kind form the basis of an experimental plot that is characterised by the increasing integration of the experimenter in the experiment itself; such a plot cannot be subsumed under the rules of science anymore. In the course of this process, the physical experiment with the outside world, in this case with the body and mind of another person, shifts towards the inside experiment, to the self-experiment of the romantic subject. In a nutshell: within such a romantic practice, the experimenter mutates to the actual centre of the experiment itself.

II.

When Novalis, in a letter to his friend Caroline Schlegel, written in 1799, inquired about the well-being of the physicist Johann Wilhelm Ritter, Caroline, in a somewhat nasty response, alluded to a certain fashion triggered by Galvani’s famous experiments:

> Was kann ich Ihnen von Ritter melden? Er wohnt in Belvedere und schickt viel Frösche herüber, von welchen dort Ueberfluß und hier Mangel ist. Zuweilen begleitet er sie selbst, allein ich sah ihn noch nie, und die Andern versichern mir, er würde auch nicht drei Worte mit mir reden können und mögen.6

Around 1780, the Italian physician Luigi Galvani had coincidentally observed that a primed frog’s leg could be stimulated with electrical shocks. After this discovery, Galvani started a whole series of experiments. He connected two metal wires made of zinc and silver to the nerves of a frog’s leg. When he put the two metals in contact with each other, thus closing the circuit (metal 1 – nerve – metal 2), the frog’s leg showed a Galvanic action: it tremored at the instant of the connection. After several experiments with various metals and further convulsions of the frog’s leg, Galvani concluded that *dem Tiere selbst Elektrizität innewohne* (electricity is inherent in the animal itself).

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Referring to a term coined by the physiologist Pierre Bertholon, he described this phenomenon as *tierische Elekrizität* (animal electricity). Thus the experimenter mistakenly interpreted what is now known as contact electricity as a phenomenon originating in the nerves of the frog itself. In Galvani’s view, an electrical fluid flowed in these nerves.

In 1792, the physicist Alessandro Volta, originally one of Galvani’s devotees, came up with a countertheory. Volta regarded the connection of the metals as the actual origin of the electric phenomenon, and he argued that this connection merely affected the nerves of the organism. The debate caused by Galvani’s and Volta’s theories gave rise to an unequalled wave of experiments all over Europe in the last decade of the eighteenth century that went far beyond the boundaries of the subject. Countless researchers and scientific laymen repeated Galvani’s and Volta’s experiments thus causing a significant shortage of frogs in many a pool in Germany.

In his treatise *Beweis, daß ein beständiger Galvanismus den Lebensproceß im Thierreiche begleite*, Johann Wilhelm Ritter went far beyond Volta and Galvani. If Galvanism was a principle that affected metals, plants and animals, these phenomena and rules, Ritter concluded, had likewise to be found in the human organism. As the human body represents the highest element in the chain of life, an understanding of its construction would mean an understanding of the analogous body of nature. Before Ritter, Alexander von Humboldt, Fowler, and Hunter had already performed Galvanic experiments on their own bodies. Ritter, on the basis of Galvanic experiments, developed the self-experiment to an extreme limit that had not been reached by science so far. This was made possible by a discovery Volta had made in 1800: the Volta column. By means of this column, far stronger currents could be created, and accordingly the test results delivered clearer data.

Ritter’s test arrangements were as follows: He alternately exposed a specific organ of his body to the positive (zinc) or negative pole (copper or silver) of the Volta column. He started by putting one hand in a bowl filled with water connected to the negative pole, and closed the circuit to the positive pole with the other hand in the same manner. Ritter meticulously wrote down perceptions and counter-perceptions. At the silver pole the hand seemed to become stiff, at the zinc pole the opposite occurred, the hand became more mobile, warmer, seemed to expand. When carrying out the same experiment with his tongue, he felt a bitter, alkaline-stinging taste on one side, and a mild, sour, dull taste on the other side. When connecting his eyeball to the silver pole, he saw a reddish flash that grew darker and through which he could see objects of the outside world in an enlarged way. The same experiment at the zinc pole caused a bluish flash that diminished objects and disguised them.7

The point to be proven was that the polarity (the dualistic principle was one of the key laws of Galvanism) that Ritter observed in organic and anorganic chains could also be found in the human organism. In the next step, Ritter was interested in a synthesis of the oppositions, which was crucial for romantic thought. He wanted to demonstrate that there was a hidden dialectic unity underneath the polar surface. According to romantic natural philosophy, all opposites are abolished on a higher plane of life. Novalis noted in his *Allgemeine Brouillon*: “Polarität ist eine Unvollkommenheit – es soll keine Polarität einst sein” (polarity is an imperfection – there shall be no polarity one day).8

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The experiments Ritter had performed up to that point proved the existence of sensation and counter-sensation in the tested sense organs, and proved that these sensations could be stimulated by Galvinism. But where would the potentiation and extremisation of a sensation lead, Ritter wondered. Do not all opposites merge into a higher unity? Ritter achieved such an extremisation of sensations by means of several experiments with his eyes. Given that the light effect at the silver pole was the colour red, what would happen with a stronger current? Ritter increased the current at his own eyeball; he did not, however, see a more intense red, but rather perceived, from a certain point of potentiation onwards, a sudden change in the colour into its opposite at the other extreme of the spectrum: the light became violet.

One concept of romantic natural philosophy seemed to have been proven experimentally: when increased to an extreme, a sensation would turn into its opposite. There was a possibility that ultimately opposites were unity, and polarity was but a hidden dialectic. It was exactly this idea that was discussed by Novalis – the idea of a phenomenon that is actually the continuation of its counter-phenomenon, and which, by means of “Extremisierung” (extremization), turns out to be contained in the latter. Thus we read in the Allgemeine Brouillon: “Absolutisierung […] des individuellen Moments, der ind[ividuellen] Situation etc. ist das eigentliche Wesen des Romantisirens”\(^8\) (the absolutisation of the single moment, of the single situation etc. lies at the core of romanticisation). However, Novalis did not follow up this idea with experiments as self-destructive as those of Ritter.

Ritter came up against the boundary of self-destruction several times in his experiments. The experiments with the Volta column on “Extremisierung” of sensations led to a temporary blindness. Over a long period of time he exposed himself to unbearable physical and psychological burdens. Having looked into the sun for 15 to 20 minutes with his eyes wide open, Ritter continued to see a flame even days after the experiment, blue paper turned to red in front of his eyes, and the fire in the stove presented itself in the schönsten Blau des brennenden Schwefels (most beautiful blue of burning sulphur).\(^10\)

On his search for the “Urformel”, Ritter sacrificed his physical and psychological health without reservation. “Alles, alles liegt in dieser Formel” (“Everything, everything is to be found in this formula”), he wrote to Oersted and continued with increasing desperation because he did not succeed in offering the ultimate experimental proof: “Ganz entwickelt müßte sie überhaupt das Universum selber seyn” (Fully developed, it would have to be the universe itself).\(^11\)

However, the unity of all natural phenomena and hence the unity of nature and mind did not seem to be permanent. Despite increased levels of electric currents, Ritter did not discover the inner secrets of nature. Instead he encountered the limit of all human ambitions: death. Ritter anticipated death and passed away at the age of only 33. It is no coincidence that his autobiographic Fragmente aus dem Nachlasse eines jungen Physikers closes with the remark: “Unser irdische Hülle ist nur eine Anmerkung, die der Schöpfer zum geistigen Text gemacht hat. Man liest sie zuletzt, überschlägt sie auch wohl.”\(^12\)

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8 Novalis, HKA III, 342; 479.
9 Novalis; HKA III, 256.
Achim von Arnim, who also conducted experiments with the Volta column on his eyeball and tongue, stopped before the boundary of physical destruction. He used far weaker currents than his physicist colleague; furthermore he refused to perform Ritter’s extreme experiments on his own eyeball. In his review of Ritter’s _Fragmente aus dem Nachlasse eines jungen Physikers_ he complained about the latter’s lack of “Ehrfurcht vor dem eignen Körper” (reverence for his own body).\(^{13}\)

One can certainly deplore this lack of reverence for one’s own body. At the same time, however, the romantics gave rise to a tradition of self-experiments that, despite occasional meanders, enabled science to reach deeply into the labyrinth of mind and nature. In 1790 the North Saxon physic Samuel Hahnemann took four ounces of cinchona bark each day to explore the effect of this drug against malaria. Hahnemann suffered from symptoms that were similar to the remittent fever characteristic of malaria. Thus he was lead to the idea that is said to be the origin of homeopathy: to cure the sick with a medicine that causes the symptoms in the healthy. In 1804 Friedrich Sertürner managed to isolate the active ingredient of opium and to produce a powerful painkiller. He tested this effect on his own body together and on two further test persons. Prior to that Sertürner had tested the effects of opium on dogs. They had died.

These were heroic acts at the beginning of a chain of self-experiments that, every now and then, ended tragically – as was seen in Johann Wilhelm Ritter’s case. Ritter pushed the self-experiment to the extreme. Most romantics, such as Achim von Arnim, Kleist, and Brentano went down another path. Despite their life-long interest, they turned away from the “Experiment im Glase” (experiment in vitro). Instead they searched for the romantic concept of a unity of nature and mind by means of an “Experiment im Kopfe” (experiment in the head): They turned to poetry.

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The values of attention

When we look at the meanings of attention during the eighteenth and nineteenth centuries, we do not find one single notion. This is especially true when we consider the myriad of spaces and discourses, which in these centuries turned attention into a moral, political, epistemological and economic value. What is attention? An ability? A mental function or a mental state? A predisposition or a conscious decision? A duty or a gift? In its history, attention has assumed all of these roles.\(^1\) In its different definitions, attention has been considered subjective, objective, spiritual, natural, active, and passive. Sometimes described as a force of attraction manifested in individuals by their surroundings, attention has also been classified as a mental and an immaterial force, inner, and actively generated. It has oscillated between being considered an objective and automatic phenomenon and a subjective and voluntary act; its normative automatism was separated from its creative traits. In the scientific discourse of objectivity opposed to artistic subjectivism, attention was exalted and made dependent on the rational will. In some moments of its history, the nomadism of attention was recognized and aspects of it that were supposedly opposed were unified and integrated.

Some historians believe attention has always been an important subject in the history of philosophy. Others, such as Jonathan Crary, state that it was first during the second half of the nineteenth century that the control of attention was transformed into a moral, political, and economic necessity. There are those who believe that recognition of the importance of attention to our societies goes back to the Romantics and the enlightened practices of self-observation and self-experimentation. According to Michael Hagner, the ability to control attention became crucial when, in the eighteenth century, the techniques of self-observation were fundamental to the constitution of bourgeois self-knowledge.\(^2\)

In his book on attention, Edward Bradford Titchener (1867-1927) evaluated the benefits that the new experimental psychology brought to the research on attention: nineteenth century psychology, he wrote, was the first to “discover attention.”\(^3\) For Titchener, this meant that, for the first time in the Western world, the real problem of attention was explicitly and scientifically

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\(^1\) Waldenfels, (2004).

\(^2\) For those interested in a historical analysis of the construction of the scientific, pragmatic and moral value of attention at the turn of the eighteenth to the nineteenth century, I suggest Hatfield (1998), Michel Hagner (2003, 2001, 1999), and Daston (2004, 2000b). Braunschweiger (1899) and Uhl (1899) are interesting as studies from the nineteenth century that analyze the theories of attention of the eighteenth century. Concerning the importance of attention in the context of the second half of the nineteenth century, Crary’s analysis (1991, 1999, 2002) is an important reference. The texts of the end of the nineteenth century that analyze the attention problem at that time are countless. Among them, I suggest Dewey (1897), where the author writes a critique on the psychology of attention. For an analysis of the importance of attention in the history of science and scientific objectivity, see Daston and Galison (1992) and Daston (1995, 1999a, 1999b, 2000a, and 2001).

\(^3\) Titchener (1908). Titchener is known as the most important American structuralist psychologist.
formulated, and that finally its importance for mental life was recognized. Attention had been 
acknowledged in the methodology of empirical psychological research, and Titchener anticipated 
that it would be of interest for a long time to come.

Historian of philosophy Gary Hatfield directed his critique to Titchener’s affirmation. He 
accused the new psychological scientists, particularly Titchener, of completely dismissing the 
psychology of attention from the previous century. For most of the “new psychologists”, 
eighteenth century psychology was only theoretical. Its interest in attention was incipient. Hatfield 
argued against this interpretation. He showed that the first era for the diffusion of a psychology of 
attention, and the recognition of its importance for psychic and moral life, was the first half of the 
eighteenth century. According to him, since 1730, attention had been an important chapter in 
psychology manuals. Christian Wolff was the first to formulate a systematic theoretical body on 
the theme.4

There is no doubt that if we compare the emphasis on attention in the psychologies of the 
eighteenth and the second half of the nineteenth century, the latter appears as the era par excellence 
of attention studies. But a comparison of these two eras provides other types of information. 
Titchener’s analysis did not reveal a lack of consideration or knowledge in the earlier psychology 
of attention. Titchener knew the psychological authors of the eighteenth century. For him, 
however, the psychology of his time had discovered both a new perception and a new way to 
research the problem of attention. The issues, the questions, the answers and the methods that 
supported research on attention had changed drastically since its inclusion in eighteenth century 
psychology manuals. What came to be understood as the control of attention in one period would 
have been almost unthinkable in an earlier period.

The historical context of psychology in the second half of the nineteenth century was marked 
by two interconnected problems that were foreign to the previous century: the scientific need for 
separation and distinction between the subjective and the objective aspects of knowledge, and the 
Victorian morals of control and dominance of feelings and impulses by strength of will and 
attention training. For nineteenth century scientific psychology, as well as for the moral discourse 
of the time, interest, pleasure and emotion were not sufficient to support attention. They should 
be substituted by strength of the will. This was not a mere “substitution,” however.5 Emotion and 
feelings were seen as the powerful enemies of attention. They were the most deep-seated internal 
antagonists of attention, with no possibility for integration.

Moral and scientific discourse tended to divide human nature in two. On the one hand, there 
were the instincts, the natural passions, the strong emotions and the immediate satisfaction of the 
bodily desires. On the other hand, there were the will, reason and consciously controlled attention. 
The relations of power and control established between these parts of the self would define the 
individual’s character, his health and his place in the moral and social hierarchy. Scientific 
knowledge was also dependent on this separation: the subjective aspects of the self should be 
suppressed and controlled, and this was the duty of voluntary attention.

Although will and attention were almost indistinguishable in nineteenth century psychology, 
there was no consensus regarding their meanings and the relations between them.6 The scientific

5 Nayrac, (1906).
and moral discourses that asserted the sovereign power of the rational will were also threatened.\textsuperscript{7} Neurophysiological research argued that the complex mental functions, voluntary attention included, were not completely dependent on rational and conscious conditions. The control of behavior was defined by the inhibitory cerebral function.\textsuperscript{8} Other voices, coming from physiology and from perception and sensory studies, were trying to break the opposition between the voluntary and the automatic spheres of attention by other means.

A complete classification of the theoretical and empirical models of attention would not end here. In the second half of the nineteenth century, in almost every psychology manual, there was a chapter devoted to attention. The concept was also discussed within other important topics, such as memory, habit, will, thought and self. Interest in the subject went beyond the psychological area, entering the educational, legal, medical, artistic, political and economic spheres.

Psychologist Walter Bowers Pillsbury (1872-1960) identified at least six theoretical lines in nineteenth century research on attention. For some psychologists, attention was an intense bodily sensation, caused by the quality of certain objects. James Mill would belong to this line. For others, such as Alexander Bain, attention was triggered by feelings of pain and pleasure. Theodule Ribot considered attention as dependent on motor movement. In a more spiritualist line, attention was identified with an immaterial will, or an unconscious agent, which, hidden somewhere outside consciousness, would control and direct it. Finally, there were those who connected attention necessarily to consciousness.

For Pillsbury, attention was conditioned by each individual’s experience in the world, and any analysis that failed to take this fact into consideration was seen as incomplete. From this perspective, attention blurs with being, is defined by it and, at the same time, participates in its definition.\textsuperscript{9} Although Pillsbury did not comment on the model of attention proposed by American pragmatists, their points of view overlap in some aspects.\textsuperscript{10} Among the many authors who discussed the subject of attention in the second half of the nineteenth century, a special and contradictory place is held by psychologist William James (1842-1910).

\textit{Attention, to William James}

Both in the psychological bibliography on the subject of attention and in the handbooks on the psychopathology of development, James’ analysis of attention is seen as an initial milestone in the history of the concept, mainly with regard to the introspective framework.\textsuperscript{11} Other authors believe that James’ analyses confirm current research on the faculty of attention and its relation to the “central brain executive function,” which controls mental actions. Together with the French Theodule Ribot, the American psychologist is considered to be a key theorist for understanding the distinction and opposition between voluntary and involuntary attention.\textsuperscript{12} Even in the current

\begin{itemize}
  \item \textsuperscript{7} Daston (1982) identified at least three assaults to the theories of the will and voluntary control of attention in the second half of the nineteenth century: psychological associationism, physiological reductionism, and psycho-physical parallelism.
  \item \textsuperscript{8} See David Ferrier (1876), and Maudsley (1867, 1883). For secondary literature on the process of neurophysiologization of attention, the will, and the ability to inhibit impulse, see Smith (1981, 1991, 1992a, b), Macmillan (1992, 2000), Young (1970, 1968), and Clark and Jacyna (1987).
  \item \textsuperscript{9} Pillsbury, (1908).
  \item \textsuperscript{11} Cicchetti and Cohen, (1995).
  \item \textsuperscript{12} Even in the current
\end{itemize}
discussion of attention in the business field, James is seen as a major figure. Nor is the relevance of James for the psychology of attention a recent realization. His contemporaries acknowledged his importance, and his work was a reference for those who studied the topic. Even when we look at the history of attention pathologies, we notice that back in 1902 Dr. George Still, seen as the first to clinically describe the symptomatic picture that today is characterized as attention-deficit/ hyperactivity disorder (ADHD), mentioned James in his analysis.

However, if the importance of the American author in the field of attention studies is unquestionable, we find hardly any agreement concerning his understanding of attention itself. Mialet described attention in James as a synonym of focalization, concentration and selection of certain thought contents over others, contrasting it with a fluctuating mental state. According to Mialet, in its active sense, attention, for James, would be a kind of resistance to the natural state of consciousness diffusion for the sake of conscious intentions and projects. On the other hand, for those who highlight the modernity of his naturalist analysis on the stream of consciousness and experience, it is precisely in the absence of a controlling central consciousness that James’ originality resides. To make things more complicated, among commentators there is no agreement on the meaning of the concept of attention, and most of the time the debate revolves around the question of whether attention is the last spiritualist and voluntarist vestige of James’ theory. Johnston and Dark believe that, in conceptual terms, nothing in attention research is more advanced than James’ analyses. We could, however, raise the following question: From what point of view is James’ point of view seen?

Between psychology and Jamesian pedagogy

James wrote about a huge variety of subjects that, in a certain way, tell us a little about his life. As Allan Wallace commented, “James was a premier example of a man of science who refused to adhere to the articles of faith of scientific naturalism, and a deeply religious man who rejected religious dogma. His approach was to take a genuinely scientific interest in precise, open-minded investigation of the entire range of human experience, including religious experience.” His commentators frequently distinguish between two phases in James’ life and work: James the psychologist of *The Principles of Psychology* (1890), and James the philosopher of the writings gathered in his books *Pragmatism* (1907) and *Radical Empiricism* (1912). Between these two phases, the analysis of attention was restricted to the author’s first psychological phase and more precisely to the chapter of *The Principles of Psychology* that bears the name “Attention” and to the chapter on will. These chapters are the point of departure, not only of the authors who still

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14 One of them was Henri Bergson, who, in a letter to William James, wrote that James’ works on attention made him conceptualize life as an “attentive phenomena.” See Perry (1973).
15 Still, (1902).
17 For this point of view, see Sacks (2004), Sanchez, Fernandes, and Loy (1993), and Levin (1999a, 1999b).
18 Johnston and Dark, (1986).
consider James’ analyses of attention a useful and creative landmark, but also of those who question their validity.

Seldom do we hear of James the pedagogue – the man who repeated the same course for huge audiences of educators in different American cities and universities. Sometimes the audience would be made up of 800 listeners, and the course was an indisputable success. Aimed at the Cambridge School teachers, the course began at the request of Harvard’s Department of Pedagogy in 1891, the year after James’ Principles was published. Every Tuesday throughout the months of November and December in 1891 and January in 1892, the already renowned psychologist would be busy trying to make his ideas palatable and clear for the new audience. The main subjects were generally divided into eight sections: (1) man as a reactive being, (2) impulses and instincts, (3) habits, (4) associations, (5) memory, (6) attention, (7) conception and reasoning, and (8) will.

The same course was offered each year at the Harvard Summer School from 1894 through 1897. In 1895 it was offered at the Colorado Summer School and in 1896 at Buffalo University. James’ influence on pedagogy and education pervaded the twentieth century with the recurrent editions of his book *Talks to Teachers on Psychology*, first published in 1899 as a longer and more developed version of his course for teachers. Translated into German, Italian and Russian, the book soon acquired the status of an educator’s guide. In the pedagogical hubbub of the time when the course was offered, educators’ prime demand was to find a solution for pupils’ distraction.

School, together with family and medicine, was one of the central institutions responsible for the consolidation of the civilizing process and, as such, had the duty of forming citizens who would be able to match the requirements of the productive, economic and moral process. The inattentive child with learning problems put this objective at risk, challenging the efficiency of both the educational system and of its body of professionals. Solutions were sought inside and outside pedagogical knowledge, particularly in the theoretical and methodological promises that new psychology brought with its recent affiliation to the scientific project. Offerings were not scarce. James came to talk about the mystification that the commerce of education created through the fallacious selling of new theories and techniques.20

James was himself inwardly involved in this commerce and also offered a kind of commodity: at that time he could already count on the fame and success his first book had given him. The cost and price of his courses were negotiated with the interested university and generally each student was charged around US $ 250. He offered a kind of “script” that described the principles for capturing the pupil’s attention. What made James’ offering different was that the content he sold made it clear that psychology had little to offer to the teaching art, providing only abstract techniques and instructions. If a guide was offered, it was more like a travel guide, with loose itineraries open to the traveler’s taste.

Although the pedagogical phase of James’ career marks the application of his psychology to the practical, educational and economical matter of attention, it is seldom discussed in the current analyses of this concept.21 What is the loss for the psychology of attention? We will see that one of the central aspects stressed by James in his course concerns the need to depart from each child’s practical and concrete life in order to excite any kind of interest and attention. To talk about James’ career without his pedagogical phase makes us lose a significant part of the living matter

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20 An American newspaper announced “The idea of Apperception is making a revolution in educational methods in Germany. [It] will be mailed prepaid to any address on receipt of $1.00” (James, 1899, p. 95).
that lay at the foundations of his conceptualization of attention and of the practical, economical, educational and existential problems that, already at that time, affected the inattentive child.

Conceptually, one of the consequences of this omission is to ascribe to James an exclusively internalist and voluntarist notion of attention, something that seems questionable even in the chapters of *The Principles of Psychology*. But my proposal in this paper is not to find the point of view of James on attention. Nothing could be less faithful to an author who supported analytical perspectivism. Following James’ recommendations, I have just tried to add another perspective, another point of view through which his analysis of attention can be seen. My proposal here is to give more visibility to some marginal aspects of his theory of attention that are seldom acknowledged. To our understanding of attention in James the psychologist, we can add a deeper understanding through James the pedagogue, an aspect of the man mostly forgotten in studies from the early twentieth century.

*James for teachers*

“(...) making an impression upon his natively restless stream of consciousness (...)” (James, 1899, p. XVI)

A course on the psychology of interest aimed at teachers who were concerned with the central practical question of pupils’ distraction could not suggest otherwise: attention was seen to be dependent on interest. But if in James the relation of attention to the matter of interest is direct, what the author perceived as interest cannot be straightforwardly identified with the ordinary meaning of the term. As a starting point, teachers were asked to understand that human nature was inherently impulsive and interested. In practical terms, for James it meant that (1) interest led to and was led by action and (2) regardless of whether it was connected to practical life or not, every element of consciousness had an influence on the action inhibiting or exciting it. I will return to these two points and their close relation with the analysis of attention and interest throughout this paper, by following certain directions and deviations in James’ thought. Let us start with James’ definition of consciousness. According to our author, “consciousness contains sensations of our bodies and of the objects around us, memories of past experiences and thoughts of distant things, feelings of satisfaction and dissatisfaction, desires and aversions, and other emotional conditions, together with determinations of the will, in every variety of permutation and combination.”22 In the Jamesian field or stream of consciousness, all these features are simultaneously present to different conscious degrees and are in constant motion, one dissolving into another and shifting positions interchangeably, sometimes on the focus, sometimes on the margins of consciousness. According to this description, consciousness is not composed of clearly distinct states and unities; rather ideas in it are as mixed and ephemeral as feelings and wills.

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21 In spite of the success of the course, James’ description of his experience with the pedagogical audience was not the most enthusiastic one. Maybe for this reason, this phase has not yet received the necessary attention from his commentators. In a 1892 letter to W. T. Harris, the psychologist stated his dislike, saying that he had been forced to offer the course and that this was a regrettable work. A few years later, with the success of the enterprise and the expectations around the book publication, James made clear his purely financial interests. Writing about the book to his wife Alice in a 1898 letter, he enthusiastically highlights that the book would make them rich! (ibid., historical notes on the course, pp. 237, 245).

22 (ibid, p. 20).
Already on the first day of the course, James declared that if the teachers’ purpose was to understand mental phenomena in their concreteness, they should not wait for a simplistic or static definition of consciousness. Consciousness was described as a chaotic stream, inherently impulsive and active, influencing every field of human action. In James, action is understood in the broadest sense, including speech, writing, present and future emotional determinations, and even the action of “not acting” in response to some circumstance.

Bearing these two notions in mind, that of stream of consciousness and that of action, and considering the mutual relation between them, two maxims should guide the behavior of teachers toward their pupils: first, there is no reception without reaction; second, there is no impression without correlative expression. Both fit what James understood as a feature of the active and practical nature of the human being and as the principle of the educational practice and of moral life. James believed that, if an impression was strong enough to leave a trace on the stream of consciousness or to display a presence in its focus or margins, this trace would somehow modify the individual’s active life: first, by becoming part of the stream of consciousness and thus changing it; and second, because from that moment on, this mark would necessarily influence the individual’s course of life in the variety of his possible actions.

An impression would become a presence only if a kind of motor consequence followed it. Otherwise, the impression would be physiologically incomplete and therefore unable to produce its effect upon memory. According to James, incomplete impressions were stimuli that “simply flow in at the pupil’s eyes or ears, and in no way modify his active life.” Such impressions inhabited the fertile ground on which inattention proliferated. What characterized them was their incapacity to capture a pupil’s interest for long. In order to excite a pupil’s attention and to direct his behavior to the subject or task in question, the teacher should, at first, facilitate the process of producing significant traces on the stream of consciousness. This was the first moral and educational duty to be taken into account.

But how to make this process easier? How to enable a mark on consciousness to be long-lasting and active enough to impact the individual’s life either in terms of the direction of his attention or in the action that accompanied it? The course was, in its entire dimension, an attempt to answer these questions. School should, first and foremost, devote itself to the biological aspects of human behavior. In his teaching on the instinct of rivalry James argued: “The wise teacher will use this instinct as he uses others, reaping its advantages, and appealing to it in such a way as to reap a maximum of benefit with a minimum of harm.” But the American psychologist did not believe that human nature had a deterministic function concerning behavior, at least not in the strong sense of this term. Human nature did not limit behavior in its variability, bestowing upon it a definitive fate. In James’ psychology, nature just offered a few relatively open directions to the adaptive process.

For James, native tendencies offered directions that made certain impressions and actions more interesting than others. For this same reason, the impressions capable of leaving a trace on consciousness had to be somehow related to these native tendencies, chiefly in childhood. Bearing in mind this vocabulary, James talked about instinct as one of the most important tools in the

23 (ibid, p. 30).
24 (ibid, p. XVI).
25 (ibid, p. 39).
teaching art. When used for the benefit of education, native tendencies could be strengthened and directed towards the constitution of new habits. At least two kinds of relations were likely to be outlined between a new impression and the child’s interest tendencies: the spontaneous and the derived. In both cases, a direction that departed from the self as an impulsive and interested complex played a fundamental role in the orientation of attention.

James talked about the self as a force with a primary form of curiosity even before the formation of what would be a sense or feeling of the self. When the self was still a non-self, a kind of psychophysical organism, interested and impulsive, it resembled a whole range of reaction tendencies that were more easily activated by what presented itself to the child’s body as dynamic, concrete and alive, rather than fixed and abstract. The child’s interests were initially drawn to movement and to the new. What also characterized this interested and impulsive small complex was its naturally relational character. Because of the child’s biological constitution aimed at the living world, one of the aspects that gave impulse to attention and action was the child’s relating to the other in the constitution of his still limited socius. For James, the self drew its contours and grew up in its relationship to the world; it was formed in this encounter. Instincts such as those of imitation, emulation, ambition and pride were some of the action tendencies that guided this state of being in and with the world, and which only existed in this relation, and not prior to it. In attempting to capture the child’s attention, these tendencies should also be reactivated.

James departed from action to reach action. He described instincts as “action tendencies” and “interest tendencies” directed at living entities, and aimed at acting on and interfering with them. If any direction in life was dictated by nature, that is how James understood it: a direction that was also dynamic throughout life. The most dominant forms of interest were not always the same during the individual process of adaptation, some being naturally more intense than others in certain development phases.

Obviously James’ purpose was not to offer a development psychology course for teachers. The psychologist was careful to explain to an audience hoping to obtain well defined and predictable hints about child development that each child had his own path, time and rhythm. His analyses of the role of instinct in education should be understood as clues to be observed in their context, in relationships often mediated by the teacher between the pupil and the world. And in this case, the use of the word tendencies represented well what James understood as instinct.

The interest and action of children were initially inclined towards the sensational qualities of an object. James talked about the dramatic quality of native interests primarily directed at the senses: the bright, the vivid and the startling always captured the child’s attention. This was a naturalistic explanation for the distraction of a child, who, nine out of ten times, would be paying more attention to light, colors, sounds, brightness and movement coming from any direction than to the uninterrupted and lengthy reading of a text in the classroom. To bring about change in the world was part of human natural destiny, said James. As practical beings, this was a “happy fatality” humans could not easily escape. The child’s instinct for construction and destruction indicated this natural inclination to act upon the world.

The familiar fascination of the child for assembling and disassembling, destroying and reconstructing facilitated a feeling of familiarity with the physical environment and with the

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26 “It would be quite impossible for a young child to listen to a lecture for more than few minutes (...) the outside sights and sounds would inevitably carry his attention off” (ibid, p. 37).
properties of material things. Consciousness was a result of the interesting activity and of the familiarity with the concrete. The tendencies to act existed before the emergence of the self, and affected the subject’s entire life. It was those tendencies that enabled the creation of the first traces that would interfere with future choices and interests, whether conscious or unconscious. This concrete “self-making” that formed the basis for constructing a feeling of the self as real was part of what was, for James, always his strongest native interest: his personal self. In order for an impression to be able to leave its active mark on consciousness, it should somehow be embodied or linked to the whole of actions and active tendencies responsible for drawing the contours of the self in relation to surroundings. According to this perspective, attention was not a passive function controlled by the characteristics of the external stimulus, it was not seen as an independent spiritual power, nor as a free agent hidden somewhere above consciousness or in the neural nets that sustained it; rather attention and interest were subject to the mingling of present and past hereditary, social and existential factors that together made up the puzzle of the individual narrative of each subject.

“Make matrix”

“(…) Neither old nor new – but new in old (…)”(James, 1899)

Life understood as a phenomenon of reaction was a common notion in the nineteenth century. But if this understanding was almost a consensus during the century in which evolutionary and adaptation theories were disseminated, the explanation about what caused and directed this reacting differentiated the philosophical and psychological perspectives and the worldview that derived from them. We have seen that, for James, the interests that directed this reaction, be they native or acquired, were initially linked to the doing. In spite of using the word “reaction”, we have seen that an interest in action was also there, directing and exciting the reaction. Not accidentally, Crary (1999) described the Jamesian attention theory as a theory of action, not of reaction. We have also seen that for the pragmatic psychologist, the acceptance of this statement led to favoring concrete experience over psychological deduction in childhood. In practical terms, this meant paying tribute to teaching methods that favored doing. He later also acknowledged artistic doing.

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27 While teaching about the importance of concrete action, James commented: “[I]t is really the foundation of human consciousness” (ibid, p. 44). For a recent interpretation of James’ account on concrete self-making, see Varela (2003, 1992).

28 At the beginning of the nineteenth century, there was a general clinical designation, although a little vague, about a sensation (feeling) of un-reality related to a flaw in the attentive processes. When the present impressions were not linked to the memory associations, the result was a feeling of unfamiliarity with the present objects (Crary, 1999). We find in James a reference to this same condition. Although he did not describe this feeling of strangeness as a clinical designation, he stated that the child raised through purely abstract methods felt a certain “longing” for the real, an absence of the concrete reality of experience as if his knowledge of things were based on an artificial and abstract world, not providing him with practical tools in his daily acting. James (1983) described a dissociation between psychological life and concrete action as a serious problem and talked about the importance of attention for attempting to reverse that condition. A similar approach can be found in Henri Bergson (1896).

29 This expression is quoted from James’ notes for his lectures to teachers, where he wrote “Make Matrix. Connect it with ideas already there! Connect it with pupil’s previous life. Then what is in the mind, so far from conflicting, unites with what you are saying” (ibid, p.198).

30 For a more comprehensive treatment of the history of action and reaction concepts, see Starobinski (2001) and Joas (1998).
which, in general, represented his belief in concrete action as a crucial factor in the constitution of character.

This kind of ethical fidelity to concrete action that so outstandingly characterized our author’s analysis was also a fidelity to the native tendencies naturally inclined to this doing. For James, to say what a man is, was to say what a man did. To be and to do were identified with each other, first understood as tendencies of action and of native interests; after that, as habits of action, which, benefiting partially from the tendencies, were created with the help of civilizing and educational processes. From then on, every act and every choice, as well as every interest to which attention was directed, involved a dialogue with the individualized narrative of actions. James still did not use the concept of continuity of existence explicitly, but outlined a kind of feeling of permanence that only acts and deeds, which composed the montage of each individual narrative, could provide the self with. And if this narrative was a film that could be reviewed and remembered, it was also a film that pervaded the next series of acts to be performed, as if for James the continuity of existence had a “desire” to extend and expand backwards and forwards.

The most vehement exclamation in *Talks to Teachers*, which I use in the title of this paper (“Make matrix”), derives from this finding. One of the ways of making a new object interesting was to associate it, somehow to connect it to the native tendencies and to the impressions that left a mark on the stream of consciousness. As we have already seen, to leave a trace on consciousness meant already having produced in this consciousness a feeling of having acted. The old actions played a fundamental role in the current interests. For James, almost every current interest was a derived interest, somehow linked and related to the entirety of actions that formed the self. According to James, the stream of consciousness, the interests and actions of the self are directed by the consequences of action. That is where his pragmatic project resided. But the way forward involved a step backwards, or rather, a step forward that carried with it the history of every step already taken. The role that the whole of an individual’s experience plays in directing his attentions and present and future actions is evident in many passages of James’ work.

But what was the pedagogical recommendation that resulted from this finding? What should a teacher do with all this information? As I mentioned in my discussion of impressions that fail to leave lasting marks, their limitation primarily consisted of their incapacity to produce a sufficiently strong modification in consciousness and in the whole of the narratives of the self. These were impressions that, if capable of producing a reaction, would be artificial, impermanent and transient. For that reason, neither impression nor action would interest the child for long. To produce a change in the world and be affected by it, were processes described by James as natural tendencies of the body. What education should do was to intensify and favor them, starting with the transformation of something uninteresting into something interesting.

James made a distinction between at least two ways in which impressions became sufficiently interesting to become traces capable of producing reactions. The first, as I have already described, was through interests or tendencies that were called natively interesting impressions. Spontaneous action was directed towards these impressions, at the durable attention that followed the interests and tendencies of the body. However, an impression could be initially uninteresting. In this case (the most frequent case for James), voluntary attention with effort became necessary. Some

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31 On this concept, see the texts by James (1968) “The Continuity of Experience” and “On the Notion of Reality as Changing”.
association should be established between the new impression and at least one preexisting interest that had left a trace on the individual. When this association was not directly provided by native tendencies, it involved a harder effort of elaboration and of networks. James’ psychology of interest did not conform with the soft pedagogy incompatible with the notion of effort, but it is necessary to make clear that it also was not in complete conformity with the emphasis on effort that was linked to conscious will and opposed to instinct.

If we follow the crucial distinctions outlined in James’ psychological work, we should say that the effort of attention or of will is related only to the voluntary and active form of attention. Always according to James, the function of attentional effort is to resist to habitual and daily action, while inhibiting its impulses and favoring the interests of the will. The effort of attention is a function of the mind, as James stated, and the other parts of the human being are subject to its power and do not have the same autonomy. According to this definition, every difficulty related to maintaining attention would be a mental one in which the will, while making an effort to select an idea, inhibits the others. Focusing on these definitions, it is not difficult to understand that some of James’ commentators see in the notion of effort of attention the spiritual or mental strength that would safeguard his theory from a certain corporal and cerebral determinism.

However, we also find in James another meaning of inhibition. In what James called “moral” or “repressive” inhibition, the motives of distraction are inhibited by means of negation and prohibition; in contrast, in inhibition by replacement, the new interests are experienced as more appealing. This form of inhibition relies on the construction of connections among interests, and was, according to James, more efficient than the repressive type.

James did not see human nature as opposing the free and active sphere of the will; human nature establishes relations with this sphere that could be either cooperative or not. But in James, nothing is so obvious or so clear and the notion of effort has plenty of contradictory nuances. The dilemma begins in the attempt to clearly distinguish two types of movements performed by the body: the automatic and reflex acts and the voluntary acts. In the chapters about attention, effort, and the laws of habit in the *Principles of Psychology*, we find sufficient arguments to put into question the clear distinction between these two terms. Voluntary attention and spontaneous or automatic attention do not appear to be static and fixed, and the boundaries end up being transformed into dissolving and linking states. In the subtlest aspects of his analysis, a certain hesitation in the adoption of his initial arguments can be sensed.

James described the adaptive process of the sensory apparatus to a new stimulus as an effort or a sensation of activity. The process of attention as a whole was part of this activity, since it always produced a feeling of activity even when it was a matter of spontaneous attention. At the same time, for James, the feeling of activity was the effort itself, regardless of whether it was sensory or ideational. The moral will that made an effort was physiological and corporal. Again, if some kind of regulating and defining will could be found in James, this was the assembly of tendencies

32 In the nineteenth century, attention was described both as a mechanism of the nervous apparatus liable to quantification and as a voluntary and intentional mechanism, respectively named passive (or automatic) attention and active (or voluntary) attention. However, the physiology and psychology of attention at that time never managed to satisfactorily set limits for the distinction between voluntary attention and spontaneous attention. In fact, the research of attention showed that both kinds were intimately related and were dependent on their respective mechanisms. I suggest that in James this indistinctness is also present.
and habits of action that he called self. Even the will depended on experiences that, at some point in time, no matter how remote, had been the object of some kind of attention. Normally, the motor process of construction of the voluntary act does not remain in the nucleus of consciousness. What occurred in the formation of habitual actions was that the long motor process of construction of action was “condensed”. Everything happened as a continuous process where only edges and surfaces were the focus of consciousness, even though all the networks of performed actions and movements were part of its configuration. What James called passivity and activity were only more remote and more present phases, respectively.

For James, one of the greatest mysteries and also one of the most extraordinary facts of psychology was the limitation of consciousness: whereas countless physical impressions affected the sensory organs, one became conscious of only a small number of these impressions, that is, only a fraction of them drew the conscious attention. But the channels excluded by the conscious nucleus were not completely eliminated. They interfered, even if peripherally, when the current action made demands of them. We have seen that a single association with the once-lived interests was sufficient for leaving a trace and interfering with the subsequent actions. This associative task included the whole of the lived experience of each subject, whether the materials of experience remained on the margins or at the center of consciousness.

James distinguished at least three types of interest to which acquired conscious or unconscious interests were connected: natively exciting objects, social responsibilities, and strength of habit. In the puzzle formed by these three elements and with the present interest linked to them, life appears as a sort of rhizome formed by the changing composition of present interests and natural tendencies singularly molded in each individual in his moral and social relation to the surroundings.

“New in old and old in new” should grow up and change together, said James, “It is an odd circumstance that neither the old nor the new, by itself, is interesting; the absolutely old is insipid; the absolutely new makes no appeal at all. The old in the new is what claims the attention – the old with a slightly new turn.” The associative work would not be restricted to the intentional work. A sort of matrix between new and old was constructed through spontaneous or voluntary work of attention. It could also simply take place at a given moment, although even for the experiencing subject, it remained unclear what kind of association was being created. The sensation of something happening in the mingling of the familiarity of something already lived with present novelty was the only feeling that came about. Any association would be possible among the infinity of relations that each individual is able to establish when he familiarizes himself with his surroundings. These were relations outlined differently in each phase of life, in each season of the year, in each moment of the day, in each kind of mood. They could either involve more concentration or less; they could be more fluid and more distracted; they could be more or less

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33 However, if for James one of the most impressive functions of consciousness is its limitation, he also mentions its unlimited and undetermined capacity for establishing relations. The clearest example provided by James concerns the genius. The genius differs from the ordinary person because the former is more natively capable of making a matrix with his object of interest, of deriving unexpected interests from it, of dissolving its initial outlines, always inserting into it a new relation, a new line, a new color. Thus, if there is initially a limitation to consciousness, this can be followed by a forward and backward expansion according to his ability to make a matrix.
intellectual and rational; but they were always linked to some element present in the lived experience.

For James, the single limitation to the incessant construction of this rhizome of interests was that it was based on the concreteness of life of each subject and on the habitual ways of associations created within it. The individual’s nature and character were formed by the habitual forms of his associations. We have seen that James identified character with doing, with the habits of action that made up the history of each individual’s life. But here he radicalized his argument by highlighting the transitive spaces of connections. Character and thinking were identified with the habitual forms of association, the forms of relations that were established between the new and the old, a concept that revealed a certain existential faithfulness to the weaving of relations, rather than to results. And these were forms that were defined by the active personal encounter of the individual with the world, since one of the most central characteristics of the attentive states was the local and situational aspect. Attention directed to an interest stemmed from relations created between the new and the old, but at the same time it identified itself with its own process of association between the present and past existence. To be attentive to an object, for James, was to associate it, was to enable as many relations as possible between the object and the stream of consciousness.

According to James, some types of characters create their associative relations with the world by turning to the focus of consciousness and its best defined elements, while others turn to the more unstable ground at the margins. Between these two extremes, a variety of forms of establishing such relations defined the different ways of being attentive to the world, of being in relation with it. These were kinds of attention that could not be defined in terms of attentive deficit. These forms of being attentive to the world and of being in relation to it were not predefined or constitutive forms of human nature; they also did not concern an external organization that controlled and organized the subjects’ perceptions. They were individual ways of being in the world and, for James, these were tendencies that could not be altered as a whole.

34 (ibid, p. 70). Crary (1999) sees in this Jamesian form of naming attention an attempt at safeguarding the continuity of experience that was already being replaced at that moment by the experience of capitalist fragmentation. From Crary’s point of view, reacting to the world in a way that is so faithful to the lived experience and that carries the whole of experience in each act of attention and action is an impossibility. My objective herein is not to take a side in this debate, nor even to develop it, but coming back to James once more, we see that this “imposition” of the continuity of interests and of action in the direction of future actions does not rule out another kind of interest. In his famous exposition, “The Laws of Habit” in the Principles of Psychology and also in the chapter with the same title in his Talks to Teachers, James stated, in a nutshell, the possibility of new habits being suddenly created, by means of a completely new stimulus, or of an excitation not necessarily related to lived facts. These would be harsh situations that had enough power to change the whole character of the living being. In “On a Certain Blindness in Human Beings,” a talk also published in the book for teachers, James mentions a certain human insensitivity to the totally different, to everything that is unlike us. However, if this inclination was seen as natural and necessary to the adaptation process, for the author it could also be turned into a rare mystic capacity for expanding the self beyond itself. James saw a possibility in the interest for the completely new, although such a thing would be rare. Such rarity can only be understood when we remember that this “new” in James is linked to his notion of religious experience and emotion, concepts that he developed in his book on religious experience.

35 “The connecting is the thinking, and if we attend clearly to the connection, the connected thing will certainly be likely to remain within recall.” (ibid, p. 87) “Types of character in short are largely types of association.” (ibid, p. 60).
The feeling of continuity and of permanence stemmed from the different ways in which the world and the self were woven together in their various styles, rhythms and colors.

**Effective distractions**

The problem of distraction so much *en vogue* in pedagogical circles was described by James as a form of divergence or indifference between the child’s interests and the new materials proposed in the classroom in such a way that no deep relation of mutual interference was possible. The old and the new remained dull or only temporarily interesting. The crucial point in his analysis is that the different levels of indifference were not identified with distraction as opposed to concentrated attention. In many children, a certain form of concentrated attention could be held only by fear of punishment or by obligation, involving not more than the minimum interest required for the action to be carried out. On the other hand, distraction could also inspire the most impassioned encounters, if the individual did get involved with the object or idea or built a relation of affection with them. For James, this was the necessary condition for efficient work.

Concentration could be trained and studied in the laboratory, and James acknowledged that the focusing forms of attention made some important tasks easier, but he did not see them as necessary for efficient work. Other tasks could be more easily accomplished by means of diminishing concentration. Against the experimental psychology based on the quantification and rationalization of mental faculties, James restated that “no elementary measurement, capable of being performed in a laboratory, can throw any light on the actual efficiency of the subject.”

The experimental methods for the measurement of attention and memory efficiency, when disconnected from lived and real experiences, had no practical significance for life, and were in no aspect similar to the artificiality of experimental laboratories. James also highlighted that, even if mental functioning was confusing, tumultuous or distracted, it could, at the same time, be extremely efficient and creative.

James emphasized a sort of faithfulness to lived action that reconciled permanence, continuity and change in the singular patterns of each individual. James was emphatic in saying that the law of association was a natural condition of the self as long as its constitution was sustained by the interested body and in its tendency to act. Only when we are disembodied spirits, said the author, will our consciousness follow different laws.

Since it is impossible to guess which relations would be established between the new and the old by each pupil, teachers should orient themselves towards a practical experimentation capable of joining thinking, feeling, and doing. It is in the realm of doing in which what has already been done flows with more freedom and intensity and is actualized in its relation to the new. The teacher’s task was to provide the conditions for a network of relations to be connected with the new stimulus, the new action and the already lived so that in action itself the matrix interwoven from the experience of the subject and the new would direct the subsequent action. In this free association or freely determined association nourished by the whole of the actions that composes

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36 (ibid, p. 73).
37 “(...) our mind may enjoy but little comfort, may be restless and full confused; but it may be extremely efficient all the same” (ibid, p.73).
38 (ibid, p. 56-57).
the puzzle of experience, we are at the opposite extreme of the abstract associationism criticized by James. To define a space for attention in James is to place it in the flow of action between a corporal tendency and a moral necessity. James replaced moral and natural determinisms with a matrix of interests that, like every matrix, does not have poles or extremes that are opposite, but lines that cross, dissolve and mingle in a composition that keeps going and growing.

References


“...” (ibid, p. 60).


William James’ pragmatism has often been referred to as a philosophy of flux, of perceptive experience, or as a theory of affects and thus an extension of the *Principles of Psychology*. When reading his philosophical works through the lens of psychology, attention has often focused on James’ concept of consciousness as a stream.¹ Even though consciousness here appears as a movement of permanent transformation and no longer as a definable entity, being conscious still signifies a privileged mode of existence. In his later writings, including *Essays in Radical Empiricism* and *Pragmatism*, James shifted his central interest from psychology to a philosophy of reality, its plurality and the multiplicity of relations of which it consists. It is in this context that he radicalized the concept of stream of consciousness; consciousness becomes an effect secondary to experience, consciousness is even “fictitious, while thoughts in the concrete are fully real. But thoughts in the concrete are made of the same stuff as things are.”² Consciousness here is a nonentity, a purely immanent function or activity. It has thus lost its uniqueness and at the same time gained a much broader sense. The hypothesis this article puts forward is that – on the basis of this understanding of consciousness – James’ pragmatism can be interpreted from a different perspective.

The question we would like to ask is not, “What is the privileged experience of consciousness?” but rather, “Are there in the universe other modes of experience than the ones we are familiar with?”. This question can be posed if we take the title of James’ last book, *A Pluralistic Universe*, literally in the sense that it suggests a universe that is made of irreducible, heterogeneous realities, these realities being neither fashioned in a way that corresponds to the image of what we know about them, nor according to our privileged modes of experience. The reality we are confronted with in a pluralistic universe is instead one of indefinite modes of existence, their reciprocal affinities and repulsions: their relations. With James’ pluralism in the foreground of our interest, we do not find the intuition on which he constructs his philosophy in the classical empiricism of John Locke, David Hume or George Berkeley, but rather in thinkers like Gustav Theodor Fechner whose influence on James we will investigate in this article.

There are various levels on which we can find ideas or concepts of Fechner’s that resonate in James’ writings. Firstly, Fechner’s *Psychophysics*,³ which is considered the theoretical foundation of experimental psychology, was an important reference for James in his psychological writings and was probably the starting point of James’ interest in the German physicist and philosopher. Secondly – and more importantly in our context – Fechner’s universe is one in which abstractions

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¹ And of course this concept of the “stream of consciousness” became most important in literary studies, denoting a specific way of associative writing.


³ The diachronic order of Fechner’s writings might suggest something else, as the writings we will refer to in the following were written in the 1840s while the two volumes of *Psychophysics* appeared only in 1860. For a long while, however, *Psychophysics* was more or less the only scientifically acknowledged writings of Fechner; within philosophy Fechner never played a really important role.
become concrete, and each instance becomes a center of experience. Reality is thus defined as a multiplicity of modes of experience. It was in this sense that James wrote about Fechner in *A Pluralistic Universe*:

He was in fact a philosopher in the ‘great’ sense, altho he cared so much less than most philosophers care for abstractions of the ‘thin’ order. For him the abstract lived in the concrete, and the hidden motive of all he did was to bring what he called the daylight view of his world into even greater evidence, that daylight view being this, that the whole universe in its different spans and wave-lengths, exclusions and envelopements, is everywhere alive and conscious.4

And in Fechner’s concept of a pluralistic universe in the strict sense of the notion, we find a third element that would become central within James’ radical empiricism: the validity of any kind of experience. Within Fechner’s universe, everything is potentially connected in one way or another to everything else; things, thoughts, and feelings are real as long as they are experienced. The hypothesis that a plant has an experience of itself and thus that it has a soul is as probable as the assumption that another human being that is not oneself has immanent experiences and thus generates thoughts. Whatever we can know about such interior experiences remains, by definition, an approximation, and therefore offers an infinite number of open-ended experimental procedures. James’ conceptualization of a universe that is in every sense pluralistic was inspired by Fechner’s almost animistic worldview and allowed James to replace psychology with a radical or superior empiricism in which experience is no longer explicitly restricted to humans.

Focusing on the inheritance of Fechner in James, this article therefore suggests that radical empiricism with its assumption of a fundamentally plural reality can be made productive for a theory – or rather a practice5 – of knowing or *knowledge in transit*. We will focus on processes of getting to know rather than on knowledge completed, and more particularly on processes of getting to know the specific experiential qualities of nonhuman phenomena.

**Towards Radical Empiricism**

What is an experience? In *The Principles of Psychology*, William James started with the assumption that “experience means experience of something foreign supposed to impress us.”6 Experience for James was thus, first of all, the effect of something exterior on something interior. This implies that an experience leaves traces. Our habits are formed through experiences and so are our endlessly transforming selves. For James, self and consciousness were only secondary to the experience that enabled their actualizations in the first place. But this does not mean that having an experience is purely receptive. Rather an experience is always a reaction towards something that is being noticed

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5 Deleuze suggested that even Hume’s empiricism was not a theory in the classical sense, but that it was a project of transforming theory into practice. A practice took a belief as its starting point; James’ as well as Fechner’s empiricism can be characterized as a radicalization of this process. See: Gilles Deleuze, Hume, in: *Die einsame Insel*, Suhrkamp, Frankfurt am Main 2005, p. 236.

and taken into account or appropriated as one’s own. And such experiential reconfiguration is never one-sided, instead the foreign exterior reality undergoes a transformation at the same time that the self is transformed by the act of taking it into account as an impression. The exterior reality as it is accounted for also undergoes a transformation, we might say, shifting from one state to another as it is impressed by something and thus it experiences.

In this sense, James’ concept of experience is not a reinforcement of a strict separation between outside and inside phenomena; experience rather establishes relationships between the two, as it “makes of our minds a mirror of the time- and space-connections between the things in the world.”7 What is mirrored in our minds can be connected in different ways quite freely by our thoughts; and for James these two are not opposed to material reality, but rather they are themselves a part of our experiences with reality as a network of changing relations. An experience is consequently the event of building resonances between formerly separated realms. And what appears in the resonating interstices of formerly unacquainted things potentially renders a plane for novel insights.8 By enabling new relationships and interconnections, experience is thus a creative act. And even more, for James, reality is made up of experiences, experiences create reality: reality as a pluralistic universe made of heterogeneous bits of material and immaterial things and their correlations; reality as an accumulation of experience or the sum of transformations that are noticed and taken into account:

To be radical, an empiricism must neither admit into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced. For such a philosophy, the relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as ‘real’ as anything else in the system.9

Like classical empiricism, radical empiricism begins with plural facts, a multiplicity of experiences of phenomena, and therefore as James suggested, can be called a mosaic philosophy. There are two specificities that come with the radical, however, that we should keep in mind. First, radical empiricism abandons the dualist distinction between a material and a mental world; things are real whether they are experienced in our thoughts or in a material reality; both interconnect and there is no substantial difference between them. Second, and consequently, radical empiricism grants relations as interior to things and thus puts the relations on one plane with things and thoughts. Radical empiricism focuses on conjunctions rather than on disjunctions, on passages, interstices, and processes rather than on oppositions.10 A radically empirical approach to reality therefore has to get away with dualist oppositions that imply hierarchies such as material versus

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8 When we talk about separation this might lead to a misunderstanding: separated here simply means that things or thoughts are unconnected and not that they were in a dualist opposition.
9 William James, A World of Pure Experience, in Essays in Radical Empiricism, p. 22f.
10 When James claimed that classical empiricism does not take relations into account, it was an exaggeration. Classical empiricism, as Deleuze showed in his text on Hume, was very much and even centrally about relations, but these relations were considered as external to the objects, produced in the subjective process of understanding. Relations thus appeared only on the plane of representation whereas for James’ they were interior to and thus constitutive of the objects themselves. See: Gilles Deleuze: Hume.
mental facts, subjects versus objects, humans versus non-humans and consider all of them on one and the same plane, all as equally real as long as they are experienced.

**Knowing as Relating**

There is, I mean, no aboriginal stuff or quality of being, contrasted with that of which material objects are made, out of which our thoughts of them are made; but there is a function in experience which thoughts perform, and for the performance of which this quality of being is invoked. That function is knowing.\(^{11}\)

Knowledge as a noun does not show up in this quotation, and this is not an accident. James pleaded for the investigation of processes and practices of knowing rather than for a theory of knowledge that is interested in resulting facts or objects that are clearly distinct from their experienced emergence. Novelty only evolves in open experiential processes in which things that were separated before are linked to one another, are disconnected and reconnected again until a configuration arises in which they take a clear position and can thus be defined and known. A new thing adds something to reality that was not there before, and it also adds to our knowledge about reality and thus signifies the end of one specific process. At the same time, however, the result of such a process of getting to know, that is, a new phenomenon – like a new document added to an archive – has an effect on the complete system, as it shifts the relations between the things that are already there. Each novel thing that comes to be known thus takes part in the creative transformation of reality, which then serves as a plane for future experiences ad infinitum.

With James, our focus is on new connections and the transformations that go on between different things. It is the processes of getting to know something in the sense of nescere: kennen, connaître, rather than on scire: wissen, savoir, knowledge about something, or as James put it of “knowing as in transit or on its way” as opposed to “knowing as verified and completed.”\(^{12}\) The process of getting to know another person, for example, is, by definition, endless. Knowing in the context of human relations obviously implies a strong personal investment, getting to know the other is only possible in a process of reciprocal exchange. Such an exchange presupposes some kind of nearness, a connecting thread, a resonance that can serve as a starting point for a network of common experiences. Common experiences form what James described as knowledge-of-acquaintance, a knowledge that is fundamentally reciprocal and in transit. The kind of relation, the respective knowledge about the other that will be established between the two experimenting actors, then depends largely on the quality of their shared experiences. And this relation that is defined by the positions of the participating experimenters towards each other is in permanent motion and will continue to generate effects endlessly. If we take seriously the idea that the transformations that are noticed and taken into account in the process of an experience happen in the exterior reality as well as inside the experiencing subject, this example of getting to know each other by building up a plane of common experiences can be extrapolated to the realm of getting to know non-human actors of any kind.

Accordingly for James, experience is “the vehicle or medium connecting knower with known”;\(^{13}\) it is between them. Drawing from this, it becomes understandable that knowledge

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\(^{11}\) William James, Does consciousness exist?, in: Essays in Radical Empiricism, p. 2.

\(^{12}\) William James, A World of Pure Experience, in: Essays in Radical Empiricism, p. 35.
about things that aims at being adequate to their reality has to take into consideration each part of experience as a resource of mediation that precedes all later discrimination between subjects and objects. Experience is constitutive of both of them. And subjects and objects thus have to be approached from the point of view of the experiential becoming of their relationship, they are not clearly separated entities per se but rather a common process of growing affinities that ends in their distinction. In *The Invention of Modern Science*, Isabelle Stengers pointed out that such a perspective on the process of knowledge production should not lead to a suspension of subject–object distinctions but rather to a redefinition of their relationship:

> It preserves the distinction between subject and object, but modifies its meaning: it is recognized not as a right, but as a vector of risk, an operator of “decentering”. It does not attribute to the subject the right to know an object, but to the object the power (to be constructed) to put the subject to the test.¹⁴

The objects however can only receive their power in processes of exchange; only if we invest potential relations with something and thus put ourselves to a certain extent at risk are we able to construct objects that will test us.

**“Pure” Experience**

The practical question would thus not be how to determine a secure and clear-cut distinction between the object and the subject of an experiment but rather how to enable zones of indistinction and thus potential spaces for novel relations to be established. With James, a crucial process in this direction would be to engage with reality by taking into account our immediate and concrete experiences with things, that is, our relations with them. For this plane of potentiality, James invented the concept of “pure” experience, that is to say, an experience outside of dualities and thus outside or before knowledge *about* something.

> (...) there is only one primal stuff or material in the world, a stuff of which everything is composed, and if we call this stuff ‘pure’ experience, the knowing can easily be explained as a particular sort of relation towards one another into which portions of pure experience may enter. The relation itself is part of pure experience; one of its ‘terms’ becomes the subject or bearer of the knowledge, the knower, the other becomes the object known.¹⁵

“Pure” in James’ understanding does not designate a state prior to experience like Condillac’s statue or Adam in paradise, pure experience is rather every lived experience “considered from an immanent point of view.”¹⁶ Lived experiences are experiences of relations and smoothly shifting transformations rather than of disjunctive entities. Thus they do not depend on *a priori* categories such as self and consciousness as discriminating functions that generate knowledge *about* the

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¹⁵ William James, Does “Consciousness” Exist?, in: Essays in Radical Empiricism, p. 2f.

respective experiences. Having a pure experience requires nothing but having or undergoing some kind of transformation. And consequently everything that is in relation to something else can have pure experiences in the process of transformation, of changing positions. One of the things that comes about in a process of experience may then be consciousness, which in this process “is both constructed and reveals itself.”

Pure experience is thus firstly an immediate and immanent experience on a plane beyond any bifurcation between the object and the subject or thoughts and things. “The instant field of the present is always experience in its ‘pure’ state, plain, unqualified actuality, a simple that.” And James opposed this simple that with a more definite what, which corresponds to a verified (and purified) knowledge about something as opposed to knowing in transit. Pure experience thus is not a purified (or cleansed) version of experience but rather the opposite, the most impure and chaotic one. James suggested that a pure experience in the strict sense of being solely an experience of that can only be made by “new-born babes, or men in semi-coma from sleep, drugs, illnesses, or blows.” All of these, however, are states in which experience is somehow diffuse, at the same time multiple and on the edge of vanishing completely.

In this sense, pure experience is on the threshold between everything and nothing, between sleep and wakefulness, life and death, selfness and selfless. But pure experience on the other hand goes on all the time as “portions of it enter” into already given relations, and by unsettling them, enable the evolvement of a sphere in which positions have to be negotiated again. Consequently, this process of getting to know and of integrating these portions into our construction of reality also transforms knowledge about reality. A sensitivity to immediate or pure experiences therefore does not only play a role in self-relations and self-knowledge, rather such sensitivity is an instrument that lies at the basis of getting to know or being acquainted with reality. Getting an adequate understanding or knowledge of reality’s multiplicity thus presupposes a readiness to enter this insecure sphere, to be sensitive to “an intermediary reality outside of any matter/form relationship” in which new and unexpected affinities can emerge.

**Interior Experience**

As we have seen, in the broadest definition of an experience, during the process some kind of change is noticed and taken into account. The specificity of pure experience is that it takes place on a plane of immediacy, it is a lived experience “considered from an immanent point of view.” And according to James, pure experience is not exactly “one stuff” in the sense of one general principle that makes up reality, there are rather “as many stuffs as there are ‘natures’ in the things experienced.” Following this assumption, James’ concept of pure experience can be radicalized in the sense that it can be extrapolated to all kinds of non-human realities. David Lapoujade illustrated this by taking the example of reactions between chemical substances. He suggested that there is an “experience of christallization” between chloride and sodium” that takes place in or

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17 Ibid., p. 196.
20 David Lapoujade, From Transcendental Empiricism to Worker Nomadism: William James, p. 193.
between the respective substances, or in other words, the chemicals in this process are active interior experimenters in their transformation:

It is the chloride and the sodium which crystallize; it is they which can therefore rightly be said to be undergoing the experience of crystallization. Insofar as it is pure, experience can be said both of “subjects” and “objects” (in a manner of speaking of course, since at this level we are dealing with neither).  

Drawing from this interior or self-experience requires neither consciousness as an entity – as opposed to the content of experience – nor a dual Ego in the Kantian sense of one which can observe the other. Pure experience is rather the interior perspective on a material process of transformation that takes place, and it corresponds and is complementary to a multiplicity of exterior experiences of the same process. We can thus postulate a first analogy between ourselves and things in exterior reality: the pure experience. It is in this sense that James’ concept of pure experience provides us with tools to go beyond an anthropological perspective and to integrate non-human actors or experimenters into a radically empiricist conception of reality as they play an active role in the process of reality’s creation. And from this perspective, James’ interest in Gustav Theodor Fechner starts to gain a significance beyond pure fascination for Fechner’s “childlike” approach to reality, “The original sin, according to Fechner, of both our popular and our scientific thinking, is our inveterate habit of regarding the spiritual not as the rule but as an exception in the midst of nature.”  

Fechner’s world is full of souls, psyches and consciousness; it is an animated multiple and living organism in which human beings and plants, animals and planets are only different modes of vital, that is, psycho-physical experiences. According to Fechner the physical and the psychical lead a functional relationship of sine qua non, their respective existence depends on the other’s existence and it ends if either of them stops being. Each body–soul entity accordingly consists of an interior and an exterior mode of existence, neither of which could exist without the other. The interior standpoint is identified with the psychical, the exterior with the physical; they are not however substantially different but together constitute a multiplicity of perspectives that reveal different facets of one and the same thing; James described the relation between subjects and objects analogously as a continuous transition.

For Fechner, as for James, an adequate understanding of reality’s fabric presupposed that we take into consideration as many perspectives as possible. Whereas the exterior side can be investigated with common scientific strategies, it is philosophy’s task to find ways of entering the realm of interior experience. The philosopher should try to find a kind of rapport with a thing’s interior experience, its experience “considered from an immanent point of view.” The creation of such a rapport however implies an open-ended process of self-experimentation. And this self-

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22 David Lapoujade, From Transcendental Empiricism to Worker Nomadism: William James, p. 193.  
23 For Kant, introspection did not have scientific value either, but for different reasons. It is true that the dual Ego enabled the theoretical possibility of introspection as a scientific method in the first place, but as the transcendental ego was considered as being beyond time and space, it was unable to observe the empirical one.  
24 William James, A Pluralistic Universe, p. 70.  
25 Reality for Fechner happened constitutively as an accumulation of psycho-physical experiences. Psychophysics as the new discipline would aim at comprising all perspectives at once.
experimentation is an attempt at least partly to become another human being, a plant, or a chemical, to take its standpoint and experience what goes on from its perspective. It is a process of getting to know this other, of producing some kind of acquaintance with it gradually without ever arriving at its actual “central” perspective, which slips away, eluding capture.

Fechner’s conception of an interior or “central” perspective or self-experience that he attributed to every living thing, similar to James’ concept of pure experience, is an abstraction that tries to capture a reality that cannot be known but can only be experienced in its immediacy. Trying to make sense of the interior experiences of others is an enterprise that can never lead to knowledge completed, it is in every case a process of permanent becoming, a process of endless transitions in which the idea of the central perspective serves as a vanishing point of curiosity rather than as a definable spatial position. Analogously, James put forward that we can know about the existence of other minds only by an analogical approach, which is by definition imprecise and process-based:

Why do I postulate your mind? Because I see your body acting in a certain way. Its gestures, facial movements, words and conduct generally, are “expressive,” so I deem it actuated as my own is, by an inner life like mine. This argument from analogy is my reason, whether an instinctive belief runs before it or not.26

Trying to access what constitutively escapes objectification always requires some kind of auxiliary construction. Immediate or pure experiences made from the central perspective in as far as they are not our own can only be approached on the basis of their exterior effects. Fechner’s philosophy thus started with the observation of exterior effects and drew analogies between them and his own experiences. Only then did he try to fabricate a plane of common experiences that would make possible a closeness to the thing that transcends the knowledge gained by exterior approaches.

The analogical hypothesis that other human beings or plants have a soul-life can only verify itself if we allow for the event or process of its performance. This requires an experiential process of getting to know or acquainting ourselves with this alien other that has so far resided in a realm separate from ours. If knowledge is fabricated in a process of relating to something alien and building a plane of common experience with it, than the question of how to know about interior experiences that are outside of ourselves can be reformulated on this basis and specified as: How do we enter into an operational relation with phenomena outside of ourselves, or how do we make ourselves a part of their networks and the other way around?

Soulful Plants

Fechner’s answer to this question was that such an experience occurred by executing a permanent change of perspective, by inventing a multiplicity of viewpoints and trying out the kinds of experiences that would follow from them. His first systematic reflections in this direction can be found in Nanna, oder über das Seelenleben der Pflanzen. Just as a crystal has an experience of its crystallization, Fechner suggested that plants have an interior experience of their plant-being. In

the introduction to *Nanna*, Fechner announced his project in which getting to know such interior experiences can also be understood as an ethical project:

> I want to lead my reader in such a world, and I want myself to precede the small beings and act as their interpreter. So that, just as every people has its representative, they do not have to do without a representative. Only the ones who would like to welcome this proposition have to follow my invitation.27

Reading Fechner giving a place to the interior experiences of things that are mute, small or invisible and thus cannot claim the uniqueness of their spectrum of experience is however a project that exceeds the concrete interest of finding out about and translating the quality of a respective experience into the language of knowledge. Trying to access a plant’s interior experience appears as an exercise in creativity – an enrichment of reality by the invention of new experiential perspectives and their execution in the imagination. As he took the uniqueness of each experience seriously, Fechner did not provide us with a generally applicable method of how to enter an interior experience, just as in James’ pragmatist investigation of reality, each phenomenon rather requires a specific approach, and not only one.28 As Fechner imagined the multiplicity of perspectives as a circle and called the interior perspective the “central”29 one, his approach to getting close to this interior experience was one of circling around it, but circling on a specific path that had to be chosen well, according to the interests of the investigated phenomenon. The plant, for example, would be confused and bored, he claimed,

> if there were all of the sudden a lot of scholarly philosophers around it, each of whom would start to question it in his own way about whether and what it knew and possessed of freedom just because he had declared freedom to be the only soul-making thing. What should the plant answer? It understands nothing of such questions.30

The investigator’s first task is therefore to find a plane on which a real relation can be established, an exchange with a phenomenon, instead of trying to find human characteristics inside of it. For the plants, Fechner consequently started his investigation on the plane of fragrances and smell:


28 James defined the pragmatic method as follows: “No particular results then, so far, but only an attitude of orientation, is what the pragmatic method means. The attitude of looking away from first things, principles, ‘categories,’ supposed necessities; and of looking towards last things, fruits, consequences, facts.” See: William James, “What Pragmatism Means”, Lecture 2, in: *Pragmatism: A New Name for some Old Ways of Thinking*, Longman Green and Co, New York 1907, p. 22.

29 The central perspective in Fechner played a similar role as the pure experience in James. As we have seen that “pure” does not signify a cleansed or purified way of experiencing, “central” for Fechner simply designated the interior and not a perspective that was more crucial or complete than any other, but rather one that serves as a virtual reference point.

30 "wenn sich auf einmal so viel gelehrte Philosophen um sie stellten, und, jeder in seiner Weise, zu examinieren anfingen, ob und was sie von der Freiheit wisse und besitze, die er selber gerade für die alleinseelenmachende erklärt. Was soll sie antworten? Sie versteht nichts von allen Fragen.” Gustav Theodor Fechner, *Nanna* und das Seelenleben der Pflanzen, p. 98.
It would be odd if we – who are so clearly opposed to the life of flowers – enjoyed more of its sweetness than a faint echo of what is being enjoyed of it by the flower-life itself. (...) Should we thus not think that the flower by the interior development and effusion of the sweet fragrance from its immanence perceives it with a greater intimacy than we its exterior flow?\footnote{31 "wenn das, was wir, die dem Blumenleben so äußerlich gegenüberstehen, von seiner Süßigkeit genießen, mehr als ein ferner Abklang dessen ist, was in dem Blumenleben selbst davon genossen wird. Wer hörte jemals ein süßes Lied singen, von welchem der, der es sang, nicht mehr fühlte, als der, der es hörte, zumal wenn es nicht eine verwandte Seele ist? Werden wir nicht also auch meinen, daß die Blume das innerliche Erarbeiten und Ausströmen des süßen Duftes aus ihrem Innern mit größerer Innigkeit empfindet als wir ihr äußerliches Zuströmen?" Gustav Theodor Fechner, Nanna, oder über das Seelenleben der Pflanzen, p. 34.}

This passage alludes to two of Fechner’s major propositions. First, that each thing aims primarily at (self)-enjoyment or (self)-pleasure and accordingly conducts its actions in order to reach a state of satisfaction. And second that the central standpoint, that is the immanent perspective, brings about a specific quality of experience. This quality is an intimate one, in contrast to the distanced sensations perceived from exterior standpoints taken towards a thing.

Each exterior perspective is, however, always and necessarily tied to a multiplicity of interior ones; not only has the plant an experience of its own smell but the smell also causes a specific interior experience in an exterior observer/smeller. There is thus some kind of resonance between the smell-perceiving human beings or animals and the interior plant experience that is mediated through a reality that is exterior to both of them. But this resonance is not identical as each thing experiences a smell differently; the various experiences are complementary to one another and together define the reality of a smell.

As plants are not self-sufficient but employ things and animals in their surroundings in order to reach this state of satisfaction, Fechner, in a next step, took the perspective that this exterior reality was a configuration of various plants and the mediators between them. Observing the operating modes of plant reproduction from the exterior enabled Fechner to understand the exchange as a network of communication. Bees fly back and forth carrying seeds from one flower to another, or the pollen is simply blown by the wind. The plants thereby exchange parts of intimate experiences, primarily enjoyable experiences:

Moreover each chalice pours this fragrance into a thousand other chalices, and each chalice in turn receives it from a thousand other chalices. As an invisible mist the fragrance moves from one flower to the other (...) The flowers themselves go to each other with it although they seem to be fixed to the ground. Each flower-soul may thus receive a sensation of what goes on in every other flower-soul by the particles of other flowers that touch its window.\footnote{32 "Nun gießt ein Kelch noch überdies diesen Duft in tausend andere Kelche, und ein Kelch empfängt ihn wieder von tausend anderen Kelchen. Als unsichtbarer Nebel zieht der Duft von Blume zu Blume (...) Sie selber (die Blumen) gehen damit zueinander, indes sie fest zu stehen scheinen. Jede Blumenseele mag durch das, was von den anderen Blumen an ihr Fenster rührt, eine Empfindung von dem zu empfangen, was in jeder anderen Blumenseele vorgeht.," Gustav Theodor Fechner, Nanna, oder über das Seelenleben der Pflanzen, p. 53.}

And observing such processes and connecting them by analogy with our own experiences, Fechner claimed that we can sense to a certain extent what might go on in flower-souls. He compared the communication by fragrances with our communication by words. Words, he claimed, try to evoke...
an analogous situation (emotional and sensational) in another person. And he concluded by
asking: “But is there only a thinking with and into other souls, not also a sensing?” 33

Fechner’s method was one of sensing what goes on between things and of enabling “portions
of pure experience” to enter into the already known relations. It is an experimental procedure in
which fictitious elements are employed as auxiliary tools to connect realms thus far separated and
thereby to create new planes of experience. Fechner’s philosophical project of approximating the
interior perspectives of others is an imaginative procedure in which thoughts and material things
merge, it is an attempt to experience ‘purely’ from positions outside of oneself in an insecure
interstice. In Fechner’s practice, the relation between himself and his objects is thus redefined, it
appears as an “operator of ‘decentering’.” Fechner took the risk of giving power to his objects, they
became actors that tested him. He invented new measures in Isabelle Stenger’s sense:

If, as the Sophists said, “man is the measure of all things,” it is always the question of inventing
practices thanks to which this statement loses it static, relativist character, and enters into a
dynamic in which neither man nor thing is the master of measure, where it is the invention
of new measures, that is, new relations and new tests, that distribute the respective identities
of man and thing. 34

Conclusion

In the beginning we put forward two major propositions concerning James’ philosophy: first that
it cannot be simply read as an extension of his psychological writings as his pragmatist pluralism
goes beyond an anthropological perspective. Second, that we can reconstruct the underlying
intuition of his radical empiricism by taking into account its inheritance from those like Fechner
rather than exclusively by its references to classical empiricism.

We have tried to show that the concept of experience within a pragmatist framework can be
generalized and attributed to all forms of existence. A Pluralistic Universe is made of a multiplicity
of centers of experience and more particularly of centers of pure or self-experience. Talking about
the experience of a plant, a planet or an animal is then no longer absurd or simply metaphorical.
In radical empiricism, as we have developed it on the basis of James and what he inherited from
Fechner, all modes of existence, including the relations that are interior to them, can be put on one
and the same plane. What is most important from one perspective is only an incomprehensible
anecdote from all other points of view. A plant has no need to know whether or not it possesses
freedom, this category does not interest it at all, the idea of freedom is beyond or outside its
perspective. But in the same sense the plant is involved in relations and actions, it has a perspective
on reality that exceeds human comprehension. Each mode of existence experiences in a certain
way and through this unique mode of experience makes its contribution to the construction of “a
pluralistic universe.”

The primary task of an empiricist approach to reality, according to Fechner and James, is
therefore a strategic multiplication of perspectives. What has to be found are perspectives that
correspond to the interest of a given reality. Instead of trying to find human features in a plant in
order to conclude that it has a soul, their common project was to invent perspectives that enable

33 Ibid.
34 Isabelle Stengers, The Invention of Modern Science, p. 134.
a common plane of experience with the thing – as Fechner did concerning the flowers’ fragrances or their system of communication with other realities like bees, the wind and other flowers.

Together with Fechner and more explicitly, James’ criticism concerning classical theories of knowledge was that they tend to forget the perspectives they should be engaged in and thus forget that they project interests without taking into account what is important from the point of view of the concerned realities. In contrast, the pragmatist’s procedure – an experiential practice rather than a theory – of getting to know reality involves a process in which “the ideas must point or lead towards \textit{that} reality and no other, and then that the pointings and leadings must yield satisfaction as their result.”\textsuperscript{35} This satisfaction is not an abstract one but it is experienced subjectively and concretely as “intermediary verifying bits of experience with which the mind at one end, and the reality at the other, are joined.”\textsuperscript{36}

The truth of an idea is not a stagnant property inherent in it. Truth happens to an idea. It becomes true, is made true by events. Its verity is in fact an event, a process: the process namely of its verifying itself, its veri-fication. Its validity is the process of its valid-ation.\textsuperscript{37}

Within a pragmatic approach, realities are not true in themselves, they simply \textit{are}; something becomes true if experiences made in reality correspond with an idea about it, if one joins the other. James, as Fechner before him, thus mobilized concreteness against rationalist concepts of truth that operate from a distance and by projection and therefore have to oppose what is contained in all experiences: subject and object, the psychic and the physical, consciousness and its content. One possibility for getting to know more about the multiplicity of realities is to invent ideas about the quality or fabric of interior experiences of things outside of ourselves and give them a chance to verify themselves. Even though, or better, exactly because this approach never leads to final results but only to approximations – as we have tried to show with Fechner’s plants – it enables an infinite number of novel experiences to become real.

\textsuperscript{35} William James, Pragmatist Account of Truth, in: The Meaning of Truth, p. 104.
\textsuperscript{36} Ibid.
\textsuperscript{37} William James, The Meaning of Truth, p. 3f.

2 Maja ist die als Blendwerk angesehene äußere Erscheinungswelt, die in der wedischen und brahmanischen Philosophie als verschleierte Schönheit dargestellt wird.
3 Nadeau (1965) S. 15.
kam gehäuft zu Begegnungen zwischen Nähmaschinen und Regenschirmen auf Seziertischen, oder – denn, wiegesagt, die konventionellen Grenzen zwischen artig fursichseienden Subjekten und Objekten waren längst aufgehoben – es trafen sich „TRANSSUBSTANTIIERTE OBJEKTE“ wie „stroherne Uhren (affektiven Ursprungs)“ und „VERHÜLLTE OBJEKTE“ wie das „Handicap“ oder das „Sirenion (Tagesphantasien)“ im La Table zu Ziegenfrischkäseroulade und Schwarzfederhuhn in Madeira. In eben dieser hier aufgerufenen, zwischen den beiden Weltkriegen situierten zeitlichen Zone kam die Bewegung zur Entfaltung, für die „der Platz einer Nase, weit davon entfernt [ist], notwenderweise in einem Gesicht sein zu müssen, [sondern] viel sinnvoller auf der Lehne eines Kanapees zu finden [ist]; und wir finden auch nichts dabei, dass die gleiche Nase auf einer kleinen Rauchwolke balanciert.“

Eine Bewegung, in der es „sich aber trotz der Übereinstimmung nicht darum [handelt], Vögel in Aquarien zu setzen. Der Witz ist, dass sie dort singen, und zwar besser singen“. Eine Bewegung, die „kein Scherz ist, wie manche meinen“, sondern „ein wirkliches Gift. Der Surrealismus ist das gefährlichste Phantasiegift, das bis heute gefunden wurde.“ Dalí porträtiert die Bewegung:

Der Surrealismus ist nicht noch eine künstlerische Richtung mehr. Der Surrealismus stellt eine Revolution des Lebens und der Moral dar. Wenn der Surrealismus die üblichen Verfahren der künstlerischen Aktivität, Malerei, Poesie usw. benutzt, so nur, um sie in den Dienst der Wünsche Leidenschaften und Bilder zu stellen, die verkannt, geheim, verboten und oft grausam durch das Gewissen des Menschen verurteilt sind. Wir Surrealisten benutzen die künstlerischen Verfahren als ein Mittel des Ausdrucks und der Mitteilung der Welt der konkreten Irrationalität; aber wir machen aus diesen Ausdrucksmitteln keinen Selbstzweck, wie das die Ästheten tun.

Und mit einem Impetus, als hätte er Revolver in den Händen, enumeriert er die zentralen Konstituenten und Züge des Surrealismus:


Für einen Vortrag, der eines der Selbstexperimente im Surrealismus vorstellen und untersuchen wird, muss dies als Präludium zunächst genügen; weitere für den Surrealismus charakteristische

11 Eine Anspielung auf Bretons berühmtes Zitat: „Die simpelste Tat des Surrealisten ist, mit Revolvern in den Händen auf die Straße zu gehen und wahllos wie wild in die Passanten zu ballern."
Psycho-automatische Selbstexperimente im Surrealismus und in der Psychoanalyse


2.

„Surrealismus – reiner psychischer Automatismus, durch den man schriftlich oder mündlich oder auf irgendeine andere Art den wirklichen Ablauf des Denkens auszudrücken sucht; Denk-Diktat ohne jede rationale, ästhetische oder moralische Kontrolle“, so die Definition, die Breton im Manifest von dieser ersten, durch passive und rezeptive Geisteshaltungen geprägten, für ihn mit

dem Surrealismus als solchem konvergierenden Bewegung gibt; summarisch lässt sie sich durch Aufzählung folgender Konstituenten skizzieren. So bilden der Intuitionismus Bergsons, die phänomenologische Wesensschau Husserls, Prousts mémoire involontaire16 und F. W. Myers Parapsychologie17 zentrale Impulse, die sich in die Automatismus-Experimente übertragen und diese inspirieren. Zumindest für die frühe, bis Anfang der 30er Jahre reichende Phase lässt sich geltend machen, dass der psychische Automatismus den Orientexpress in die Überwirklichkeit schlechthin darstellt: Der Wellengang der automatischen Schreib- und Redetechniken treibt das Subjekt, das sich von ihm forttragen lässt, direkt und rückhaltlos in eine „Wahrnehmung der Realität [...], die die letzten naturalistischen Reste endgültig vertreibt [und die] [... zu André Bretons Formulierung [passt], die Surrealität sei in der Realität enthalten und umgekehrt.“18 Dalí, der sich mit dieser und anderen Formulierungen aus den frühen Texten noch in die gängige Auffassung, durch den Automatismus allein lasse sich jener unbewusste Bezirk realisieren, in dem „die Surrealität in der Realität enthalten“19 ist, einschließt, unterstreicht weiter die konstitutive Zugangsbedingung, das Ticket für den psycho-automatisch gleitenden Orientexpress (in Parenthesen und im Hinblick auf das folgende sei an Lacsens Gleiten der Signifikanten im Unbewussten erinnert20): den „Augenblick besonderer Unaufmerksamkeit“21, oder, wie Breton postulierte: das unconditional surrender jeder rationalen, sich der Existenz einer so genannnten objektiven, äußeren, kausal regulierten Wirklichkeit versichernden Kontrolle seitens des Bewusstseins.

Szenen- und Diskurswechsel. „Wir legen es dem Kranken auf, sich in einen Zustand von ruhiger Selbstbeobachtung ohne Nachdenken zu versetzen und alles mitzuteilen, was er dabei an inneren Wahrnehmungen machen kann Gefühle, Gedanken, Erinnerungen, in der Reihenfolge, in der sie in ihm auftauchen. Wir warnen ihn dabei ausdrücklich, irgendeinem Motiv nachzugeben, welches eine Auswahl oder Ausschließung unter den Einfällen erzielen möchte, [...] und vertrauen ihm an, dass der Erfolg der Behandlung, vor allem aber die Dauer derselben von der Gewissenhaftigkeit abhängt, mit der er diese technische Grundregel der Analyse befolgt. [...] wogegen man zu erklären hat, dass alles sagen wirklich alles sagen bedeutet.“22 Diese Sätze spricht

22 Freud, GW XI, S. 297f.
Sigmund Freud in seinen im Wintersemester 1916/17 gehaltenen Vorlesungen zur Einführung in die Psychoanalyse.


Zuvor soll jedoch eine kleine Exkursion in die zwischen Hypnagogie, Stardust, Traumkommandatur und dem Katarakt der Assoziationen schillernde Situation erfolgen, soll die Atmosphäre evoziert, das Selbstexperiment der automatischen Schlaf- und Schreibpraxis nahe gebracht werden. Das Selbstexperiment ... immer wieder supponieren, beharren und belegen diese Sätze die experimentelle Verfasstheit des Automatismus, und aber das Subjekt, das hier in dieser Weise insistierte, ist nicht eine um Akkommodation an das übergreifende Thema dieses Bands bemühte Verfasserin. Es sind vielmehr die Surrealisten selbst, die ohne Unterlass pointieren, dass ihr Unternehmen gerade nicht in der Kunst oder Literatur ghettoisiert sei, sondern ausdrücklich von wissenschaftlichen Beweggründen motiviert werde28, und die Wissenschaft verfährt, wie zum Beispiel die Geschichte der Elektrizität29 und nicht zuletzt die der Psychoanalyse30 gezeigt haben,

im allgemeinen und im Surrealismus im besonderen manchmal unumgänglich über den Weg des Selbstexperiments.

3.

Nachdem Breton und kurz darauf Soupault als erste infiziert worden waren – angesichts der Erfahrung, „dass das Tempo des Denkstroms nicht größer ist als das des Redestroms und dass das Denken nicht unbedingt die Zunge oder gar die Feder am Mitkommen hindert [...]“ begannen wir – Philippe Soupault, den ich in diese ersten Folgerungen eingeweiht hatte –, Mengen von Papier zu beschreiben, voller Verachtung für das, was dabei literarisch herauskommen würde31, war die Inkubationszeit nur noch sehr gering. Wie eine Pandemie griff die Sucht des automatischen Niederschreibens auf alle Teilnehmer der surrealistischen Bewegung im engeren und weiteren Umfeld über, explosionsartig und wie ein Flächenbrand ging das Selbstexperiment über den gesammten Surrealismus hinweg – das Fanal jener frenetischen Epoche frenetisch automatisch geschriebener Texte, ein Fanal, das einer Epiphanie des Unglaublichen, einer Offenbarung des bisher Unübertragbaren glich:

Am meisten verblüfft sie, dass sie da mit einem Male eine Kraft in sich entdecken, von der sie bis dahin überhaupt nichts wussten, die sie in einen Zustand schwebender Leichtigkeit versetzt, ihr Denken von allen Fesseln freimacht, bildhafte Vorstellungen von ungeahnter Wunderlichkeit in ihnen aufsteigen lässt und ihren Niederschriften etwas geradezu Übernatürliches verleiht. In dem, was solcherart aus ihnen quillt, offenbar ganz ohne ihr Zutun, erkennen sie dasselbe Unvergleichliche wieder, was auch den Reiz jener wenigen Bücher und Äußerungen ausmacht, die sie noch schätzen. Nun erblicken sie plötzlich eine umfassende Einheit alles Dichterischen, die die frühen Weissagungen aller Völker, aber auch Rimbauds Illuminations und Les Chants de Maldoror von Lautréamont in sich versammelt.32

Weiter memoriert Aragon die Euphorie, die die Experimentatoren erfasste, wenn sie über die Befunde und Resultate ihrer jeweiligen Experimente in Austausch traten und einander die Schneekugeln, Wehmutsfedern und andere Fundstücke präsentierten, die sie von ihren

Expeditionen in die Katakomben der Subjektivität mitgebracht hatten. „Wie Jäger kamen wir damals allabendlich zusammen, jeder berichtete seinen Tageslauf, zählte die Fabeltiere auf, die er ersonnen hatte, die phantastischen Pflanzen und die bildhaften Vorstellungen, die er ‚erlegt‘ hatte …“33

Sehr bald lässt sich die Beobachtung machen, dass das Selbstexperiment nach Beginn in positiver Rückkopplung auf den Experimentierenden wirkt und halluzinative, hypnotische oder psychopathologische Zustände unterschiedlicher Form von Obsessionen bis zu Delirien induziert.


... Wir spürten ihre geistige Stofflichkeit in ihrer handgreiflichen Macht, in ihrer Fähigkeit, sich zu verdinglichen. Wir sahen, wie diese geistige Stofflichkeit aus einer Erscheinungsform in eine andere überging. Und gerade an diesen Gestaltwandlungen, die uns das Vorhandensein dieser Stofflichkeit überhaupt erst enthüllten, erkannten wir auch ihr Wesen. Wir beobachteten z. B., wie sich das Bild von etwas Geschriebenem, das sich zunächst wie etwas gänzlich Zufälliges und Willkürliches darbot, unseren Sinnen aufdrängte, sodann seine Sprachlichkeit und Schrifthaftigkeit ablegte und sich zu rein bildhaften Erscheinungen und Wirklichkeiten wandelte, von denen wir nie geglaubt hätten, dass sie sich hervorrufen ließen, und die wir bis dahin immer für feststehend und nicht nach unserem Belieben manipulierbar gehalten hatten.34

Inwieweit sich hier tatsächlich Insignien einer sich nährenden Überwirklichkeit realisieren oder ob nicht vielmehr psychotechnische und psychopharmakologische Effekte beschrieben werden, sei für spätere und andere Untersuchungen dahingestellt. Ganz sicher jedoch konvergieren die Selbstexperimentatoren gesinnungsmäßig sowohl mit der Grundvoraussetzung der Psychoanalyse, die den Assoziationsfluss der Signifikanten im Unbewussten nicht als kostenloses Vergnügen, sondern vielmehr als Arbeit35, hart, unermüdlich, kräftezehrend, betrachtet, als auch mit dem Takt der sie stroboskopisch skandierenden Medien vom Ruhmkorff des Psycholabors bis


zu den kinematographischen Bilderflotten. 36 So unterwarfen sie sich Kommandostimme Pameelens, so arbeiteten und trainierten sie bis zur Schlaflosigkeit, was zugestandenermaßen eine oxymoronale Beschreibung eines unbewussten Denkzeitalters ist, in dem der Begriff Schlaf völlig andere Valeurs und Konnotationen erhält; in dem es arbeitet, wenn es schläft, und es schlafen muss, um seine assoziative und generative Funktionstüchtigkeit unter Beweis zu stellen. Ein Luna-Park für einen durch den Advent der Überwirklichkeit libidinierten Surrealisten, eine Hölle für einen Defaitisten wie Cioran, der nur noch die Diffusität des Nichts zu erwarten hatte und – bar jeder Aufbruchstimmung und judischen Lust am Selbstexperiment später schreiben sollte: „Drei Uhr morgens. Ich nehme diese Sekunde wahr, dann jene, ich ziehe die Bilanz jeder Minute. Wozu das alles! - Weil ich geboren wurde. Aus durchwachten Nächten besonderer Art erwächst die Infragestellung der Geburt.”37

Aber zurück zu jener korybantischen, überaktiven, hochgradig produktiven Schlafkrankheit, die Ende 1922 unter den Surrealisten ausbrach, ein wahres Fiebern nach jenen Momenten, in denen die asphaltgraue Wirklichkeit versank, Amnesie über alles sich legte, Amnesie und Finsternis ..., denn: die Lampe gelöscht, eine Zeremonie, eine Feierlichkeit, die Trance setzt ein, das Selbstexperiment beginnt, das Unsägliche von Unten schreibt sich auf. Pameelens Peitsche knallt, das Subjekt ist an die zeitgenössischen Medien der Diskretisierung angeschlossen, das Kommando hat sich eingeschrieben, der Automatismus funktioniert – wie zum Beispiel bei Desnos, der ohne Vorbereitungen von einer Sekunde zur anderen in den Schlaf der Assoziationen zu fallen vermochte, nahe an der Selbstrekursivität:

Im Kaffeehaus, mitten im lauten Stimmengewirr, bei der strahlendsten Beleuchtung, trotz der sich drängenden Gäste, braucht Robert Desnos bloß die Augen zu schließen, und schon schwimmt er ab und redet in Trance; und mitten im Durcheinander aus Biergläsern, Tellern, Untersätzen, überspült ihn der ganze Ozean mit ahnungsvollem Tosen, mit Gischt, Dunst und Nebeln, der in zerfetzten Fahnen daherweht.38


Die Protokolle dieser Séancen, teilweise in der Zeitschrift *Littérature* veröffentlicht, dokumentieren den psychischen, oder besser: psychophysischen Zustand, in dem die blind, unansprechbar, somnolent und zugleich manisch agierenden Selbstexperimentatoren sich befinden – wie eine Mischung aus Hellseher, Maschine und Psychotiker reden, schreiben, zeichnen René Crevel, Desnos, Benjamin Péret und andere. René Crevel, Robert Desnos, Benjamin Péret, Philippe Soupault, André Breton, „die wir uns mit keiner Art von Filtrierung abgegeben haben, die wir uns in unseren Werken zu tauben Empfängern so vielen Widerhalls gemacht haben, zu bescheidenen Registriermaschinen....“\(^\text{39}\) – so der letztgenannte im *Ersten Manifest*, womit unmittelbar der bereits angekündigte Anschluss an das Verhältnis von Surrealismus und Psychoanalyse wieder aufgegriffen werden soll.

4.

Es ist an diesem Punkt klar geworden, dass der oben zitierte Absatz aus Freuds *Vorlesungen*, der „einen Zustand von ruhiger Selbstbeobachtung ohne Nachdenken“\(^\text{40}\) zur Grundbedingung zum Eintritt in die psychoanalytische Situation (oder könnte man sogar sagen: Séance) macht, auch als Instruktion für das Selbstexperiment der *écriture automatique* gelesen werden kann. Jener oben beschriebene Zustand, in dem die Flora vom Anderen Schauplatz, virtuos, hysterogen, wunderschön wie schwarzer Samt und zugleich verflucht, sich aufschreibt, dieser „Wirbel von tausend Fasern unseres Geistes, in dem sich uns alles Tun verbietet, das nicht zur poetischen Erkenntnis der Realität führt [...]“, und wo endlich die Worte ‚schön‘ und ‚häslich‘ allen Sinn für uns verloren haben“\(^\text{41}\), ist ganz offensichtlich nicht ohne Entsprechung zu jenem Zustand, der von Freud zum Zwecke der Psychoanalyse eines psychisch erkrankten Subjekts eingeleitet wird (...so wie man eine Narkose einleitet...): „Bei dem Zustand, den man zur Analyse der Träume und pathologischen Ideen benützt, verzichtet man absichtlich und willkürlich auf jene Aktivität und verwendet die ersparte psychische Energie [...] zur aufmerksamen Verfolgung der jetzt auftauchenden ungewollten Gedanken, die ihren Charakter als Vorstellungen [...]beibehalten. Man macht so die ‚ungewollten‘ Vorstellungen zu ‚gewollten‘.“\(^\text{42}\) Die damit angestrebte

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\(^\text{30}\) Insbesondere für die Psychoanalyse hat das selbstexperimentelle V erfahren einen konstitutiven und tragenden Wert. Freuds 1900 erscheinende *Traumdeutung*, im Grunde die Inauguration der psychoanalytischen Technik, basiert auf Analysen von Freuds eigenen Träumen, und die *Psychopathologie des Alltagsleben*, die in erster Linie symptomatische Fehlhandlungen darlegt und entziffert, nimmt zu großen Teilen Bezug auf eigene (‘alltagsexperimentelle’) Erfahrungen.

\(^\text{31}\) Breton (1986) S. 25.

\(^\text{32}\) Aragon (1924).

\(^\text{33}\) Aragon (1924).

\(^\text{34}\) Aragon (1924).

\(^\text{35}\) Vgl. Freud, GW XI, S. 250: „Es bedarf der angestrengten Arbeit von vielen Monaten und selbst Jahren, um zu zeigen, dass die Symptome eines Falles von neurotischer Erkrankung ihren Sinn haben, einer Absicht dienen und aus den Schicksalen der leidenden Person hervorgehen.“


\(^\text{38}\) Aragon (1924).


\(^\text{40}\) Freud, GW XI, S. 297f.

\(^\text{41}\) Dalí (1974) S. 70.

\(^\text{42}\) Freud, GW II/III S. 106f.


In einem Augenblick besonderer Unaufmerksamkeit, wenn man weit entfernt ist von schöpferischen Eingebungen, die eine Störung des wirklich passiven Zustandes, den ich hier meine, bedeuten würden, könnte einem ein Eselskarren mit seinem Segel, vor den das unbewegliche Tier geschirrt ist, das außerdem die gleiche Farbe wie der Karren hat, plötzlich wie die verwirrendste, greifbarste und detaillierteste magische Zusammenstellung erscheinen, wenn wir das Tier, die Räder, das Zaumzeug und das Holz des Karrens als einen einzigen toten Gegenstand ansehen und hingegen das Segel mit seinen Bastschnüren als den lebendigen und hin und her schlagenden Teil empfinden, da es ja das einzige sich vor unseren Augen Bewegende ist.47

46 Vgl. Freud, GW XII, S. 185f. „Aus diesem berechtigten Vergleich der ärztlichen psychoanalytischen Tätigkeit mit einer chemischen Arbeit könnte sich nun eine Anregung zu einer neuen Richtung unserer Therapie ergeben. Wir haben den Kranken analysiert, das heißt seine Seelentätigkeit in ihre elementaren Bestandteile zerlegt, diese Triebelemente einzeln und isoliert in ihm aufgezeigt; was läge nun näher als zu fordern, dass wir ihm auch bei einer neuen und besseren Zusammensetzung derselben behilflich sein müssen? Sie wissen, diese Forderung ist auch wirklich erhoben worden. Wir haben gehört: Nach der Analyse des kranken Seelenlebens muss die Synthese desselben folgen! [...] So vollzieht sich bei dem analytisch Behandelten die Psychosynthese ohne unser Eingreifen, automatisch und unausweichlich. Durch die Zersetzung der Symptome und die Aufhebung der Widerstände haben wir die Bedingungen für sie geschaffen. Es ist nicht wahr, dass etwas in dem Kranken in seine Bestandteile zerlegt ist, was nun ruhig darauf wartet, bis wir es irgendwie zusammensetzen.“
Es stellt sich nun, nachdem dieses konkrete Fallbeispiel dessen, was im Zuge eines surrealistisch-automatischen Selbstexperiments das Licht der Welt erblicken kann, präsentiert worden ist, die lakonische Frage nach dem epistemologischen Gewinn eines solchen Unternehmens. Vielleicht bräuchte es eines weiteren Beispiels, um die Frage weniger lakonisch zu stellen.

Das Experiment, das als „Der köstliche Leichnam“ bekannt ist, war von Breton angeregt worden. Mehrere Personen mussten nacheinander Wörter aufschreiben, die nach einem vorgegebenen Muster (Der köstliche/Leichnam/trinkt/den neuen/Wein) einen Satz bildeten, wobei keiner wusste, an welches Wort sein Nachbar gedacht hatte. Oder es mussten mehrere Personen nacheinander Linien ziehen, die zusammen ein Portrait oder eine Szenerie ergaben, wobei der zweite die Zeichnung des ersten und der dritte die Zeichnungen des ersten und des zweiten nicht sehen durfte usw. Im Bereich der Metaphorik führte „Der köstliche Leichnam“ zu ganz überraschenden poetischen Assoziationen, die auf keinem anderen bekannten Weg hervorzubringen waren, Assoziationen, die sich der Analyse noch entziehen und als Einfälle die seltensten Dokumente im Zusammenhang mit Geisteskrankheiten übertreffen. 48

An der lakonischen Antwort Freuds auf den Sinn und Zweck der von den Surrealisten mit aller Ernsthaftigkeit und aller Passion praktizierten Selbstexperimente ändert auch dieser Vorfall nichts. Am 26. Dezember 1932 schreibt er an Breton: „Und nun ein Geständnis, das Sie tolerant aufnehmen wollen! Ich erhalte soviel Zeugnisse dafür, dass Sie und Ihre Freunde meine Forschungen schätzen, aber ich selbst bin nicht im Stande, mir klarzumachen, was Ihr Surréalisme ist und will. [...] In herzlicher Ergebenheit, Ihr Freud.“ 49 Freud hat die Experimente der Surrealisten und deren Konzeption des Unbewussten, mochte diese sich noch so sehr und mit so viel Devotion auf seine eigenen Theorien berufen, nicht für seriös erachtet, und er verharrte, unbekehrbar und immun, bis ans Ende in seiner distanzierten Haltung.

Aber diese Tatsache, an der ein Ideengeschichtler ein höheres Interesse nehmen wird, rührt nicht an der Akkordanz der von der Freudschen Psychoanalyse einerseits und vom Surrealismus andererseits zum Einsatz gebrachten Techniken – die von Freud vom Patienten wie vom Analytiker abverlangte Grundhaltung, dass er sich bei „gleichschwebender Aufmerksamkeit seiner eigenen unbewussten Geistestätigkeit überlasse, Nachdenken und Bildung bewusster Erwartungen möglichst vermeide.“ 50 – oder mit Lacan: „Das Subjekt ist eigentlicherweise der, den wir anhalten, nicht, wie wir ihm sagen, um ihn zu bestricken, alles zu sagen – man kann nicht alles sagen – sondern Blödheiten zu sagen, darauf kommt es an.“ 51 –, konstituiert die grundlegende Voraussetzung für die soeben abgelichteten Séancen des selbstexperimentellen Automatismus, die Voraussetzung dafür, dass „die dauernde Osmose zwischen Realität und Surrealität“ 52 sich zu verwirklichen beginnt, dass das, „was man nicht einmal im Traum zu zerbrechen wagte, [...] mit absoluter Meisterschaft der Verstümmelung zerstört [wird], und das Weichste hart wird wie die Minerale“. 53 Die Adaption der psychoanalytischen Regel zur selbstexperimentellen Generierung einer „Aufeinanderfolge surrealistischer Bilder, onirischer Szenerie usw.“ 54 wird an späterer Stelle,
wenn es um die diese Methode wiederum hervorbringenden Medien – man könnte also beinahe sagen: um das gemeinsame mediale Dispositiv von Surrealismus und Psychoanalyse – gehen wird, noch einmal ins Themenlicht gerückt werden; zunächst soll jedoch die Frage nach dem Sinn und Zweck des automatischen Schreibens noch einmal aufgegriffen werden.


Dem surrealistischen Experiment spricht Freud – im Gegensatz zu Lacan59 – die Eignung ab, einen unbewussten Sinn wiederzuerwecken oder sich überhaupt nur auf die Wissensbohrung

54 Dalí (1974) S. 86.
55 Freud, GW XI, S. 265.
56 Freud, GW XI, S. 286.
57 Freud, GW XI, S. 56.
58 Lacan beschreibt eine Psychoanalyse, also eine im Sprechen realisierende Rekonstruktion der Geschichte des Subjekts als „eine Reintegration bis zu den äussersten Wahrnehmungsgrenzen, und das heisst bis in eine Dimension, die weit die individuellen Grenzen übersteigt“. In diesen Worten kündigt sich die Diskonnexion jedes konstitutiv reduzierten Erlebniswinkel des Bewusstsein und des unbewussten, als Performance begriffenen Sprechens an. Und so prononciert Lacan auch wenige Sätze später: „Das Faktum, dass das Subjekt die seine Existenz prägenden Ereignisse wieder durchlebt, sie sich anschaulich wieder in Erinnerung ruft, ist an sich nicht so wichtig. Was zählt ist, was es rekonstruiert. [...] der Akzent liegt durchweg stärker auf der Seite der Rekonstruktion als auf der Wiederbelebung, wie man sie als affektive zu bezeichnen gewöhnt ist“. Zudem kann es nur im Sinne des Patienten sein, wenn der Analytiker nicht in bigotter Absicht darauf besteht, all die Gründen, Frakturen und all die durch Symptome oft nur wenig effizient verleimten Diskontinuitäten ans Licht zu zerren; Schonung ist allerdings nicht das Motiv, das Freud und Lacan davon Abstand nehmen lässt, sondern vielmehr Einsicht in die Unmöglichkeit eines solchen Unterfangens. Wissend um diese Unmöglichkeit, das hinter der Deckerrinnerung liegende Dunkel zu erhelten, geht es der analytischen Tätigkeit vielmehr darum, unter Unterlaufung des Bewusstseins auf das diachronisch-synchronische Funktionsprinzip des Unbewussten zuzugreifen und dieses strukturell zu modifizieren – „ich will sagen, dass das, worauf es letzten Endes ankommt, weniger ist, sich der Geschichte zu erinnern als sie noch einmal zu schreiben“. Vgl. Lacan, Seminar I, S. 20-22.
Psycho-automatische Selbstexperimente im Surrealismus und in der Psychoanalyse


Irgendwann einmal werde ich des längeren (vielleicht sogar in einem selbständigen Buch) auf eine Person namens Eugenio Sánchez eingehen müssen, mit dem mich eine große Freundschaft in den neun Monaten verband, in denen wir beide den Militärdienst absolvierten. (...) Dieser Mann war Karrenfahrer von Beruf und bar jeglicher Kultur; alles was er konnte war schreiben und lesen; mit ihm habe ich mich jedoch besser als mit sonst jemandem über Dinge verständigen können, die zu den am schwierigsten durch einen Dialog oder durch die eigene bewusste Kontrolle erreichbaren gehören. Nachdem er durch mich einige surrealistische Texte kennengelernt hatte, was praktisch das Einzige war, was er von Literatur kannte (er hatte niemals einen Roman gelesen), füllte er in automatischer Weise Seiten und Seiten voll unvergleichlicher Suggestivität. (...) Eines Tages zum Beispiel rief er nach einem sehr langen Schweigen aus: Es gibt einen fliegenden Phallus und sogleich zeichnete er ihn auf die Marmorplatte eines Café-Tisches. Man braucht nicht meine Überraschung zu betonen, da er doch nichts von der Existenz des Geflügelten Phallus der alten Völker wissen konnte, über die ich später die Ausführungen von Freud las.64

60 Dalí (1974) S. 73.
Dalís Ahnung, „wer weiß, ob sich hinter den drei grossen Wahnbildern, der Scheiße, dem Blut und der Verwesung, nicht gerade das ersehnte Land der Schätze“ verbirgt, beweist hinsichtlich ontologischer Fragestellungen einen ähnlichen mutigen und experimentell innovativen Charakter wie der psychoanalytische Hinweis, dass „der Anspruch, ein Häufchen Scheiße zu sein, [...] unsere Blickrichtung etwas verändern [sollte], wenn das Subjekt sich darin entdeckt“ beweist. Und schließlich lässt sich sogar die für die Psychoanalyse wesentliche „Kunst der Deutung“ im Programm des surrealistischen Selbstexperiments wiederfinden: „Um meine Bilder auf die gängige Sprache zurückzuführen, um sie zu erklären, müssen sie besonderen Analysen unterworfen werden, [...] Jede Erklärung taucht also a posteriori auf, wenn das Bild als Phänomen bereits vorhanden ist.“

Freud wird in seinem Urteil, dass die Sitzungen der écriture automatique im besonderen und der Surrealismus im allgemeinen nur einen ausgesprochenen Konfusionismus heraufbeschwören, standhaft und von steinerner Skepsis bleiben, die surrealistischen Prätentionen auf Wissenschaftlichkeit nicht hören. Die Gründe liegen, nicht ideengeschichtlich, sondern psychoanalytisch betrachtet, zum Teil sicher in einer ungünstigen Konstellation. Die Weise und der Duktus, in denen die Surrealisten das Unbewusste als das Wunderbare, eine dunkle, junoisch und zugleich verfemte Vegetation, Wahrheit in Form von Oublietten, Kastalischer Quelle mit depressivem Charme invozierten, konnten Freud, der diese seine Entdeckung von jedem Pathos und jeder Mystifizierung fernhalten wollte, nur abschrecken. Ausdrücklich warnt er vor einem „überrassende[n] Respekt vor dem ‚geheimnisvollen Unbewussten‘“ und fährt fort: „Man vergisst zu leicht daran, dass ein Traum zumeist nur ein Gedanke ist wie ein anderer, ermöglicht durch den Nachlass der Zensur und die unbewusste Verstärkung und entstellt durch die Einwirkung der Zensur und die unbewusste Bearbeitung.“


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69 Freud, GW XIII, S. 304.
„Die Beschäftigung mit dem Traum ist aber nicht bloß unpraktisch und überflüssig, sondern direkt schimpflich; sie bringt das Odium der Unwissenschaftlichkeit mit sich, weckt den Verdacht einer persönlichen Hinneigung zur Mystizismus. Dass ein Mediziner sich mit dem Traume abgeben sollte, wo es selbst in der Neuropathologie und Psychiatrie soviel Ernsthafteres gibt: Tumoren bis zu Apfelgröße, die das Organ des Seelenlebens komprimirieren, Blutergüsse, chronische Entzündungen, bei denen man die Veränderungen der Gewebe unter dem Mikroskop demonstrieren kann! Nein, der Traum ist ein allzu geringfügiges und der Erforschung unwürdiges Objekt.71

Aber der existentielle und wissenschaftliche Stil von Freud und den Surrealisten waren zu disparat, als dass es zu einer produktiven Kommunikation hat kommen können, was Lacan sensibel punktiert, Freud als einen reservierten Herrn erinnernd, „der seinen Besucher André Breton damit in Erstaunen versetzte, dass er durchaus nicht als ein von Mänaden Gejagter sich aufspielte“. Ein wahrer Herr, der Leidenschaft nicht mit Pathos verwechselte – „Wer verstand es besser als er, indem er kein Hehl aus seinen Träumen machte, die Schnur zu drehen, auf der der Ring gleitet, der uns mit dem Sein verbindet, und ihn so in den geschlossenen Händen, die sich ihn im Wieselspiel menschlicher Leidenschaft weiterreichen, kurz aufleuchten zu lassen?“72 Und während die Surrealisten noch mit dramatischen Soundtracks und dem Anspruch auf meerüberwandernde Reichweite verkündeten, dass „alles [...] nahe [ist], die schlimmsten materiellen Bedingungen [...] großartig sind [und] die Wälder weiß oder schwarz, man muss niemals schlafen gehen“73, und dass es nur „darum [ging], zu den Quellen der dichterischen Imagination hinabzusteigen und vor allem dort zu bleiben“74, war Freud bereits, still, zurückhaltend, voller Demut und nicht ohne Fatalismus zur condition humaine vorgedrungen, in „jene letzte Spaltung [...], durch die das Subjekt dem Logos sich artikuliert und über die Freud, als er über sie zu schreiben begann, auf dem letzten Gipfel eines Werkes von den Dimensionen des Seins uns die Lösung der ‚unendlichen‘ Analyse gab, als sein Tod das Wort Nichts darunter setzte.“75

5.

Qualvoll war Freuds Tod an Kiefer- und Gesichtskrebs, aber es war kein Selbstmord. Ließe sich der Selbstmord als ein finales Selbstexperiment auffassen? – diese Frage wird, so wie die Fragen nach den unberührbar bodenlosen Abgründen des Seins, die beide, Freud und die Surrealisten, wenn auch in unterschiedlichen Diskursen und mit unterschiedlichen Klangfarben, bewegten, in Suspension bleiben müssen. Zumal: „Was hinter dem ist, was benannt wird, ist unbenennbar. Und eben weil’s unbenennbar ist, mit allen Resonanzen, die Sie diesem Namen geben können, ist es verwandt mit dem Unbenennbaren par excellence, das heißt mit dem Tod.“76 Wenn Freud auch solch überschwenglichen Deklamationen wie „Sagen wir es geradeheraus: das Wunderbare ist immer schön, gleich, welches Wunderbare schön ist, es ist sogar nur das Wunderbare schön“77,
nur, einer Neigung zu existenzieller Dezeleration und felice notte-Grundbefindlichkeit entsprechend, mit Argwohn begegnen konnte, so hat er die surrealistentischen Selbstexperimente doch ernst genommen. Sehr ernst genommen hat er sicherlich René Crevels letztes Selbstexperiment.

Auf eine 1925 in der Zeitschrift *Révolution surréaliste* unternommene Umfrage über den Selbstmord, dessen Sinn und Zweck sowie dessen Problemlösungspotentiale laufen die heterogensten Antworten von den unterschiedlichsten Künstlern und Literaten, Wissenschaftlern und Spiritisten ein (z.B. von Maurice de Fleury, Francis Dammes, Clément Vautel, Fernand Gregh, Pierre Reverdy, u.a.).

Die Antwort von René Crevel, so wahrhaftig wie subkutan, lautet:


Mit moiréhafter Vorsehung schreibt es weiter in dem Buch *Détours*:


In der nebligen Dämmerung eines Morgens im Jahre 1935 wurde René Crevels Leiche neben seinem Herd, aus dem noch immer unaufhörlich Gas strömte, gefunden. Nicht ohne Grund reagierte Freud empfindlich auf die oben genannten verbalen Infarkte und Paroxysmen der Surrealisten, wie z.B.:

> „Der Surrealismus wird Sie in den Tod, der eine Geheimgesellschaft ist, einführen.“

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77 Breton (1986) S. 18.
79 Crevel, zit. in: Nadeau (1965) S. 78.
80 *Détours*... "Umwege... hier assoziert sich folgende Passage aus Lacans Seminar zu Freuds Todestrieb:

81 Breton (1986) S. 32.


Inwiefern, sehr spät wird diese Frage gestellt, lässt sich der hier gegebene Einblick in Freuds Erfahrungshorizonte als Mediziner und Psychiater noch im Kontext des surrealistischen Selbstexperiments verorten? Zunächst schließen sich nun die Gründe dafür auf, warum Freud „seinen Besucher André Breton damit in Erstaunen versetzte, dass er durchaus nicht als ein von Männern Gejagter sich aufspielte“, warum ihn die Importation seiner Techniken in den Surrealismus und psycho-automatischen Experimente so völlig unbeeindruckt ließ. Entscheidender aber noch ist der Verlauf der Trasse, die am Ende dieses Vortrags zu dem – bereits angekündigten – gemeinsamen medialen Apriori von Freuds Psychoanalyse und dem surrealistischen Automatismus führen wird. Ohne sie erst umwegig zu antizipieren, soll sie sofort weiter verfolgt werden, und also, was sah Freud noch? Er sah, was auch seine Lehrer, Kollegen und

83 Vgl. Freud, GW I, S. 262f: „Man befindet sich dann wohl in derselben Stellung gegen die Neurose, welche der Arzt gegen eine akute Infektionskrankheit einnimmt. Die ätiologischen Momente haben zu einer verschossenen, jetzt der Beeinflussung entzogenen Zeit ihre Wirkung in genügendem Ausmaß geübt, nun werden dieselben nach Überwindung des Inkubationsintervalls manifest; die Affektion lässt sich nicht abbrechen; man muss ihren Ablauf abwarten und unterdessen die günstigsten Bedingungen für den Kranken herstellen.“
Zeitgenossen, was auch Helmholtz, Wundt, Flechsig, Charcot und Du-Bois Reymond gesehen hatten, nämlich Trauma, Tremolo, Phobie, Paranoia, Diskontinuität.


Von 1872 bis 1883 legt Freud ein Medizinstudium an der Wiener Universität ab, spezialisiert sich in den Fachbereichen Histologie und Neurophysiologie, der Lehre von den organischen Geweben und dem Nervensystem, wird unter anderem von dem als Begründer des Materialismus in der Psychologie in die Geschichte eingegangen Physiologen Ernst Brücke ausgebildet und erbringt in dieser Zeit einige wichtige Pionierarbeiten über Nervenzellen. Auf Brückes Rat hin, der eine Maschine demontiert. Da wird man ruhig prinzipielle Erklärungen abgeben können, diese Einstellung ist radikal. Davon ist Freud ausgegangen, und das ist’s, was sein Ideal war – pathologische Anatomie treiben, anatomische Physiologie, entdecken, wozu dieses komplizierte Apparätchen dient, das da im Nervensystem verkörpert ist.“

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86 Freud selbst erinnert sich in seiner Selbstdarstellung positiv an diese Zeit, vgl. Freud, GW XIV, S. 35: „Im physiologischen Laboratorium von Ernst Brücke fand ich endlich Ruhe und volle Befriedigung, auch die Personen, die ich respektieren und zu Vorbildern nehmen konnte. Brücke stellte mir eine Aufgabe aus der Histologie des Nervensystems, die ich zu seiner Zufriedenheit lösen und selbständig weiterführen konnte. Ich arbeitete in diesem Institut von 1876-1882 mit kurzen Unterbrechungen und galt allgemein als designiert für die nächste sich dort ergebende Assistentenstelle.“
Histologie, Neurophysiologie, Innere Medizin, Pathologie, Gehirnanatomie – Freud ist völlig in das medizinische Dispositiv um 1900 eingebunden, mit außergewöhnlicher Begabung, Klugheit und Studiertheit und mit zumindest vordergründiger Absorption und Leidenschaft bewegt er sich geschmeidig im Charme der Diskurse, in der aufgehenden Sternenkonstellation der experimentalphysiologischen Wissenschaften. Doch die Passion erweist sich in der Tat als sehr vordergründig, vergänglich und ambulant, denn sehr bald resigniert er vor der Einsicht, dass der Arbeitsalltag in einer Internistenpraxis für ihn als lebenslanger Beruf nicht vorstellbar ist.


Diese Zeilen als Nachhall im Ohr, wundert es nicht, dass die ersten Verstörungen hinsichtlich des durchgängig materialistisch sedimentierten medizinischen Wissens bereits die *Studien über Hysterie* von 1895 durchbeben. Das Buch enthält, wenn Freud beispielsweise über eine Krankheit durch Vorstellung ventilieren, erstmalig antimaterialistische Denkansätze; die Spekulation, dass psychische Läsionen physische Störungen induzieren und nicht umgekehrt, verstößt unzweideutig gegen die Grundsätze Charcots. Das aber heißt nicht, dass Freud den materialistischen Ansatz ein für allemal verwirft, sondern markiert vielmehr den Eintritt in jene nervöse Frage, die Aporie ohne Ausweg, die ihn bis zu seinem Tode präokkupieren wird. Er ist und bleibt hin und her gerissen: Einerseits präfiguriert er eine strukturalistische bzw. zeichentheoretisch konzipierte Psychoanalyse, andererseits bleibt er dem scientifischen Blickwinkel einer rein materialistischen Psychologie verhaftet, welche alle psychopathologischen Phänomene neurophysiologisch zu explizieren und organisch zu lokalisieren bestrebt ist. Genau das führt Freud bei der Konfrontation mit neurotischen Symptomen erneut in eine Krise, die er diesmal durch Supposition des Unbewussten partiell und zeitweise abzufedern vermag. Diese Krise kann zeichentheoretisch reformuliert werden. Operieren Symptome als Zeichen im Sinne einer prästrukturalistischen oder ontologisierenden Zeichentheorie, d.h. repräsentieren sie das

90 Freud, GW XIV, S. 34.
Sein? – dann müssten ihre Referenten oder Signifikate einer materialistischen oder eben ontologisierenden Semiologie entsprechen und lokalisierbare psychische Läsionen darstellen, dann würden sie genau jene dysfunktionalen organischen Prozesse indizieren, die Freud ja aber nun einmal vermisst.

Diese Frage, eine Angst und Unbehagen erzeugende Frage, entzündet sie sich doch wie ein plötzlicher Krater auf bisher ebenem, gesichertem Terrain, behelligt Freud wie ein nie verschwindender Doppelgänger und schreibt sich in seinen Formkreis ein, wenn er sich beispielsweise zu schreiben veranlasst sieht:

Diese Frage kann abstrus erscheinen, muss aber aufgeworfen werden, wenn wir uns von der psychischen Topik, der psychischen Tiefendimension, eine bestimmtere Idee bilden wollen. Sie ist schwierig, weil sie über das rein Psychologische hinausgeht und die Beziehungen des seelischen Apparates zur Anatomie streift. Wir wissen, dass solche Beziehungen im Gröbstem existieren. Es ist ein unerschütterliches Resultat der Forschung, dass die seelische Tätigkeit an die Funktion des Gehirns gebunden ist wie an kein anderes Organ. [...] Aber alle Versuche, von da aus eine Lokalisation der seelischen Vorgänge zu erraten, alle Bemühungen, die Vorstellungen in Nervenzellen aufgespeichert zu denken und die Erregungen auf Nervenfasern wandern zu lassen, sind gründlich gescheitert. Dasselbe Schicksal würde einer Lehre bevorstehen, die etwa den anatomischen Ort des Systems Bw, der bewussten Seelentätigkeit, in der Hirnrinde erkennen und die unbewussten Vorgänge in die subkortikalen Hirnpartien versetzen wollte. Es klafft hier eine Lücke, deren Ausfüllung derzeit nicht möglich ist, auch nicht zu den Aufgaben der Psychologie gehört.91

Die Frage reflektiert sich in seinem Diskurs, wenn psychische und physische Vokabeln interferieren und sich unauflöslich verschlingen – „Das Namenvergessen scheint aber psychophysiologisch besonders erleichtert zu sein“92 oder „Die Provokation des [hysterischen, Anm. d. Verf.] Anfalles erfolgt entweder durch die Reizung einer hysterogenen Zone oder durch ein neues Erlebnis, welches durch Ähnlichkeit an das pathogene Erlebnis anklingt. Wir hoffen, zeigen zu können, dass zwischen beiden anscheinend so verschiedenen Bedingungen ein wesentlicher Unterschied nicht besteht, dass in beiden Fällen an eine hyperästhetische Erinnerung gerührt wird.“93 – und er somatische Auslöser des Träumes und die symbolische Traumarbeit in unmittelbarem Anschluss verhandelt, ohne eine klare Trennlinie zwischen beiden zu ziehen: „Es ist offenbar gleichgültig, wodurch der Schlaf gestört und die Seele zum Träumen angeregt werden soll. Wenn es nicht jedesmal ein von außen kommender Sinnesreiz sein kann, so mag dafür ein von den inneren Organen ausgehender, sogenannter Leibreiz eintreten. [...] Der Traum bringt den Reiz nicht einfach wieder, sondern er verarbeitet ihn, er spielt auf ihn an, reiht ihn in einen Zusammenhang ersetzt ihn durch etwas anderes. Das ist eine Seite der Traumarbeit, die uns interessieren muss, weil sie vielleicht näher an das Wesen des Traumes heranführt.“94 Von vesuvischer Aktivierungsenergie ist in diesem Zusammenhang das Änigma der Partialtriebe, das direkt ins bodenlose Zenit des Kraters führt; zu komplex um hier dargelegt zu werden, soll doch

91 Freud, GW I, S. 273,  
92 Freud, GW XI, S. 71.  
93 Freud, GW I, S. 96.  
– nicht zuletzt, um einen Vorblick auf das Ziel, das diesen Exkurs motiviert, zu geben, und das
natürlich das Verhältnis zu den Surrealisten betrifft – die Stelle bei Freud angeführt werden, in der
er unverwandt und ganz ohne prätenziöse Verschlüsselungen den Titel eines Buches von Breton
übernimmt. „Sie [die Partialtriebe, Anm. d. Verf.] verhalten sich zueinander wie ein Netz von
kommunizierenden, mit Flüssigkeit gefüllten Kanälen.“95 Und jetzt schnell und kommentarlos
weiter in diesem Text, wo „es“ doch in jenem anderen, sich in Freud schreibenden und bedrohlich
iterativ fragenden Text ad infinitum weiterginge, hätte Thanatos Freud nicht, wie jedes Subjekt –
denn was anderes konstituiert ein Subjekt letzten Endes als dieses Ereignis – schließlich abgelöst.

Die Frage, die Angst und Unbehagen erzeugende Frage, die kafkaeske Aporie wird nicht gelöst,
Freud konstatierte es ganz ruhig und gefasst, spielte sich nicht wie ein von Mänaden gejagter auf;
er war ein bis zur Manie leidenschaftlicher Wissenschaftler, dabei jedoch mutig und entschlossen,
keinem Analgetikum von Illusion zu verfallen, auch angesichts des Kraters, des Pandämoniums
blieb er detachiert. „Wir kommen mit all diesen Spekulationen zu nichts; da wir nicht warten
können, bis uns die Entscheidungen der Trieblehre von einer anderen Wissenschaft geschenkt
werden, ist es weit zweckmäßiger, zu versuchen, welches Licht durch eine Synthese der
psychologischen Phänomene auf jene biologischen Grundrätsel geworfen werden kann.“96

Angesichts des Kraters, des phänomenologischen Phänomens im Sinne Heideggers97, des sich
eeiner empirischen Sichtbarkeit oder zumindest physiologischen Deduktion unwiderruflich
entziehenden Symptoms erklärt Freud, „[daß ich] bereit bin, mit meinem Glauben über die
Beweiskraft meiner bisherigen Erfahrungen hinauszugehen.“98 Mag hierin auch eine
Übereinstimmung in Grundhaltung und Überzeugung mit den zur experimentellen
Kolonisierung „der (von trockenen Regenschirmen starrenden) Dunkelheit“99 und zum Einzug
in Bretons aristokratisches Gruftie-Schloss100 bereiten Surrealisten erkennbar sein, so divergieren
die Ausführungen Freuds, der Hirnabszesse, Aborte, Rattenbissfieber, Gefäßschäden, regulierliche
Blutungen und Blutungen post partum, Letalfaktoren, Asthmaanfälle und letzte Krämpfe gesehen
hatte, doch völlig von den chiliastischen Visionen und jambischen Aufbruchsstimmungen, die
sich kundgeben in Verkündigungen wie: „Einzig das Wort Freiheit vermag mich noch zu
begeistern. Ich halte es für geeignet, die alte Flamme, den Fanatismus des Menschen für alle Zeiten
zu erhalten. [...] Unter so viel ererbter Ungnade bleibt uns, wie man zugeben muss, die größte
Freiheit, die des Geistes, doch gewährt. Es liegt an uns, sie nicht leichtfertig zu vertun.“101 Oder:
„Der Mensch fügt und verfügt. Es hängt nur von ihm ab, ob er sich ganz gehören, das heißt, die
den Tag furchterregende Zahl seiner Begierden im anarchischen Zustand halten will. Die Poesie
lehrt es ihm. Sie trägt in sich den vollkommenen Ausgleich für das Elend, das wir ertragen. [...] Die

95 Freud, GW XI, S. 358.
96 Freud, GW X, S. 144. Vgl. auch GW I, S. 387: „Um die Vorgänge der Verdrängung, der Wiederkehr des
Verdrängten und der Bildung der pathologischen Kompromissvorstellungen anschaulich und
wahrscheinlich zutreffend zu beschreiben, müsste man sich zu ganz bestimmten Annahmen über das
Substrat des psychischen Geschehens und des Bewusstseins entschließen. So lange man dies vermeiden
will, muss man sich mit folgenden, eher bändig verstandenen Bemerkungen befreien“.
97 Heideggers „phänomenologisches Phänomen“ zeichnet sich dadurch aus, dass es sich zunächst nicht an
sich selbst zeigt: es ist ekliptiert, verdunkelt, verborgen. Es ist „solches, was sich zunächst und zumeist
gerade nicht zeigt, was gegenüber dem, was sich zunächst und zumeist zeigt, verborgen ist, aber zugleich
etwas ist, was wesenhaft zu dem, was sich zunächst und zumeist zeigt, gehört, so zwar, dass es seinen Sinn
und Grund ausmacht.“ (Heidegger (1953), S. 35.)
98 Freud, GW I, S. 435.
Zeit komme, da sie das Ende des Geldes dekretiert und allein das Brot des Himmels für die Erde bricht!"102

Freud verwahrt sich in vornehmer Manier vor jedem Messianismus; selbst bereit, sich bedingungslos und ohne Revanchefurcht, sei es seitens der säkularen materialistischen Psychiatrie, sei es seitens unheilsstiftender Manen, den „bisherigen Erfahrungen“ zu stellen, will er jedoch niemanden zu diesem Experiment bekehren. Ihm steht klar vor Augen, „[dass ich] den Anspruch meines Verfahrens auf Glaubwürdigkeit enorm herabsetze. Unter der Voraussetzung, dass der Traum ein psychisches Phänomen ist, unter der weiteren Voraussetzung, dass es seelische Dinge im Menschen gibt, die er weiß, ohne zu wissen, dass er sie weiß, usw. Dann braucht man nur die innere Unwahrscheinlichkeit jeder dieser beiden Voraussetzungen ins Auge zu fassen, um beruhigt sein Interesse von den Schlüssen aus ihnen abzuwenden. [...] wem das Ganze zu mühselig und zu unsicher ist, oder wer an höhere Sicherheiten und elegantere Ableitungen gewöhnt ist, der braucht nicht weiter mitzugehen.«103

... der braucht nicht weiter mitzugehen auf dem Weg, der Frage, die nicht in vormittagshelle Klarheit und aufgeklärte Sachlichkeit führt, sondern in die „dunklen Gebiete des Seelenlebens“104; ... der braucht nicht weiter mitzugehen auf dem Weg der „Annahme [...], dass es Tendenzen beim Menschen gibt, welche wirksam werden können, ohne dass er von ihnen weiß“105. Und mögen die kontemporären Psychophysiker tagsüber ihre Versuchsobjekte in den Laboratorien tetanisieren (ein Selbstexperiment ist das nicht) und abends mit selbstsicherem, herrndiskursivem Organ ihre Erfahrungen im La Table über einem Ragout von Gänseherzen in Barolosauce austauschen, Freud bleibt abends am Schreibtisch, er geht nicht ins La Table, um die Aporie, den Krater zu verdrängen, er setzt sich im Gegenteil jenem trauergeweihten, fluchterfahrenen Dunkel der Seele aus, dem Unbewussten, unvordenklich, nächtlich, todesnah, unheimlich ... „der Ochse und die Kuh, mehr als andere Tiere, tragen am Hinterkopf, dort wo der Tod sitzt, eine menschliche Maske, die uns anschaut“106. Das Unbewusste, geisterhafte Symptome, Signifikanten


102 Breton (1986).
103 Freud, GW XI, S. 99.
104 Freud, GW XI, S. 61.
105 Freud, GW XI, S. 70.
ohne logozentrische Signifikate oder materialistische Referenten, „außerhalb der vorstellbaren Grenzen bleibend und mit der Unfassbarkeit des Windes, der Unergründlichkeit des Diamantenschachtes die Gebäude des Geistes und die Logik des Fleisches beherrschend“\textsuperscript{107}. Bei aller bereits diskutierten Dissonanz der Stile punktieren diese Zeilen Dalís die vom Unbewussten emanierten Schwingungen doch sehr genau und beweisen, dass die Surrealisten und Freud, so sehr er dies für sich persönlich refüsierte wollte, an ein und demselben Dispositiv, präziser: an der Peripherie, den Übergangszonen dieses Dispositivs teilhaben. Und so sollen, bevor dieser Vortrag am Ende nach Amerika auswandern wird, noch einmal zwei Gemeinsamkeiten der Freudschen Psychoanalyse und der surrealistisch-experimentellen Bewegung zur Erwähnung gebracht werden.

Bereits mehrfach wurde auf die Reklamationen der Surrealisten verwiesen, die sich gegen eine reduktionistische Wahrnehmung als ein rein dichtersch-literarisches Verfahren zur Wehr setzen und dagegen ihre Revindikationsansprüche auf Anerkennung von seiten der Wissenschaft geltend machen. Das aber korreliert genau der Positionierung Freuds, der sich mit seiner sich in Träumen, Symptomen und Fehlhandlungen artikulierenden Erfahrung des Unbewussten ständig der Gefahr exponiert sah, die Anschlussfähigkeit an den herrschenden wissenschaftlichen Diskurs zu verlieren und von den im \textit{La Table} dinierenden Herren in spiritistische Gedankenkreise exiliert zu werden.\textsuperscript{108} Der zweite, damit zusammenhängende Punkt bezieht sich unmittelbar auf das Traum-Experiment und macht es möglich, die hier diskutierte Beziehung von psychischem Automatismus und \textit{écriture automatique} zu Freuds Technik auf dem nun erweiterten Fundament einer Konzeption des Unbewussten als eines bis auf weiteres unentscheidbar zwischen Physis und Psyche fluktuernden Phänomens zusammenzufassen. Freud konzediert nämlich, das mag an dieser Stelle und im Rückblick auf seine Bearbeitung der surrealistischen Schlaf- und Schreibséances überraschend kommen, „dass man Träume experimentell erzeugen, richtiger gesagt, einen Teil des Traummaterials in den Traum einführen kann. Der Analytiker spielt also bei diesen Beeinflussungen seiner Patienten keine andere Rolle als der Experimentator, der wie Mourly Vold den Gliedern seiner Versuchspersonen gewisse Stellungen erteilt."

Allerdings trägt Freud in diese scheinbar einfache Sachlage, die das surrealistische Selbstexperiment als eindeutig fundiert durch Freuds Traumtheorie erscheinen lässt und Freuds eigene Distanzierung als persönliches Ressentiment marginalisiert, eine Komplikation ein,

\textsuperscript{106} Dalí (1974) S. 60.


Im Gegensatz zu den Surrealisten, sensibilisiert durch die Freudsche Aporie, den Krater, das Unheimliche und gorgonische Wunder von unten, hat der Begründer der Psychotechnik Hugo Münsterberg Freuds Frage „Sind die Neurosen exogene oder endogene Krankheiten, die unausbleibliche Folge einer gewissen Konstitution oder das Produkt gewisser schädigender (traumatischer) Lebenseindrücke, im besonderen: werden sie durch die Libidofixierung (und die sonstige Sexualkonstitution) oder durch den Druck der Versagung hervorgerufen?“ überhaupt

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109 Freud, GW XI, S. 245.
111 Freud, GW XI, S. 359.
Annette Bitsch

nicht erst wahrnehmen wollen. Wie hätte er sonst die Freudsche Psychoanalyse ausnehmen können im Zuge seiner rundumschlagenden Polemik gegen all die in Europa und Amerika proliferierenden psychologischen, idealistischen oder okkultistischen Theorien des Unbewussten? Eine solche, Freud privilegierende Ausnahmestellung ließ sich natürlich nur auf der Basis eines stark beschränkten Verständnisses des Unbewussten als Verarbeitungsanlage neurologischer Reize, die „zurückgedrängt wurden und, dem Bewusstsein längst entschwunden, im Unbewussten indirekt wirksam bleiben“\textsuperscript{112}, halten. Mehr noch, Münsterberg hielt Freud nicht nur aus seiner Generalattacke gegen das blümerante Sortiment all der ‚Unbewussten‘ heraus, er promovierte die von Freud beschriebenen Phänomene sogar zu den unmittelbaren Forschungsgebieten in seinem Laboratorium, in dem er solche hirnphysiologischen Prozesse explorierte, die die bewusste Aufmerksamkeit unterlaufen.

Die Emergenz der Psycho-Laboratorien ab 1850 hatte zu einer radikalen Reformulierung der klassischen Konzepte von Kunst und Ästhetik geführt, die sich nicht zuletzt in den surrealistischen Experimenten theoretisch wie praktisch auf flagranate Weise reflektiert. „Nicht Fabeln, Formen oder Farben, sondern Erregungsfrequenzen konnten mit dem Ende des letzten Jahrhunderts zur Qualität von Kunstwerken erhoben werden: ein gewisses Flimmern. In dem Maße, wie in Laboratorien die Wahrnehmung zerlegt und in Einzelfunktionen untersucht worden war, wurde Kunst nicht mehr nur als ästhetisches Phänomen untersucht, sondern auch in der Art, wie sie die Nerven affizierte.“\textsuperscript{113}


\textsuperscript{112} Münsterberg (1914/1920).
\textsuperscript{113} Holl (2002) S. 217.
Dienste der Kulturaufgaben“ darstellende Disziplin in Buchform materialisiert, zum Glanzträger in akademischen Kreisen und zugleich Darling der populärwissenschaftlichen Bestsellerlisten.


115 Münsterberg (1914/1920) S. 14.
117 Vgl. Solomons/Stein (1896) S. 499: “Real automatism, that is, dropping out of consciousness of the other two elements, heard sound and return sensations from the arm, comes only at intervals and for short periods a a time. But it comes whenever the attention is sufficiently distracted. In no case does withdrawal of the attention interfere in the least with the reaction.”
Zurück zu der Versuchsperson Getrude Stein vor ihrer schweren Aufgabe, die hysterische Vision zu erproben, „die motorischen, im automatischen Sinne unbewussten Reaktionen von Hysterikerinnen zu simulieren“, in Trance zu verfallen und diese Trance zwecks einer möglichst hohen unbewussten Assoziationsrate zu effektivieren. Diese Aufgabe, im Prinzip „ein negatives Aufmerksamkeits-Training“\(^{119}\), bei dem es darum ging, die gewohnten, bewusstein-kontrollierten Nervenverschaltungen zu unterbrechen, musste aus konstitutiven Gründen dann fehlgehen, wenn die Aufmerksamkeit durch äußere Sensationen von der Introspektion, dem hypnotisch-automatischen Sprechen-lassen der inneren unbewussten Stimmen, abgelenkt wurde. “Our trouble never came from a failure of reaction, but from a functioning of attention.”\(^{120}\)

Erinnern Sie sich: Was destinierte Desnos mehr zum Meister des psycho-automatischen Selbstexperiments als seine Immunität gegen den ihn umgebenden Kaffeehausschlag? Ob und welche Maßnahmen Desnos praktizierte, um so bruchlos in den hypnagogen Schwebezustand einzutreten, wird sein Geheimnis bleiben; Solomons dagegen beschreibt die von Getrude Stein im Zuge der Test- oder Trainingseinheiten angewendeten Hilfen zur Disjunktion motorischer und sensorischer sowie auditorischer und sprachlicher Leistungen und zur Tranceerzeugung durch intrapsychische Zeitmanipulation wie folgt: “Miss Stein found it sufficient distraction often to simply read what her arm wrote, but following three or four words behind her pencil.”\(^{121}\) Um es zusammenzufassen: Solomons und Stein übten sich in ihren Experimenten an der Partikularisierung derjenigen motorischen und sensorischen Funktionen, die in synthetisierter Form das klassisch-idealistiche, aufgeklärte und vernunftbegabte Bewusstsein konstituierten. Und die Demontage dieses Bewusstseins, die die Surrealisten wie auch Freud, wenn auch in unterschiedlichen Stilen und mit teilweise disparaten Motivationen zum Programm erheben werden, ließ sich im Psycho-Labor in Harvard so weit perfektionieren, dass die Experimentatoren am Ende ihre eigenen Hände in Erwartung des großen X betrachten konnten, zugleich erfolgreich unfähig, in die automatischen Handlungen und vor allem Schreib-Handlungen dieser Hände zu intervenieren. Die Experimentatoren … und an dieser Stelle, wo das Psycho-Labor die mediale Bedingung der Möglichkeit für eine artifiziell erzeugte mentale Dissoziation bereitgestellt hatte, hätte man fast vergessen können, dass ihre Namen Münsterberg, Solomons und Stein und nicht Breton, Aragon und Dalí lauteten.\(^{122}\)

**Literaturverzeichnis**


\(^{119}\) Holl (2002) S. 222.
\(^{120}\) Solomons/Stein (1896) S. 502.
\(^{121}\) Solomons/Stein (1896) S. 506.
Psycho-automatische Selbstexperimente im Surrealismus und in der Psychoanalyse

Crookes (1898): William Crookes, Der Spiritismus und die Wissenschaft. Leipzig 1898.

Whereas self-experiments were part and parcel of scientific practice in the nineteenth century, today they are regarded with suspicion. But despite its marginalization, self-experimentation has not vanished altogether. In the gray area of contemporary science, some curious individuals are still seeking a more profound understanding of themselves and our kind by systematically manipulating their bodies and minds. Honza Samotar, for example. I would like briefly to introduce his work and the tradition from which it has arisen before you hear his own report.

Samotar is a Swiss physician of Czech descent in his mid-thirties, currently finishing his MD/PhD training, which involves two theses – one on insect navigation with respect to a potential application in robotics, the other one on the effects of hallucinogenic drugs on the brain. At a neuroscience laboratory in Switzerland, he doses healthy volunteers with the NMDA-antagonist ketamine to provoke psychosis-like symptoms. He examines whether the co-administration of the classic antipsychotic haloperidol or the antiserotonergic drug ketanserin can alleviate the ketamine-induced deficits in a manner that is neuropsychologically quantifiable and that changes brain perfusion in a consistent way as measured by positron emission tomography (PET). During my fieldwork on contemporary hallucinogen research in 2005–2006, I served as a test subject in his study. While I was recovering from my first ketamine trip, we spoke about Samotar’s work and how he came to do what he does. It turned out that before taking up academic-model psychosis research on human subjects, Samotar engaged in extensive self-experimentation with ketamine and a multitude of other psychoactive substances, mostly hallucinogens.

From 1992 to 1995, as a medical student in his early twenties, Samotar had access to an isolation tank that a friend of his operated in the back room of his bookstore. Samotar used the tank after closing time to test the effects of about a dozen psychoactive drugs on himself, from alcohol and cannabis to fly agaric, psilocybe mushrooms, LSD, ketamine, MDMA, dextromethorphan, trihexiphenidyl, and laughing gas. The isolation tank (also known by its popular name “Samadhi tank” – after the Sanskrit term for a state of “neutral bliss” or “consciousness without object”) was developed in the mid-1950s by the American physician John Lilly. But Samotar did not only make use of Lilly’s technology. Since he had read Lilly’s “autobiography of inner space” entitled The Center of the Cyclone at age 17, he also looked at Lilly’s whole self-experimental approach as a model. For Samotar, it is Lilly as an unconventional scientist with whom he identifies:

Lilly made a strong impression on me and has influenced my development significantly as he was akin to me insofar as he approached new problems with great openness. He did so with a

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1 Following ethnographic convention, I am using a pseudonym to protect the identity of my informant.
high degree of scientific clarity instead of getting lost in esoteric blather and odd speculations. His approach consisted of examining the mind scientifically as a system by isolating it. This was his original idea, which led to the construction of the isolation tank. As little input, as little output as possible to allow grasping the mind as purely as possible and observing it as a scientific object. I found this very impressive because I am a critical and scientifically minded person by nature. For this reason, I have more or less taken over Lilly’s approach to drug research and followed in his footsteps for quite some time.3

As Lilly’s work has had such a profound impact on Samotar, I will give an overview of Lilly’s highly original project to provide a historical and conceptual framework for Samotar’s self-experimental practice.

1. John Lilly’s Isolation Tank Experiments

John Lilly invented the isolation tank in 1954 while he was working as a brain researcher for the National Institute of Mental Health (NIMH) in Bethesda, Maryland. He was interested in research on the reticular activating system of the brain stem and the physiology of waking and sleeping. At the beginning of the 1950s, the neurophysiologists Horace Magoun (University of California, Los Angeles) and Frederic Bremer (Brussels) had suggested that the brain only stayed in a waking state due to outside stimulation. In Lilly’s eyes, “the obvious experiment [to test this hypothesis] was to isolate the human from all external stimulation insofar as this was physically possible, and to see what the resulting states were.”4 To carry out this experiment he conceived of the isolation tank: Test subjects were to float for hours in a saline solution at 33.9–34.4°C in complete darkness and dead silence. Under such conditions the human body is deprived of almost all tactile, thermic, visual, and acoustic stimuli (apart from those it creates itself, for example through breathing, heart beats, or bowel movements5). In this tank, Lilly engaged in extensive self-experimentation.

3 This quote from Honza Samotar is derived from an interview I conducted with him on February 7th, 2006. The interview has been edited by Nicolas Langlitz and Honza Samotar. (My translation – NL)
5 In his discussion of attempts to build sound- and light-proof experimental psychology laboratories in the nineteenth century, Henning Schmidgen emphasized the confounding role of the body: “After excluding every obvious sensation of sound and light, what remains is an encounter with the body; its eyes and ears, its lungs, and its blood. The consequence is that the subject of the experiment reveals him or herself to be a disturbing factor in the execution of the experiment.” Henning Schmidgen, “A Roaring Silence: Encountering the Body Without Organs in Time Experiments around 1900,” in Experimental Cultures: Configurations between Science, Art, and Technology 1830-1950 (Preprint 213) (Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2001), 76.
The result of the experiment seemed to rebut the claims of Magoun and Bremer:

In the absence of all stimulation it was found that one quickly makes up for this by an extremely heightened awareness and increasing sensory experience in the absence of known means of external stimulation. Within the first few hours it was found that I did not tend to go to sleep at all. The original theory was wrong. One did not need external stimulation to stay awake.⁶

Lilly’s psychic processes did not die down. In fact, his mind came to develop a rather animated life of its own:

I went through dreamlike states, trancelike states, mystical states. [...] I went through experiences in which other people apparently joined me in this dark silent environment. I could actually see them, feel them, hear them. At other times, I went through dreamlike sequences, waking dreams as they are now called, in which I watched what was happening. At other times I apparently tuned in on networks of communication that are normally below our levels of awareness, networks of civilizations way beyond ours. I did hours of work on my own hindrances to understanding myself, on my life situation. I did hours of meditation, concentration, and contemplation, without knowing that this was what I was doing. It was only later in reading the literature that I found that the states I was getting into resembled those attained by other techniques.⁷

John Lilly in front of isolation tank.

By itself the isolation tank did not allow much more to be learned about the brain than the fact that its deprivation of most external stimuli did not lead to a significant reduction in vigilance.

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⁶ Lilly, The Center of the Cyclone, 42.
⁷ Ibid., 42-43.
However, instead of changing the instrument, Lilly changed his epistemic object. Having started off as a neurophysiologist studying the brain, he soon became more interested in the exploration of his own mind. In many self-experiments, “self” refers to the use of one’s own body as a medium of experimentation with something else. For example, the self-experimenter tests the effects of a certain drug or vaccine on his brain or immune system. In Lilly’s case, the self was not only the medium, but also the object of his investigations. For this purpose, the isolation tank seemed to be a highly suitable device. Following the logic of the scientific method, it appeared to single out the epistemic object while minimizing external confounding factors: “A given mind seen in pure culture by itself in profound physical isolation and in solitude is the raw material of our investigation.”

However, the mind Lilly examined in the isolation tank was not so much a natural given, but a carefully constructed scientific object appearing as it did under highly artificial conditions. The tank had to be installed on several layers of rubber in a secluded and soundproof room protected from daylight, preferably in a basement (and even then the vibrations caused by certain airplane motors and earthquakes could still be perceived in the tank). The temperature of the water had to be maintained through an almost silent heating device and the saline solution had to be filtered and circulated impalpably by a pump to prevent the formation of noticeable temperature gradients between skin and water. The air in the tank had to be renewed continuously as well, which required a second pump. Additionally, the test subject’s solitude had to be guarded by locked doors and signs, while someone had to stay close-by to help in case of unexpected events.

Lilly continued to explore his own responses to the “solitude-isolation tank situation” for a decade before complicating the experimental setting. During this period of time, many of Lilly’s colleagues at NIMH were studying the effects of lysergic acid diethylamide (LSD). They suggested experimenting with LSD in the tank, which Lilly steadfastly rejected. He did not want to “contaminate” his findings by introducing drugs into his research. However, after he had experienced the effects of LSD in different settings in the early 1960s, he finally decided to follow up the idea. In 1964 – by which time he had left NIMH and established the Communication Research Institute on the Virgin Islands, a center devoted to fostering human-dolphin communication – he finally took LSD in the tank. Over the following two years, Lilly repeated this self-experiment twenty times before LSD was made illegal in the United States. At this point, the

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10 Related efforts at keeping external disturbing noises out of experimental psychological laboratories in the nineteenth century are described by Schmidgen, “A Roaring Silence.”

11 For Lilly’s comprehensive list of recommendations concerning an “ideal tank environment,” see Lilly, Das tiefe Selbst, 168-170.

12 Similarly, in their sociological analysis of monastic life, Niklas Luhmann and Peter Fuchs argue that the monks’ withdrawal from society paradoxically required a high degree of social organization to be practicable. Niklas Luhmann and Peter Fuchs, Reden und Schweigen (Frankfurt/M.: Suhrkamp, 1989), 21-45.

13 Lilly, The Scientist, 105.

14 Lilly, The Center of the Cyclone, 7-36.
regulations of scientific applications of hallucinogens became stricter and stricter as well. In 1966, Lilly was obliged to return his LSD stocks to the manufacturer, the Swiss pharmaceutical company Sandoz. Later on, he continued self-experimentation in the tank with ketamine. Despite his use of pharmacological agents, the object of Lilly’s inquiry was still the mind, not drugs or the brain. In his eyes, LSD and ketamine only served as vehicles for his psychonautical expeditions.

2. Pharmacologically Facilitated Thought Experiments

Lilly claimed that the special conditions of physical isolation were optimal for “exploring, displaying, and fully experiencing new states of consciousness.” “[T]he elimination or at least maximal attenuation of all modes of stimulation from the external reality allows deeper direct penetration of the unconscious.”15 Before he began his self-experimentation in the isolation tank, Lilly had undergone eight years of psychoanalysis with Robert Waelder. He regarded the practice of introspection, which he developed in the tank, as a continuation of this process. But instead of speaking to his analyst and responding to the latter’s interventions, Lilly was now on his own. He was well aware of the difficulties that self-analysis poses:

When one compares the classical analytical situation to the solitudinous self-analysis situation one must be quite aware of what has been sacrificed in each case. The advantage of the external analyst being present listening to one producing the material is that one avoids some of the pitfalls of solitude in that some of the above evasions can be pointed out rapidly before one became too involved in them. On the other hand the interpretations of the analyst can be a distraction from pursuing in depth certain aspects of one’s own self-analysis.16

Lilly preferred to rely on “a satisfactorily functioning internal analyst” developed over the years on Waelder’s couch. He only returned to his analyst when encountering problems he felt he could not solve on his own.17

Lilly’s self-analysis in the isolation tank was based on the premise shared by all hermeneutics of the self: “The exploration of the inner reality presupposes that the inner reality contains large unknowns which are worth exploring.”18 Yet the outcome of Lilly’s journeys into the realms of the unconscious differed in a slight, but decisive, manner from the findings of Sigmund Freud’s self-analysis at the end of the nineteenth century: “After having been through some of the innermost depths of the self, a result is that they are only one’s own beliefs and their multitudes of randomized logical consequences deep down inside one’s self.”19 While Freud conceived of the mental apparatus as a steam engine-like machine operating with charges of libidinal energy, Lilly

15 Lilly, Programming and Metaprogramming, 14, 25.
16 Ibid., 28.
17 For a historical account of the clinical cultures of self-observation in the late nineteenth century and their subsequent problematization, see Andreas Mayer, From Introspective Hypnotism to Freud’s Self-Analysis (Preprint 168) (Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2001). The development Mayer described as “the demise of self-analysis” primarily refers to the move from self-analysis to training analysis in the psychoanalytic movement. Self-analysis has remained important for trained analysts though. The analysis and interpretation of the unconscious is regarded as a lifelong task to be continued independently after the termination of one’s own analysis.
18 Lilly, Programming and Metaprogramming, 61.
19 Ibid., 40.
looked at the mind as the software of the “human biocomputer” implemented in the brain. The basic elements with which this computer is supposed to operate and by which it is determined are propositional beliefs. Affects only play a minor role in this logocentric model of the psyche. Lilly’s self-analysis aimed at identifying the beliefs that he had unconsciously held ever since he was inculcated with them (“in a sense we are all victims of the previous metaprograms which have been laid down by other humans long before us”)

The goal was to go beyond the limits of thought and experience set up by these unexamined assumptions. From Lilly’s point of view, the altered states of consciousness occurring under sensory deprivation in the tank and under the influence of hallucinogens allowed one to become aware of and to understand those determinations. As for the effects of LSD, Lilly’s interpretation was consistent with the use of hallucinogens in “psycholytic therapy” developed by Ronald Sandison and others in the 1950s. Their idea was to facilitate psychoanalysis and other forms of psychotherapy by administering comparatively low doses of LSD to improve the patient’s access to the unconscious. As Lilly put it:

The LSD-25 allows breakdown of the barriers between the emotional-wordless systems, and the wordfilled modeling systems by means of channeled uninhibited feeling and channeled uninhibited action. (This is one way that the unconscious is made conscious in a sometimes too rapid fashion.)

The combination of the isolation tank and LSD allowed a “deeper penetration of self,” Lilly reported. But he recommended doing self-analysis without LSD as well as training sessions with LSD and another person before taking the drug in profound physical isolation and solitude. The knowledge gained through these forms of introspection had a practical purpose: Realizing one’s determinations was meant to be the first step towards emancipation from them. The isolation tank, Lilly hoped, would allow us to “free ourselves from the effects on our thinking machine of storage of material from the external world” and from “the effects of storage of metaprograms which direct our thinking, programs devised by others and fed to us during our learning years.”

But mere understanding of one’s conditioning does not suffice to change one’s life. For Lilly the psychoanalytic quest for an inner truth was only a first step. To achieve greater autonomy one has to replace one’s old imposed beliefs with freely chosen new ones. As far as Freud’s “psychic reality” was concerned, Lilly was a radical constructivist: “In the province of the mind, what one believes to be true is or becomes true, within certain limits to be found experientially and experimentally. These limits are further beliefs to be transcended. In the mind, there are no limits.”

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22 Ibid., 68.

23 Ibid., 25-26, 35.

24 Ibid., xxvi.

25 Ibid., xii.
the ideals and hopes of human engineering and the Human Potential Movement prospering in the United States at the time.\textsuperscript{26} From a Freudian perspective, Lilly’s mantra is tantamount to a regression to hypnosis and suggestion, which Freud’s “talking cure” was meant to overcome.\textsuperscript{27} In fact, LSD was said to provoke a state of increased suggestibility. Hence, the drug not only served to reveal the unconscious programs and beliefs by which the subject is determined, as a “reprogramming substance,” it was also meant to help substituting them with more beneficial programs and beliefs.\textsuperscript{28} Lilly explained the power of LSD to modify one’s programs in terms of information theory:

In the analysis of the effects of LSD-25 on the human mind, a reasonable hypothesis states that the effects of these substances on the human computer is to introduce white noise (in the sense of randomly varying energy containing no signal of itself) in specific systems in the computer. [...] In such noise one can project almost anything at almost any cognitive level in almost any allowable mode: one dramatic example is the conviction of some subjects of hearing-seeing-feeling God, when “way out.” One projects one’s expectations of God onto the white noise as if the noise were signals; one hears the voice of God in the Noise. With a bit of proper programming under the right conditions, with the right dose, at the right time, one can program almost anything into the noise within one’s cognitive limits.\textsuperscript{29}

The most original aspect of Lilly’s self-experiments is his use of LSD and the isolation tank for the purpose of a rather peculiar kind of thought experiment. Thought experiments are usually carried out to examine certain assumptions about reality. Based on the premises in question one thinks through the consequences of these assumptions and compares them to what one has learned about the world empirically. If the results of the thought experiment do not comply with experience the premises need to be questioned.\textsuperscript{30} Lilly used the heightened suggestibility under LSD and the physical interruption of social relations in order to implement new beliefs in his own “biocomputer” by way of autosuggestion. When the drug effects died down Lilly was able to reflect on where the assumptions had taken him.


\textsuperscript{28} “Certain chemical substances have programmatic and/or metaprogrammatic effects, i.e., they change the operations of the computer, some at the programmatic level and some at the metaprogrammatic level. Some substances which are of interest at the metaprogrammatic level are those that allow reprogramming, and those that allow and facilitate modifications of the metaprograms. [...] For example, the term ‘reprogramming substances’ may be appropriate for compounds like lysergic acid diethylamide. For substances like ethyl alcohol the term ‘metaprogram-attenuating substance’ may be useful.” Lilly, \textit{Programming and Metaprogramming}, 9. And even more pointed: “It is to be emphasized for those who have not seen the phenomena within themselves that this kind of manipulation and control of one’s own programs and its rather dramatic presentation to one’s self is apparently not achievable outside of the use of LSD-25.” Lilly, \textit{Programming and Metaprogramming}, 19-20.

\textsuperscript{29} Lilly, \textit{Programming and Metaprogramming}, 76-77.

During this first trip I also defined other kinds of belief with which I would experiment. I would try to go to universes other than our consensus universe, universes I didn’t necessarily believe existed, but which I could imagine. At first this was a test of the hypothesis that what one believes to be true becomes true. Before the trip, I didn’t believe in these universes or spaces, but I defined them as existing. During the LSD trip in the tank I then took on these beliefs as true. After the trip, I then disengaged and looked at what happened as a set of experiences, a set of consequences of the belief.31

Lilly regarded the mind as perfectly malleable. The question was not whether the beliefs experimented with were true, but whether their consequences for the self were desirable. Hence, he did not strive only for self-knowledge. The goal was to change himself by meditating over new beliefs, some of which Lilly found beneficial enough to keep:

Experiments were done on myself to test the theory, to change it, to absorb it, to make it part of me, of my own biocomputer. As the theory entered and reprogrammed my thinking-feeling machinery, my life changed rapidly and radically. New inner spaces opened up; new understanding and humor appeared. And a new skepticism of the above facts became prominent: “My own beliefs are unbelievable,” says a new metabelief.32

In the absence of an external referent, Lilly’s thought experiments were not about testing certain assumptions about the world. Their main objective was not even to discover an inner truth, although the discovery of “previous metaprogams” was a necessary first step. The goal of Lilly’s experiments in the tank was to internalize newly constructed “truths” while maintaining an ironic distance from them. The aim of Lilly’s self-experimentation was not so much methodical self-exploration as in psychoanalysis, as much as it was a meditative “work on the self” (Michel Foucault) producing the self-deprecating maverick Lilly came to be.33

3. The Paradox of Methodico-meditative Self-experimentation

There is a certain tension between the methodical and the meditative poles of this kind of self-experimentation. Hans Blumenberg pointed out that modern science is based on the principle of method. Its purpose is the integration of a potentially infinite number of subjects doing research in different contexts over time. Their individual lives and their personal desires for truth are irrelevant.34 If a particular experiment does not lead to the desired outcome, it is regrettable for the experimenter, but the scientific community can still learn from it. Hence, even experiments with a negative outcome are valuable. They contribute to the progress of science at large. Consequently, this must be true for self-experiments as well. The recklessness towards oneself implied by the determination to go beyond given limits was articulated most clearly by Friedrich Nietzsche:

31 Lilly, The Center of the Cyclone, 48.
32 Ibid., 5.
[O]ur attitude towards ourselves is hubris, for we experiment with ourselves in a way we would never permit ourselves to experiment with animals and, carried away by curiosity, we cheerfully vivisect our souls: what is the “salvation” of the soul to us today? Afterwards we cure ourselves: sickness is instructive, we have no doubt of that, even more instructive than health – those who make sick seem even more necessary to us today than any medicine men or “saviors.” We violate ourselves nowadays, no doubt of it, we nutcrackers of the soul, ever questioning and questionable, as if life were nothing but cracking nuts; and thus we are bound to grow day-by-day more questionable, worthier of asking questions; perhaps also worthier – of living?

Following this severe logic of self-negation for the purpose of overcoming one’s current limitations, Lilly even welcomed what he described as a “near-lethal ‘accident,’” a suicide attempt he committed after his second LSD experience: “No experiment is a failure,” he concluded. “I had learned that death is not as terrifying as I had imagined it to be.” Within the wider framework of the pursuit of knowledge realized in a series of experiments (and not in one experiment alone), it is to be expected that individual experiments fail and there is a lesson to be drawn from such failures as well. Lilly’s systematization of self-experimentation, his deliberate disengagement from beliefs he had taken up merely to try them out, and his appreciation of good and bad experiences alike reflect the detached relationship with the world underlying the ideology (if not the practice) of modern science. But how does this fit together with a self-experimental practice aimed at a better life for oneself? How do the recklessness of methodical self-experimentation and Lilly’s meditative care of the self go together? Here the subject experiments for his own sake, not for the sake of scientific progress.

The French historian of science Georges Canguilhem has raised the question of norms underlying the epistemology of medicine and the life sciences. Can living beings, who – by nature – invest life with normativity, study this very life in a value-neutral manner? Canguilhem did not think so. From his point of view:

Medicine exists as the art of life because the living human being himself calls certain dreaded states or behaviors pathological (hence requiring avoidance or correction) relative to the dynamic polarity of life, in the form of a negative value. We think that in doing this the living human being, in a more or less lucid way, extends a spontaneous effort, peculiar to life, to struggle against that which obstructs its preservation and development taken as norms.

According to Canguilhem, judging “certain dreaded states or behaviors pathological” is a function of the normativity inherent in life itself. Consequently, medical and biological research – including self-experimental approaches like Lilly’s or Samotar’s drug research – must be seen as part of the struggle of living beings for “preservation and development” in insecure and changing environments. Thus the formation of concepts in the life sciences does not take place in the abstract realm of “theory”, located at a safe distance from the world of living things described. The production of knowledge in the life sciences constitutes a life process itself. However, if physicians

36 Lilly, The Center of the Cyclone, 35.
and biologists are not detached observers, but living organisms pursuing vital interests, one would expect that the degree of engagement Canguilhem postulated would be even higher in the case of a self-experimenting psychonaut. In his isolation tank experiments, Lilly was involved in the most existential manner. After all, it was his own life with which he experimented. From Canguilhem’s viewpoint, it seems paradoxical that Lilly presents himself as a detached observer of his own impingement while putting his well-being and even his survival at risk without pressing cause. What was he looking for?

In Selbstversuche, Peter Sloterdijk pointed out that the rationale underlying modern self-experimentation must not be reduced to the logic of self-preservation. Often a second motivation comes into play, which Sloterdijk called “self-intensification”:

In the concept of self-intensification, there is an element that cannot be accounted for by the rationale of self-preservation alone. In classical tradition, he who preserves himself by abiding by the cosmos is wise – and even in modernity, one still presumes a profound equation of reason and self-preservation. But modernity has long since left the space of self-preserving rationality. The will to self-intensification cuts the auto-conservative cord. One reclaims the right to self-annihilation. The one who always acted in a self-preserving manner couldn’t do many things that have been part of our experimental habits since long ago – this unbridled furor, this tendency toward escalation in everything made into an absolute.39

Self-intensification aims at transgressing the boundaries of everyday experience and overcoming the limits that define and restrain the self at a given time. This can serve as an apt description of Lilly’s project. But does Sloterdijk’s diagnosis of a neo-Nietzschean mania at work in modern self-experimentation apply equally well to Honza Samotar?

38 At first glance, this appears to be a return to the Aristotelian logic of life. For Aristotle, the soul constituted a fundamental unity of life’s reality (ousia) and definition (logos). “Thus, the concept of the living thing was, in the end, the living thing itself.” Georges Canguilhem, A Vital Rationalist. Selected Writing from Georges Canguilhem (New York: Zone Books, 2000), 303. From this perspective, the logos of life can only be true (at least on the basis of a correspondence theory of truth). The nominalist antithesis to this position holds that there is no necessary connection between the reality of life and its logoi. Canguilhem’s own stance is strongly informed by the contemporary resurgence of an Aristotelian conception of life in molecular biology. After all, the genetic “code” and its “letters,” the “book of life,” etc. indicate a certain reunion of matter and logos. But Canguilhem’s concept of normativity incorporates both the naturalism of Aristotelianism as well as nominalism’s emphasis on contingency. Aristotle’s life inhabited a cosmos belonging to a lasting and meaningful order of things. The conception of life as situated in an unstable, highly dynamic environment demanding constant adaptation only arose in the nineteenth century. Although Canguilhem does not regard the logoi of life as external to life itself these logoi have lost the essentialist privilege of Aristotle’s logos.

4. The Contemporary Problematization of the Self

Samotar’s self-experiments in the isolation tank took place in the first half of the 1990s, which George H. W. Bush announced as the “Decade of the Brain.”

Since then there has been much concern that the self and other aspects of our subjective lives are called into question by the neurosciences. In his preface to a collection of texts representative of the German debate about recent advances in the neurosciences, Christian Geyer articulated this growing disquiet about the illusory character of subjective experience:

Our life is an illusion. This is the succinct conclusion with which neuroscientists clobber the scene. They say: You think that you’re thinking, but in fact, you only think that you’re thinking. In reality, nobody thinks, but the brain plays its neuronal game, in which the self doesn’t have a say. So much the worse, they say, that the self is even taken in by the illusions, which the play of neurons constantly produces. Among these illusions is the self and its whole way of experiencing the lifeworld.

In my eyes, this uncertainty about the self points to an opening for new forms of representation and intervention, Samotar’s resumption of Lilly’s practice in the age of cognitive neuroscience among them. I understand Honza Samotar’s self-experiments in the isolation tank as one response to this problematization of the self. Samotar is neither primarily interested in self-preservation nor self-intensification and self-transcendence. For him, self-transcendence through the drug-induced dissolution of ego boundaries is only a means, not an end. The question underlying his drug experiments in the isolation tank was, he says, whether there are “experiential invariants”\footnote{Christian Geyer, “Vorwort,” in Hirnforschung und Willensfreiheit. Zur Deutung der neuesten Experimente, ed. Christian Geyer (Frankfurt/M.: Suhrkamp, 2004), 9 (my translation – NL).}. By this he means: Is there anything in one’s experience that resists a broad range of pharmacological challenges? Does anything remain experientially consistent despite sometimes massive alterations of brain chemistry? Is there a core self enduring under all conditions, something steady amidst the flux of neurotransmitters, the firing of nerve cells, the feelings of unlimited freedom and abysmal anxiety going along with the so-called dissolution of ego-boundaries typically induced by hallucinogens?

These were the questions materializing in Samotar’s self experimentation with drugs in the isolation tank. These questions indicate that the existence of the self has become problematic. It is not taken as self-evident anymore. Samotar’s worry about “experiential invariants” suggests a

\footnote{George H. W. Bush, Presidential Proclamation 6158 (18 July 1990 cited); available from http://www.loc.gov/loc/brain/proclaim.html.}
gnawing disquiet, a lack of confidence vis-à-vis the self in tune with the uneasiness expressed by Geyer. However, while the representatives of the anti-biologicist current in the humanities, social sciences, and the German and Swiss feuilleton have responded to neuroscientific incursions into their traditional territory by writing more and more defensive texts denouncing reductionism, Samotar has drawn a different lesson from his self-experiments. The conclusions at which he has arrived, you will now hear from him.

Literature

Tripping in Solitude

Honza Samotar

At the age of 17 I woke up from a dream and switched on the bedside light. It did not work. I checked the power cord. It was correctly plugged into the outlet. I checked the bulb, it seemed to be fine as well. Then I realized that I did not see any light coming in from the street. I started panicking, quickly opened the drawer and switched on the flashlight. This was too much! It could not possibly be broken as well... I must be blind, I thought. I was terrified. I got up to turn on the big lights – and still did not see anything but a deep blacking. I was desperate...

Then I woke up again – exactly as before. I reached carefully for the switch of the bedside light again. It was in the “off” position. I turned it on – and it was light!

It took me some time to realize what must have happened. Everything had felt absolutely real. That could not possibly have been a dream. I really seemed to be blind in some parallel world. For more than an hour I was afraid of falling asleep again and getting stuck in that parallel world...

When I started experimenting with altered states of consciousness my primary motivation was the search for reality. As a child I was particularly interested in astronomy and physics and then between 12 and 14 years of age I doubted whether I could be sure about the existence of anything since everything was just mediated by my awareness. So the only things that I could be certain existed were my own perceptions.

What was that experience of waking up blind? It clearly was a dream. But what does that mean? Was it real or not? What does it mean, being real?

WordNet defines reality as follows:

1. all of your experiences that determine how things appear to you
2. the state of being actual or real
3. the state of the world as it really is rather than as you might want it to be
4. the quality possessed by something that is real

And the adjective real:

1. being or occurring in fact or actuality; having verified existence; not illusory
2. no less than what is stated; worthy of the name
3. being or reflecting the essential or genuine character of something
4. not synthetic or spurious; of real or natural origin
5. not to be taken lightly
6. possible to be treated as fact
7. being value measured in terms of purchasing power
8. having substance or capable of being treated as fact; not imaginary
9. (of property) fixed or immovable
10. coinciding with reality
11. founded on practical matters

1 http://wordnet.princeton.edu/, Version 2.0; cited without examples.
According to the Online Etymology Dictionary, reality originally was a legal term in the sense of “fixed property”, from Latin realitas.

For the adjective real it states: “relating to things” (esp. property), from Latin realis “actual,” from Latin res “matter, thing” of unknown origin.

William James put it as follows: “Everything real must be experienceable somewhere, and every kind of thing experienced must somewhere be real.”

Accepting the conclusion that everything that I know about the world is mediated by my consciousness, I started looking at my consciousness first and asked questions from a solipsist point of view: What are the (spatial, temporal and categorical) consistencies and inconsistencies of my perceptions? Why are they changing at all? Waking up from a dream is an example of an inconsistency. Where does it come from? What does it mean? And why am I considering it an inconsistency in the first place? Finally, who or what is that “I” who is considering anything?

I felt somehow contaminated by assumptions or even just associations, unwarily absorbed from others. This called for mental purification. The search for reality implied the search for the real self.

On the other hand I felt incomplete, since there remained so much to discover. This called for learning more.

I found myself stuck in between a minimal self devoid of any experience and a maximal self having experienced (and digested) all experienceable. Only those two extreme concepts seemed “pure” and “complete” enough to grasp what was going on.

Consequently, I was looking for means to bring myself closer to both extremes, which would bring me closer to reality. It may seem strange to use psychoactive drugs for close inspection of reality. They are often considered to serve the opposite aim, namely to escape from reality. But turning anything off never was an end in itself for me. I rather saw it as a possible way to find firm ground.

Unfortunately, I did not see any conceivable way to unlearn everything I have ever learned in order to experience the minimal self directly. At least not reversibly – unlearning by banging the head against a wall would probably be permanent.

So I had to be satisfied with a construct, the intersection of all states. That intersection would represent the unchangeable elements of experience, the experiential invariants [Erlebnisinvarianten] as I called them. Finding them was one of the main motivations for my experiments in the isolation tank. I asked: What remains constant under all conditions?

Maybe you instantly think that nothing remains constant since you can fall unconscious. Then I have to clarify: Being in deep sleep is not a state in one’s own experience. For oneself it does not exist directly. It is an inference to give sense to the sudden change in one’s perceptions, to the inconsistency of change. Having observed such inconsistencies repeatedly can lead one to the generalization of missing time. Now this is a fundamental step: It is the assumption that there is

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2 http://www.etymonline.com/
3 William James, Essays in Radical Empiricism (University of Nebraska Press, 1996), 160. Note that reality in this sense has nothing in common with objectivity.
4 And since I am arguing here from a solipsist point of view any knowledge about the behavior of newborns does not help either.
5 What exactly is repetition by the way?
6 Time is clearly a generalization as such.
something not directly accessible to my awareness. Moreover, someone can tell me what happened while I was asleep and even voluntarily influence what is going on in my own world when I am dreaming. So I can deduce the existence of an “outer” world that is ontologically independent of my own being. In other words, solipsist thinking does not necessarily have to be a dead end. But it can be helpful for disciplined observation and description of states of being.

So what remains constant under all conditions? What is the intersection of all states? What are the experiential invariants?

To make it short: I didn’t find any. There was nothing that remained constant under all conditions.

Does that mean that there is no minimal self? This could seem compelling, even more so as there are experiences during which one is confronted with the void inside one’s own core being very directly.

In some sense, however, the result is quite banal. As anyone knows who has ever had the experience of passing out, awareness can gradually fade until it disappears completely. Usually it relates to awareness of some objects. But it is possible to remove all objects from your awareness and still be aware. Therefore, awareness itself and all its objects are variable.

And since we defined awareness as the prerequisite of a mental state in the solipsist view, we could at most identify the minimal self with pure awareness by declaring the changes in awareness itself to be insignificant – or we have to declare the concept null and void.

I consider the first-hand experience of the voidness of the self one of the main gains from my experiments in the isolation tank.

I would say that this is quite distinct from the uneasiness expressed by Christian Geyer deducing the illusion of the self from the findings of the neurosciences:

> In reality, nobody thinks, but the brain plays its neuronal game, in which the self doesn’t have a say. So much the worse, they say, that the self is even taken in by the illusions, which the play of neurons constantly produces.\(^7\)

I don’t think Geyer’s view of a self being a mere illusion is directly related to my concept of the minimal self. What they have in common is the fact that the human mind is divisible – into pieces, modules, functions or whatever you would like to call them, – that it is not an atom (in the original Greek meaning). That our personalities, our very inner beings are structures, something built, which therefore can – and will – decay again. And it does not change much in this context if we identify some of those functions with parts of the neuronal machinery in our brains or not.

I do not agree with Geyer’s statement. I think that the problem is not so much whether or not the self is an illusion, but rather how we distinguish between illusion and reality – and how we value both. I understand Geyer’s concern as a subtle form of dualism, or at least as a mix-up of different aspects of the self.

On one hand, not believing in an atomic self makes it difficult to believe in an immortal soul. On the other hand, believing in an atomic self makes it difficult not to run up against obvious facts over and over.

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\(^7\) translation by Nicolas Langlitz, as cited in his introduction to my talk.
Even though I did not find any meaningful minimal self in my experiments, I have found a multitude of very interesting states of mind, among which the state of pure awareness can serve as an Archimedean point of introspection. It actually is a state of mind known for millennia and well described in different traditions: it is called, for example, Samadhi in Hindu and Indian Buddhist traditions, Satori in Japanese Zen Buddhist tradition. A modern term coined by Franklin Merrell-Wolff is “consciousness without an object”;

Consciousness-without-an-object may be symbolized by a SPACE that is unaffected by the presence or absence of objects, for which there is neither Time nor Timelessness, neither a world-containing Space nor a Spatial Void, neither Tension nor Equilibrium, neither Resistance nor Creativeness, neither Agony nor Bliss, neither Action nor Rest, and neither Restriction nor Freedom. It means a state of mind when one is completely dissolved but still conscious. One is aware, but not as a person, one is neither awake nor sleeping, neither alive nor dead, neither oneself observing anything nor an object nor both. One is everything and nothing at the same time. One is pure awareness. It is something not really graspable by language. Nevertheless, or maybe even because of that, it is something which has had and still has a big influence on philosophical and religious traditions. One reason may be that going through Samadhi often leaves the impression of having reached the ultimate.

From my own experiences of that state I feel that its cultural influence is mostly of an ill effect. From my point of view, it only can have such an impact because most people don’t know that state first-hand. When people are talking about Samadhi it usually sounds quite strange. Those who have not experienced that state first-hand cannot really imagine what people like Merrell-Wolff are talking about. And those who know that state from their own experience know that it is not graspable by language. Language is based upon differences. Samadhi is no-difference. It is outside of the domain of language, or we could also say, it is at its root. It is often described by a set of dichotomies or oxymorons. But then it also is often used to justify some desired difference or value.

From my point of view it cannot justify anything, and talking about it actually does not make much sense at all. Therefore I rarely do it. For this seminar I was asked to talk about my self-experiments, particularly the ones in the isolation tank, and the state of Samadhi is one of the more general key points in this story, so here I am making an exception. It definitely is valuable to experience it a few times at least, but I think that there are much more interesting things to talk about.

But clearly it is very useful as a point of reference in the complex landscape of states of mind. John Lilly said about it:

It is the one state which is self contained, complete, or in other words, adequate. I don’t know which levels there are beyond this one, but I know that this state encompasses all the others, even those I did not encounter.

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8 To be exact, I am referring to Nirvikalpa Samadhi from here.
9 Franklin Merrell-Wolff, Philosophy of Consciousness Without an Object (Three Rivers Press, 1983)
10 I am talking exclusively about the introspective view. I do not believe nor claim that one could not be alive in a biological sense seen from outside.
So let us start with the *Samadhi* state: It is the all-embracing state of complete emptiness lacking any structure. There is everything and nothing. It is of particular interest to try describing what happens when you go in and out of this state, when you are close to it. You realize that whatever you think could be a description or whatever you remember from your daily life or from your most elaborate goals in your life or what you perceive as the most profane or the most sacred in your life, no matter what, everything is just loops of differences made and destroyed again (Figure 1). As soon as you try to grasp an aspect of *Samadhi* in words, you necessarily detach from it. And the more you talk (or just think in words), the bigger the loop. As Ludwig Wittgenstein wrote: “The chain of reasons comes to an end, that is, one cannot always give a reason for a reason.”

![Figure 1: Fractal description loops.](image)

You can follow fractal paths of arguments – but not forever. Eventually you fall back into the void no matter what. But in the process you cross myriads of different states of mind, changing with every single decision you make, constantly evolving. It is funny enough, however, that when you come out of *Samadhi* through all those in-between states into your everyday state of mind you just operate on the basis of certain assumptions that proved to work in the system of perceptions you call the world, or your life. You know that they are just assumptions, but you do not care. If you cared, you would very probably be called crazy.

When we talk about reality we cannot ignore the striking and very seductive feeling of evidence, of absolute authenticity. You can feel absolute truth, you can feel that all answers to all possible questions are clearly laid out before you. You can also feel that some particular answer

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is correct beyond all doubt. But no matter how evident, how authentic, how authoritative it feels, it does not prove anything, since that feeling can attach to everything.

In this context I would like to refer to a particular experience that I had in the isolation tank under the influence of LSD and laughing gas. I experienced the feeling of being myself at an amazing intensity, much more than any time before or after. I was completely isolated, there was nothing but myself — and I realized that I had never been as complete, authentic and honest to myself as in these very moments. And that it is absolutely impossible to be as complete, authentic and honest to myself as soon as I am relating to anything. That this extreme feeling of being myself is only possible in complete isolation. As soon as I am relating to anything I am not complete anymore, but rather somehow dispersed into the relation.

This observation leads us to a very important methodological issue. When you want to do self-experiments in your own mind you need to have some emotional attachment to the state of mind you are in. You need attachment to those states to be able to perceive them. On the other hand when you want to describe them to bring back information to your daily life you need language — and therefore you need emotional detachment. This is what Nicolas Langlitz said about the experiments of John Lilly. You need to go in and you need to go out. You can change the level of authenticity. When you don’t report at all for extended periods of time, authenticity is highest. By reporting it decreases.

Once I performed an experiment in a cave in southern Spain where I was sitting inside for hours under the influence of hallucinogenic drugs. It was almost completely dark and I was just sitting there and observing. In some sense this is the most authentic since you are not constantly interrupting your experience by talking.

The other extreme is writing because you hardly can write without reading what you have written before. And that can heavily change your experience.

In the isolation tank I always had a microphone hanging about 10 cm above my face connected to a digital audio tape (DAT) so I could record for 6 hours without leaving the tank. I was trying to go into the state for only a few minutes at a time, then to come out again and report. I was always trying to describe everything as accurately as possible. This method proved to be best for combining reporting with the highest possible authenticity. Afterwards I did not listen to the recording first but always wrote a protocol from my memory for later comparison. I checked whether I was making something up in my memory or what I had forgotten or whether I was talking about something else than what I was perceiving.

Also, I had to develop a special language to be able to report from within the tank. How do you describe, for example, spatial relations in the isolation tank? It is far more difficult than in the outer world because there are no direct measures. When you describe visual phenomena elicited by, for example, LSD in the outer world with open eyes you always can relate to real objects, so you can say “x is 80 cm across.” In the isolation tank there are no objects to relate to. This point relates to what Neal White said yesterday about his art performances: “There are no objects, only event-structures.”

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13 This is a very typical feeling when coming out of Samadhi.
14 Note that this experience has nothing to do with Samadhi.
15 Neal White, Let’s Experiment with Ourselves (in this volume).
I solved this problem by imagining my visual field as a half sphere in front of me with a radius of 10 circular units. So 0;0 was directly in front of me, 10;0 rightmost, 0;10 upmost. The language I then used was something like “dark green oval from 2;3 to 7;5 pulsating with 7 Hz.” For angles I used compass directions – at least when they started from the center, as was very often the case.

One particularly pronounced problem in work with hallucinogenic drugs is (auto-) suggestibility. You never know in which ways your experiences are going to be biased by your own expectations or prejudices. I tried to control for this as much as possible. I will describe the technique I used by means of sensory perceptions, since it is easiest to show in this context, but you can play the same game with emotions, thoughts, and beliefs.

When you observe illusions or pseudo-hallucinations you have basically two possibilities for reporting: a passive and an active approach. In the passive approach you try to take your own will away as much as possible and just describe your observations either in real time or at a later time. With the active approach you can somehow control for your prejudices by trying to change the perception by will power and observing how far that goes in different directions and how much effort it needs in each case. So if you see a green object you can try to see it in different colors and notice, for example, that it is easier to change to blue than to red. If you see a shape you can try to change the direction of the shape, its form, its size. Then you can measure the boundaries of changeability. Usually you can perform some changes more easily than others, and you can change the perception to some extent and not more.

Then you have what you observe when you don’t do anything, and this clearly is biased. But in addition you also have the space of possibilities. Sometimes you find the core almost centrally in the whole space, which indicates that your prejudices were small, but sometimes it is located marginally, which tells you something about your prejudices and/or about the structure of the processes generating the perception.

A method relating to this one is performing body movements as factors of influence. When you observe a visual phenomenon you can move your eyes and/or your head and watch for movements of the observed perception.

In the experimental situation itself, my first and most important question always was: “What is different compared to my everyday state?” This question is methodologically very important even though it has the potential to reduce the intensity of the experience by forcing you to imagine yourself being sober and relating that state to the current one. On the other hand this characteristic can be helpful when you feel the need to drag yourself out of an emotionally consuming experience that you are having a hard time dealing with.

In experiments with combinations of substances I often asked for the differences in the states elicited by each substance alone, in addition to the differences compared with my everyday state.

One drug played a very special role in my experiments, and that was N₂O, also known as nitrous oxide or laughing gas. Its short but powerful effects make it a very interesting substance to use in combination with longer-acting drugs. In addition, its effect is very constant when used in isolation and therefore changes can be attributed to the influence of the other drug.

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16 The described techniques work for any perception, but their effects are most pronounced when used in the context of hallucinatory states of mind, since those perceptions are most malleable.

17 More precisely I was comparing the situation to the state I experienced first in two sober baseline sessions in the isolation tank. Clearly the state of mind in there is different from the everyday state even without pharmacological challenge.
The following is an excerpt from my experiment with marijuana in the isolation tank, which took place December 30, 1994. The water temperature was 36.1°C. I describe the effects of the second N₂O inhalation.¹⁸

I think: how is the space? And I can tell, this is not the point. Even now I am able to project a Euclidean space on this space. The space actually is a zero-dimensional point. But when asking myself how the space is, I am still able – I am talking now about the laughing gas trip from before, chronologically, starting from the time point when I still held it in with my diaphragm with open glottis – I am still able to project a Euclidean space together with its coordinate system out there. Then I think: is it the time? Then I think no, the time isn’t it either. But the time is changed profoundly: it is cyclical – the period becomes shorter and shorter – until time stops – and I am standing outside of time.

Amazingly, my position splits up: I am not just suddenly outside of time. I am in this ever faster rotating time and outside of this rotating time in a static non-time. I am in both positions together.

After breathing out [the laughing gas] and [air] in again that spatial point representing the rotating time is not a point without any characteristic anymore. It has a diameter now of about 2.¹⁹ It has a ‘skin’, it is more compact at the brim than in the center, and it is oval, approximately ellipsoidal, with a slight recess midway. The long axis is tilted about 10° to the horizontal line, going from back right to front left.

I projected the Euclidean coordinate system according to the position of my head first – but then it detached from my head. It detached in a curve resembling an ‘S’ – seen from the left side. So first it moved to the front away from my face, then downwards, backwards, downwards and to the front again.²⁰ It translated a bit to the left and rotated, the frontal plane about 30° rightwards, the horizontal plane about 30° upwards.

After breathing out and in a second time the oval smears first upwards and then backwards to the right, giving rise to a form resembling a crosier. That moves first down a bit and then up in the visual field. At the left side it grows to something resembling a fishtail, spreading from -0.5;0.5 to -0.5;6, with the fish body not being visible and reaching only 2 units from the vertical in the right upper quadrant. This form still shows the inner structure of the original oval, it still has a ‘skin’. This figure blurs more and more and changes into a [bright white] oval light pulsating at approximately 10 Hz, maybe a little bit more, with the long axis this time pointing about 10° to the upper right. This light grows until it fills up the whole visual field. Parallel with the growth of this stroboscopic light a feeling of bliss of unbelievable intensity develops, extremely warm, extremely relaxed, extremely salvaged, extremely loving, extremely protective. It spreads throughout my body. It is pure delight.

During that time I touch the wall of the tank with the three outer toes of my left foot. It is extremely interesting to notice that the tactile sensation is absolutely normal. It is sharp, clear, and bright, completely opposite to that unstructured, disembodied, and somehow ‘spaceless’ blissful feeling of over-flowing warmth.

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¹⁸ The described experience itself lasted for a few minutes, the description took much longer. The text represents the transliteration of the DAT protocol. My own translation from German – HS.

¹⁹ By this I am referring to the units I was projecting onto my visual field. 2 units correspond to an impression of about 3-5cm seen from a distance of 1m.

²⁰ These terms refer to the position of my head and body, not to gravity. So ‘down’ means the direction towards my feet, not towards the center of the Earth.
Gradually, the intensity of that pulsating light diminishes. It is pulsating more and more spatially, by moving far away and coming close to me again. The direction of this movement is about 20° to the bottom left from the straight line ahead. There seems to be a plane below and to the left from that line in which the bright white light moves back and forth, reflecting that light in a bright claret red color. In the next 10 to 20 seconds this pulsating, jumping light slowly moves away from me straight ahead, diverts a little bit downwards, but not to the left. Now it moves back and forth over a finite distance. Before the distance was infinite, since I was located inside the space where the light moved. Now I am outside of this space and the light goes away from me, with the correct foreshortening. It ends up being smaller than one unit located at about -0.5; -0.5 and now seen in an angle of about 30° to the bottom left from the vertical, i.e. towards SSE. At 1;-0.5 a very small ring of very bright light flashes for about one or two seconds without disturbing the other light at the left of the center. That light multiplies however, upwards to the front. It is reverberating many times. Those ‘children’ of the light do not pulsate anymore, they glimmer in gray and move away rightwards, upwards ahead in the typical WNW direction, generating a picture resembling the tail of a comet (Figure 2).

While I held the laughing gas in my lungs and thought about the changes in the perception of space and time I was somehow outside of my own mental state. This is rather typical for that phase. After having breathed it out and getting in oxygen again, the changes become more pronounced. Then I am inside the state, I cannot observe it from ‘outside’ anymore – well I can when I want, but it’s not the natural flow of things.
After the comet tail has moved to the front and left, a line of light from 0;0 to WNW, a small semicircle appears at 0;1 with the straight part horizontally at the top. It moves ENE and also divides into many tiny semicircles of the same orientation. Now there are two beams of light from approximately the center of the visual field to the top right and left, respectively. They form an angle of about 120°. Now rings of white light peel away from the periphery below these beams. They have the form of a curved lancet, being narrow near the beams and 0.5 units wide in the SSW. They move in waves from the periphery to the center of the visual field which takes them about half a second. Each such ring of light presses the beams up a little bit, so that the angle between the beams decreases. The left side beam which originally was built up from the semicircles gradually shortens and so the rings of light build up a structure resembling a snail-shell with just one twirl. The beam to the upper right remains stable and the snail-shell revolves to the left until it stops at the right side beam again, from the left side of course. Finally also the right side beam starts fading away but still lights up whenever a ring of light hits it – btw. the red color has been gone for a long time now, everything is purely white.

What remains is only another pulsating light in the center, although with a far lower frequency than the 10 Hz at the beginning. The pulsating is generated by those rings of light now starting around the whole visual field and disappearing approximately in the center. They are generated at an ever higher frequency and lower intensity. At 2;2 they feed a last standing light with a radius between 2.5 and 3. It is darkest in the center, brightest at about $3/4$ of the radius and a bit darker towards the rim again."

This example also shows a very important point. At the time I was recording this I was under the influence of THC which I had smoked before entering the tank. In the tank I was using laughing gas in addition. And while using laughing gas you cannot report because you have it in your lungs, so you cannot talk. You need to hold it in memory and report afterwards. But what are you then reporting? You are already reporting a model of what you perceived before.
Having discussed the *minimal self*, *Samadhi*, the methods of experimenting and recording experiences in the isolation tank and a real example of such a recording, we should also briefly have a look at the *maximal self*, the union of all states. That is related to language, and I would say even more closely to science. On one hand, the development of arguments is comparable to biological evolution (Figure 3). The more elaborate they become, the more distinct they are. On the other hand, when we come from the central point of absolute inner personal truth and perambulate our loops, then the more loops we map the more the “space of arguments” as a whole can resemble the point of *Samadhi*. It can be seen as a droplet of water expanding on a surface with rising temperature. Our personal and collective knowledge extends into the unknown just like the water wets the surface beneath.

Ludwig Wittgenstein wrote in his Tractatus: “Not *how* the world is, is the mystical, but *that* it is.”

Even though I was talking above about states of mind commonly called “mystical” I personally do not consider any state as such by far as mystical as the one most astonishing invariant I have found in my long-lasting experimentation: the fact that I have always returned back into the same mortal body in the same absurd world as a human being, no matter where and for how long “I” was away – and no matter how estranged I sometimes was finding myself back “here”. For me, not *pure awareness* is the truly mystical, but the fact that there is *any awareness* in the first place.

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Experiential Observation: The Playful Challenges of Self-Experimentation

Mark Butler

This presentation is a discussion of participatory or, in my terms, experiential observation and its place in cultural science. This empirical method, predominately known from ethnography, intersects with aesthetic and ludological reflections. It is also an experimental technique of the self. In many instances cultural scientists already partake in this practice. This presentation is an argument to reflect on this process, make it explicit and hone the method.

Participatory Observation

Participatory observation is a method that Bronislaw Malinowsky elevated to the dominant paradigm of ethnology in “Argonauts of the Western Pacific”, a monograph he published in 1922 on the basis of four years of field work in the Trobriand Islands of New Guinea. The document brought developments that had been brewing since the end of the nineteenth century within ethnology to a head, namely criticisms of desk-based research, and called for a greater involvement of the researcher in the field of research. Since then, participatory observation has become the central method used for qualitative studies of the behaviour of social groups and their interactions. The idea being, that by participating in cultural activities, by becoming a part of the field, the researcher gains insights into meanings and connotations and is able to perceive a given culture as seen through the eyes of the participants.

In the following, I will not pursue the differences that social researchers make between the opposite poles of participatory and non-participatory, or open and hidden observation. Instead I would like to direct attention to what it means to participate in a field – the experiential dimension of this approach and the methodological challenges and opportunities it brings with it.

This approach, which I propose to call experiential observation to accent the characteristics I wish to focus on, has something deeply irritating for scientific inquiry. Modern epistemology perceives a danger in the personal involvement of a researcher in the scene that is being studied. There is an anxiety that the desired objectivity could be dominated, shaped and falsified by subjective experiences – the so called “pygmalion effect”. This scientific fear is also present in the strict division of the objects of study and the scientific subject.

There are other fields, besides ethnology, which do not have qualms about participation, introspection and individual insight. Aesthetics and play theory both use the scientific subject in his or her multisensory corporeality as a means of producing knowledge. In these fields, it is assumed that researchers have access to objective qualities that affect their subjective being and that the process of accessing these qualities is a source of scientific insight.

This, of course, does not necessarily happen. It is just as possible that the observer, exposed to an experience, will be swept away by the dazzling intensity of the situation at hand. Not every act of perception necessarily leads to increasing scientific clarity, and in the following, I will outline observational faculties and techniques that must be practiced and applied in order to gain insight.
Aesthetic Experience

The philosophical discipline of aesthetics, which dates back to Gottlieb Baumgarten’s “Aesthetica” from 1750 “is the science of sensory insight”. Baumgarten’s project was a cultivation of the senses in tandem with the arts. He wanted to establish a scientific discipline that securely guides the chaotic sensory impressions in the service of the higher faculty of reason. Contemporary developments in aesthetics have broadened the field to include phenomena that are found outside the cultural sphere of high art. The cultural scientist Hartmut Böhme, for example, goes back to the etymological root of the word: aisthesis, which connotes sensory perception per se in ancient Greek. He uses the term aisthesis to denote a captivated process of active perception.

The methodological approach of aesthetics, as formulated by Böhme, has parallels with and differences from participatory observation. On the one hand, both propose that the scientific subject is a unique and irreplaceable tool of research. By becoming a part of the field of inquiry and through contact with the object of research insights are gained that cannot be reached otherwise. On the other hand, aesthetics deals with situations in which the interaction is not primarily of a social nature but of a perceptual one. Social situations are aesthetic situations, but not all aesthetic situations are, in the everyday sense, social.

A solitary computer game, for example, doesn’t entail direct interaction between human and human, but between human and computer. One could of course say that the game program is a delegate of the designers, who interact with the player in a telepresent and asynchronous fashion, that the code manifests the power relations of contemporary capitalist society. However, this is not the way in which a game is generally perceived. The presence that the player experiences is the presence of the program, which is implemented in a Universal Turing Machine and its periphery devices: monitor, loudspeakers, controller or keyboard and mouse. I will come back to this example with a “thick” description of a computer game-playing situation in a moment.

The discipline of aesthetics has its own perils. Whereas social scientists worry about the falsification of social interactions by their participation in the field, the act of aisthesis is itself a challenge. The sphere of sensory perception, Böhme emphasizes, embodies a “continuous desire, an insatiable hunger, an unruly disquiet”. It knows and desires no guidance, an aspiration which is only formulated from the standpoint of the scientific subject, who is seeking clarity and stable order. At the same time, the “unruly disquiet” of the senses is also an opportunity for innovative scientific insight. The aesthetic is a sphere in which “the new, different and unexpected can be experienced”.

For Böhme, the method of aesthetics calls for a liminal position – a partial distance from the chaotic intensities of embodied being as well as from the certainty and clarity of theoretical coordinates. This characterisation places the experiential observer in the status of a medium. The

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1 Baumgarten, quoted in Böhme, Hartmut: “Einführung in die Ästhetik”. In: Paragrana vol. 4, issue 32, Berlin 1995, p. 240-254. Because this reference is from an online publication of this text, which is one long scrollable document without page breaks, there are no page numbers for the quotes. All of the English translations of this text and the following ones are mine.


3 Böhme: “Einführung in die Ästhetik.”

4 Ibid.
experiential observation, according to Böhme, encompasses an imaginary participation in the situation at hand as well as a deciphering interpretation of this situation. From an intermediary position, the researcher is experientially present in the field of study, and at the same time “peculiarly detached”.5

On the one hand, experiential observers are closer to what they are studying than with many other methods.6 This is why all insights are colored with subjectivity – something that is not a fundamental source of anxiety, but something to be reflected upon. On the other hand, the depth of involvement is shallow compared to that of non-scientific cultural participants and their everyday experience. The insights gained are parasitical, in the sense that they are always on the heels of actors who are fully engaged in a situation.

Böhme characterizes aesthetic phenomena as constituting themselves “in a fluid and integrative process of perception and reflexion, of knowledge and memory, of imagination and association, of felt atmospheres and analytical insights, of projective relinquishing and introjective internalizations”.7 He emphasizes that, on the one hand, aesthetic insight doesn’t know the hierarchies or censure that come with the primacy of theoretical or moral considerations. And he stresses, on the other hand, that the process of aesthetic perception isn’t chaotic or random. As a methodological approach, it requires rigorous practice and knowledge of aesthetic traditions and cultures.

Böhme points to a central faculty that must be trained in the pursuit of aesthetic insight, a technique of self for the experiential observer. He calls it “attention” and locates it in the aesthetic act: “Attention is the simultaneity or the permanent fluctuation between presence of mind and consciousness of sensory perception”.8 This ability is, according to Böhme, the most important skill that must be cultivated and practiced in the production and reception of aesthetic phenomena. He differentiates between the “aesthetic situation”, in which someone can be carried away by captivating perceptions and fascinating phenomena, and the discipline of “aesthetics”, which is the conscious reflection of this process. The methodological goal is to generate analytical insights within the aesthetic situation, have reflections emerge from an experience and highlight its facets, without completely dispelling the dazzling intensities that made it spellbinding in the first place.

**Media Enactment**

Karl Ludwig Pfeiffer, in *The Media and the Imaginary*, the outline of his cultural-anthropological media theory, voices a similar methodological challenge. He wants to capture the heated passions that are enacted in and with media through cool observation – in short, through experiential observation.9 Theory must stay close to the material, without “sacrificing the systematizing right

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5 Ibid.
6 Ibid.
7 Ibid.
8 Ibid.
9 Pfeiffer argues along the same lines as Böhme when he calls for an “aesthetics as theory, which must construct as concrete circumstances as possible, by extracting affective experiences from these circumstances through ‘logical’ procedures, which do not damage these experiences, or at least harm them as little as possible.” Pfeiffer, Karl Ludwig: “Das Mediale und das Imaginäre. Dimensionen kulturanthropologischer Medientheorie.” Frankfurt am Main 1999, p. 20.
of theory itself.”10 Theoretical reflection, and in this I follow Pfeiffer, “is only allowed to be the transformation, not the elimination of mental arousal”.11

Pfeiffer draws on Friedrich Nietzsche, who, according to him, was the first to formulate the need for a schism in scientific perspective. He quotes Nietzsche’s Human, all too Human, in which the latter characterizes the “higher culture” that he is calling for, as having “a double brain”, in which two complementary compartments reside. In one, “non-science” is active as an “energy source”. In the other, science takes on the necessary role of “regulator”.12 “One needs to heat with illusions, one-sidedness, passions” while the other one “must prevent the malicious and dangerous consequences of overheating”.13 This call for a dual perspective can be found throughout Nietzsche’s work.

Pfeiffer proclaims Jacques Lacan to be the most incisive twentieth-century heir to this Nietzschean double of enraptured passion and reflective distance. In this context he refers to the fundamental schism of the subject – “moi” the imaginary ego and “je” the unconscious subject – that Lacan describes in his model of the mirror stage.14 In this model, the real fragmentation of the body is primary and the psychic function of the ego, the site of conscious reflection, is secondary. The latter is installed through the identification with and internalization of an external image. Pfeiffer uses Lacan to formulate his media theory: “In order to take on distinct, concrete forms, the unconscious absorbs (especially aesthetic) images and enactments” from cultural media.15 The media that we live in and do our research in are not neutral, but saturated with libidinous investment. At their most intense, the enactments we partake of therein become evidentiary experiences.16 This makes the delineation between “real” and “virtual” or “fictional” irrelevant, for the researcher who is interested in the aesthetic experience of these enactments.

**Playful Experience**

In Böhme’s concept of aesthetics and in Pfeiffer’s media theory, the spheres of the subjective and the objective blur. Subjective experience and the objective characteristics of an aesthetic situation meet in the observer’s captivated perception of the observed. In this, both approaches exhibit a playful characteristic. In the enactments of play, boundaries that we have become habituated to in everyday life become porous and permeable. In this process the membrane of the self is not so much a border sharply separating self from other, subject from object, but is instead a liminal zone of “as well as”.17

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10 Ibid., p. 21.
11 Ibid.
13 Ibid.
15 Ibid., p. 60. And further: “The amorphous desire transforms itself into the forms, that are modulated by the inaccessible ‘Other’.”
16 Pfeiffer emphasises, that in media enactments “one is dealing primarily with intensities, not authenticity”. Ibid., p. 46.
In her book *I Have Never Yet Encountered Reason*, the cultural scientist and play theoretician Natascha Adamowsky argues for the scientific value of play. According to her, play has an analogous structure to scientific method: they are both “defining activities” and “scientific insight decidedly lives from open ludic forms and practices like the experiment, the project, the metaphor and the model.” According to her, serious scientific consideration of the knowledge-generating potential of play would bring opportunities and challenges. Among them: the primacy of the distanced observer would have to be given up, and procedures would have to be developed for engaging the non-identical.

Experiential observation encompasses a number of characteristics that can be called playful. I would like to outline briefly these qualities with the ludological categories of Roger Callois. First, the researcher opens him- or herself to the unknown of a sensory or social situation and lets serendipity play a part in the research process. This falls under what Callois’ calls “alea” or chance. This quality brings with it the challenge of not being overwhelmed by the richness of detail that the world has to offer. Second, the researcher’s goal of reconstructing an ordered set of insights and connecting this with the existing body of scientific literature predisposes him or her to an “agonal” or competitive stance. Experiential observers are in competition with their field, of which they themselves, their material and other researchers are a part. They are striving to gain new insights that will further their scientific careers. Third, in the process of experiential observation, researchers participate in “mimicry”. They are role-playing between the position of an actor in the field and a distanced observer, whether studying the culture of the Trobriand Island, immersing themselves in a computer game or partaking in scientific games of truth. Fourth, in this process researchers can become captivated by the experiences they expose themselves to, fascinated by new perceptions. This is the quality of “ilinx”, a vertigo that undermines theoretical assumptions and operating scientific orders. This process unfolds itself between the two opposing poles that Callois postulates for all four categories. On the one side, “ludus” – challenging rules – is found in the established scientific discourse that experiential observers must adhere to, if they want to be acknowledged by the scientific community. On the other side “paidia” – unruly fantasy – presents itself in the transgressive act of formulating new insights.

All of the lines that I have traced, whether ethnological, aesthetic or ludological, place high demands on the scientist. There are few, if any, scientific approaches that require a comparable degree of personal engagement on the part of the researcher. It is not an easy feat to be observer, instrument of observation and observed – subject, medium and object of research – at the same time.

In the following, I have picked an example from popular culture to demonstrate the practice of this method: the aesthetic situation of computer game-playing. To be precise: the experience that the action-adventure game “Call of Cthulhu – Dark Corners of the Earth” offers. The game is based on the literary cosmos of H. P. Lovecraft. It is played in the first person, from the so-called

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19 See ibid. p. 15.
ego perspective. The player slips into the role of the detective Jack Walters and is presented with a three-dimensional audio-visual-haptic space that he or she navigates with both hands on a force-feedback-enabled game-controller. What follows is an excerpt from my field diary.

The Researcher’s Fear of the Field

“The aesthetic experience of a computer game begins long before the Universal Turing Machine is even turned on. The first contact with a game is with the advertisements in magazines, on television, in the movie theater and on the Internet – or in the final instance, the package cover. This presentation of the game, distributed in different media, has to successfully address a potential player; otherwise no further interaction takes place.

In the case of my encounter with “Call of Cthluhu”, the siren song was successful. I had heard nothing about the game and while browsing through my local video store, on the look-out for an interesting example for this presentation, the cover captured my attention. My rudimentary knowledge of H. P. Lovecraft’s writing and the dark melancholic mood of the title-image – a golem-like figure, sunk within himself, portrayed in shades of grey-brown, accented by the weak light of a lone lantern – grabbed my attention. The description on the back of the package cemented my choice: “Experience the horror of H.P. Lovecraft (...) You don’t just have to keep Jack Walters alive, you must also keep him from going insane (...). Effects that mirror his actual mental state insure that you experience the horror in full, while you are unraveling the mysteries of the Forgotten Gods and find out why they are after you. (...) The dynamic system for displaying the mental state results in hallucinations, panic attacks, vertigo, paranoia and a good deal more!”

At home, I turn on my gaming system. In the case of some computer games, the “researcher’s fear of the field”, to quote the European ethnographer Rolf Lindner, is blatantly obvious. 22 The promise of the package is repeated at the beginning of the game: “WARNING – The following game contains scenes of a disturbing nature. To maximize your Cthulhu experience, please make sure that you use the options menu to adjust your brightness setting (some games are supposed to be played in the dark.). Cthulhu will occasionally manipulate graphics, sound and controls in an unusual way. This is perfectly normal, and it is unlikely to be either a problem with your game disc or your sanity.”

I adjust the lighting and turn the volume up. Through these parameters I can regulate the depth of my immersion into the virtual world. The game begins, as is customary, with a narrative animation sequence. I’m presented with a night shot of a sign, covered with raindrops: “Arkham Asylum”. The lens of the virtual camera is hit by drops and the view is blurred. The inside of an insane asylum appears: a long, shadow-filled hall, in which the tune from the phonograph sounds lost. In multiple shots a night watchman, a chair and an inmate appear. The latter gets on the chair and by the noise of his gurgling throat and his dangling feet, I know that he has hanged himself.

The first interactive sequence occurs six years in the past, on the rainy evening of the 6th of September, 1915. I arrive at a crime scene and learn that an enigmatic sect has barricaded itself in an old house. As the highest ranking officer, it is my job to go inside. I move my/Jack’s body with the left analogue stick, and my/Jack’s head with the right one. The further I push the stick, the faster the movement.

I move to the back door and sneak into the decaying house. I can’t see anybody, but a deep, hardly perceptible murmur flows through the dimly lit corridor, from which multiple doors lead. When I want to see something closer, I have to push the A button. Then I hear my thoughts to the particular object – whether it’s interesting, if my actions make sense and so on. Even when an object doesn’t offer any further interaction, it is often an important atmospheric element that adds an additional facet to the semantic fabric of the game.

After about ten minutes, I’m in. The different moods of the rooms affect my disposition. In the foyer, dark and mysterious music resounds and the depressing atmosphere of the minor chords immerses me in melancholy. Behind one of the doors there is a library. Upon entering I hear a tortured-ecstatic moaning from an unknown room. I search everything thoroughly, but can’t find access to the acoustic trace. (...) I continue to explore the library, and find a chamber, behind a bookshelf, that I hadn’t seen before, and move inside. Suddenly, a figure appears that is moving towards me at the same speed as I am moving forward!

After a short moment, I recognise my reflection in the mirror. As my adrenaline level slowly drops, I carefully walk up the stairs to the first floor. Ominous, unidentifiable sounds keep me in a state of tense attentiveness. At the end of a hallway, behind one of three closed doors, I can hear a coarse wheezing that could also be the snarling of a monstrous dog. The sound grinds away at my bones and my steadfastness. Ticklish shivers shoot through my body. I retreat from the door, not sure if I would open it if I could. In the meantime, my pulse draws attention to itself, through the vibrating controller in my hands and the throbbing in my ears. The dark corners of the rooms awaken the dread that any moment someone or something could assault me.

Just as I begin to relax in the monotony of the known, my vision begins to blur slightly. I ask myself if I have just imagined it, when the distortion increases and soft ripples contort the walls. The room is pulsating, as if it were alive and breathing, in a barely perceptible fashion. Something is in the house with me! I run through the rooms known to me, and scan every corner. I have no choice. The door through which I entered is locked. There has to be an escape. In the library I discover a trap door that I hadn’t noticed before. I rip it open and the groaning is revealed to be screaming. My heartbeat is trembling in my hands, ears and chest. I descend past steaming and
dripping pipes when the stairway collapses beneath me. I fall and briefly lose my orientation and land with a loud thud.

I’m afraid that I’ve hurt myself. (...) My breathing is heavy, I hear myself panting and gasping for air, my vision is losing focus at the edges and my movements are extremely cumbersome. I reach in my inventory and grab a morphine syringe that I carry with me as a pain reliever. After a short moment I rejoice over my regained dexterity. But the price of my quick fix is that my perceptual distortions have gotten worse. I see everything double and objects leave ghostly traces when I move my head. I also hear voices, a faint insectoid whispering gnawing at my sanity. In this miserable state, I search for a way out ...
After about two hours, the game exercises a noticeable pull. I relish the exploration of the foreign environment, and curiosity mixes itself with my fear. My capacity for physical movement has sunken considerably. I have postponed getting up to satisfy my hunger and thirst for a long time. It’s 3:30 in the morning, and I am very inclined to continue playing …”

**Cybernetic Spaces**

To play a computer game is to submerge oneself in virtual reality – sensory interaction with data structures. Between the light, sound and vibrational patterns that are generated by the code and the active perception as well as the imagination of the player, the *aisthesis* of computer game-playing unfolds. Computer and player become part of a continuum. The player internalizes the figure that is projected on the screen by the code. Through the contact surface of the interface, the electric states of transistors and nerves dance with each other in a cybernetic circuit. *Homo ludens* and universal machine meld in the enactment of a computer game.

In the case of “The Call of Cthulhu”, there are no numeric displays of the game figure’s status as is common in many other games. When Jack becomes increasingly unstable – because of disturbing events, sustained wounds or repeated morphine use – it is reflected in the entire sensory perception and motor dexterity of the player’s virtual embodiment. Then the *Forgotten Ones* from Lovecraft’s literary cosmos unfold their presence along all media channels of the virtual script.

The process of game-playing occurs along an axis of simultaneous de- and reembodiment. The psychosomatic presence of the player is in a visually dominated space. This is permeated by acoustic atmospheres and the vibrations of the controller in the dramatic unfolding of the game. All of these channels can trigger memories and associations as well as mobilize emotions and wishes. Libido flows through the circuits of the cybernetic embodiment. The interface is the relay in this process. It opens a zone of transition that makes the utopian possibilities of virtual reality
accessible. While the sensory and sensitive body participates in the experiences of the virtual-imaginary incarnation on the other side of the screen, it is neglected on this side. In the player’s concern for the virtual existence and its potentially endless reincarnations, hunger, thirst and the passing of time tend to be forgotten.

Figure 5: The cover of “The Sims 2”.

Game players always play a double role. They are simultaneously external observers and internal participants. According to the philosopher Sybille Krämer, virtual reality offers the sensory experience of a model that Immanuel Kant formulated from the standpoint of reason: the schism in “our relationship to the world, insofar as we are – irreducibly – external observers and intrinsic actors.” In contrast to Kant, who doesn’t attribute knowledge to the participatory perspective, Krämer proposes to take “virtual realities as an allegory” for the insight-generating potential of the participant’s point of view.23
What is gained by involved observation is the spectrum of affective colours, the richness of experience that the interaction with people, aesthetic situations and media can bring. It is the only approach that captures the full aesthetic dimension of experience. In addition to the masochistic mixture of fear and curiosity, anxiety and lust presented here, there are many other thrills that digital stimulations offer. Sadistic flavours, for example, which are not only implemented in gruesome blood sporting games like “Manhunt”, but can also be enacted in the oh-so-loveable world of “The Sims”. I quote a 23-year-old web designer, who explains his love for the game as follows: “We live such normal lives. The Sims gives us an opportunity to be psychotic, [...] I like bringing over a neighbor, inviting him over for a swim, taking away the ladder, and watching him drown.” Testimonies such as these gain a greater depth and intensity when animated by an experiential perspective. Other affective qualities that computer games evoke include concern, curiosity, adventurousness, courage, lightheartedness, zeal, megalomania, compulsive orderliness, claustrophobia and paranoia.

Self-Experimentation: The Technique of Estrangement

It is impractical to partake in a four-year field research à la Malinowksy. The half-life of knowledge in our rapid modern times makes this a non-option in many cases. The duration of field deployment has shortened, and when it comes to the study of our own Occidental culture – as taught at the Institute for European Ethnography here in Berlin – it must be reconceptualized completely. Here researchers are often already immersed in the culture they want to study and the methodological challenge resides more in the estrangement from what is taken for granted on an everyday level.

The ethnologist Karl Heinz Kohl characterizes the ethnological gaze as alienating as soon as it is applied to one’s own culture. Ethnology is, etymologically speaking, the science of the cultural other. “Relational estrangement”, according to Kohl, is one of the biggest discoveries of the discipline and a methodological principle. Computer gameplayers, for example, appear as travellers of the netherworld when compared to other cultural techniques that lead to out of body experiences - such as those practiced by shamans with hypnotic drums and psychedelic plants.

The challenge, according to Kohl, is to learn to perceive that which is generally considered one’s own and taken for granted as something foreign. This is a process of self-transformation.

Researchers who expose themselves to a field, as well as those who apply the method of estrangement to their own culture, are always taking part in a self-experiment. The entire process

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27 Kohl quotes Merleau-Ponty, who characterises ethnology as a discipline that is not defined by a special object, but by “a way of thinking, that imposes itself, when the object is an ‘other’ and demands a metamorphosis of our self.” Ibid., p. 96.
of research, including the practices of reading and writing, can be seen as a part of this undertaking. Intertwined with the field work is the literary task of translating diverse sensory experiences into scientific prose. Science is as much an aesthetic process as it is an aesthetic experience.  

The field book diary is not only a wonderful genre; it is also an indispensable tool for the experiential observer, an integral part of the technique of estrangement. By objectifying themselves in writing, experiential observers leave traces that they can later analyse and interpret from a more distanced position. Creating transcripts interwoven with the experienced situation – wherein the implicit, somatic knowledge is at its peak and the sensory apparatus is attuned to molecular dynamics of perception – is of utmost importance in capturing the fine nuances of experience.

The scientific process of experiential observation can be called a playful technique of the self, to use and modify a term of the late Michel Foucault. In the collection of essays and interviews *Humankind is an experiential animal*, Foucault explicitly states, that he writes books to change his way of thinking, to see phenomena in new, unusual ways. “I never think the exact same things, because my books are experiences to me, experiences in the full sense that can be attached to this expression. An experience is something out of which one emerges altered. (...) Every book changes that which I had thought when I finished the prior book. I am an experimenter and not a theoretician. (...) I write to transform myself”. This process is open, the experiential observer does not know what the outcome will be. Why else should one pursue such a strenuous undertaking as writing a book or giving a presentation.

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