



FLORIAN HECKER EXHIBITION TALK: ROBIN MACKAY
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HECKER: DE/NATURALISING THE EAR-BRAIN

nb. A further developed exploration of the argument outlined in these notes appears as 'These Broken Impressions' in the book to be published August 2010 by Museum für Moderne Kunst Frankfurt to accompany Hecker's show 'Event, Stream, Object'.

1. Philosopher Éric Alliez, in his *L'Oeil-Cerveau: Nouvelles Histoires de la Peinture Moderne* ((The Eye-Brain: New Histories of Modern Painting),¹ argues that painters such as Manet, Seurat and Gauguin participated in a project of 'non-discursive thought' that can be understood as turning around the notion of hallucination. Overcoming formal and symbolic conventions of the image, painters become concerned with *sensation*: colours are no longer qualities destined to support the stability of an image *form*, but active *forces* which put the canvas into a dynamic state of becoming and actively construct objects of sensation without formal representation. The painter begins to understand the work in terms of a psychophysiological connection between the eye and the brain, and proceeds to explore, intensify, manipulate and amplify the characteristics of this eye-brain circuit.

2. According to Alliez, these key modern painters engaged in an experimentation that partly draws on, and partly parallels, that of their scientist contemporaries, whose systematic and experimental study of the relation between physical phenomena and perception developed 'logics of sensation' – mathematical theories concerning the thresholds of sensation, the relation between sensations and their interaction. In the mid-nineteenth century the so-called psychophysics of scientists such as Fechner, Weber and Helmholtz presented such logics of sensation as decoupled from any consideration of the *source* of sensation.

3. Contemporary with the emergence of this psychophysics, we find the reinvention of the word 'hallucination' in its modern sense, in the context of a new psychiatric paradigm. Having been used since the sixteenth century to describe those who had visions or saw ghosts, 'hallucination' gained its current meaning with Jean Etienne Esquirol in 1837, in his *Des maladies mentales*.² Esquirol's fellow psychiatrist Brierre de Boismont followed this with the first full-length study of hallucination in 1845.³ Boismont insists that hallucination be depathologised and historicised, arguing that ultimately only 'experience may distinguish the differences'⁴ between hallucinations proper and the 'normal hallucinatory' aspect of much sensory experience.

4. The modern painter's non-discursive thinking, his programme of experimental hallucination, Alliez argues, finds philosophical determination in the work of Hyppolite Taine, who in his 1870 *De L'Intelligence* developed this notion of hallucination into the first principle of a philosophical theory of perception and knowledge.

¹ E. Alliez, *L'Oeil-Cerveau: Nouvelles Histoires de la Peinture Moderne* (Paris: Vrin, 2007).

² Paris: Baillière; English translation 'Mental Maladies: A Treatise on Insanity' trans. E. K. Hunt (Philadelphia: Lea and Blanchard, 1845).

³ Paris: Baillière; English Translation, *A History Of Dreams, Visions, Apparitions, Ecstasy, Magnetism, and Somnambulism* (Philadelphia: Lindsay and Blakiston, 1855).

⁴ *Ibid.*, 354.

5. Esquirol had been the first to introduce into psychiatry the idea that mental illness did not come from outside, but was an extravagant and unusual efflorescence of the normal mechanisms that exist in 'sane' minds. Boismont, likewise, had argued that hallucination is compatible with reason and exists in germ in all men. The modern sense of the word 'hallucination', then, implies a reappraisal of the relation between inner events and outer objects; and consequently, of the relation between sanity and pathology. The separation of a logic of *sensation* from a logic of *representation*, through the naturalisation of the mind, opens up this distinction. Surpassing in audacity both Esquirol and Boismont, Taine sees hallucination as *the* basic fact of mental life, and mental morbidity as consisting only in the failure of a certain limiting mechanism that retains hallucinatory perception in the service of coherent experience. Drawing the full conclusions of this principle, Taine writes that: 'external perception is a true hallucination'; 'external perception is an internal dream which proves to be in harmony with external things; and instead of calling hallucination a false external perception, we must call external perception a *true hallucination*'.⁵ Mental illness, where the presence of objects is not necessary for the production of sensation, demonstrates to us the truth of sensation *as* hallucination, and alerts us to the fact that the apparent simplicity and transparency of the act of perceiving objects is illusory; in fact, we must not confuse the internal event of sensation with external 'things', we must not see the perception of externals as a 'simple naked act of mind' but must pay attention to its active and synthetic character.

6. In a rather grotesque metaphor Taine likens the hallucinatory fecundity of the mind to a kind of obtuse mental energy, which if unchecked leads to hallucination, to the vital processes whereby, if we place the skinned paw of a rat under the skin on the side of another rat, it grows as if it was attached to its former owner.⁶

7. What is remarkable about Taine is that, for a French philosopher, he should be so very British. For in imagining this incontinent mental mechanism he is really only drawing the conclusions of the generation of philosophers from the preceding century, who we know as the empiricists: Locke, Berkeley, and in particular David Hume.

8. Now, empiricism begins with uncertainty: What is in doubt is the rationalist notion that the correspondence of thought to being is somehow vouchsafed. For the rationalist, the enemy of reason is error, and error can be corrected, since it is the natural state of the mind is to be oriented towards truth. And this because ultimately thought and being are expressions of the same divine regime of reason – thought is blessed with innate powers to grasp reality. Empiricism instead lays the groundwork for treating the mind as a set of mechanisms and tendencies produced by the same reality that they attempt to grasp; mechanisms which *can* be used to grasp that reality correctly, but which are not endowed with any *a priori* capability to do so.

9. Hume describes the mechanisms of the mind in terms of associations: we tend to associate together perceptions which have often occurred together in the past, and it is through this mechanism of association that our picture of the world is built up. But with this, Hume takes leave of any guarantee of correspondence between our perceptions and reality, and instead emphasises the need for vigilance against the extravagance to which these mechanisms are liable, warning that the mechanisms whereby sensation is gathered into an accurate account of reality are essentially no different to those which make it that, in fables and imaginings, 'nature ... is totally confounded, and nothing mention'd but winged horses, fiery dragons, and monstrous giants'.⁷ No sooner does Hume discover the principle of the imagination to be the *association* of impressions on the basis of resemblance, contiguity, or past conjunction, than he notes the extravagant tendencies of this principle to which we owe our coherent experience of the world. As Gilles Deleuze remarks of Hume, 'for the traditional concept of error he substitutes the concept of illusion or delirium ... We're not threatened by error. It's much worse: we're swimming in delirium.'⁸ It is this delirium, this extravagance of the mind, that prefigures the hallucinatory logic of Taine.

⁵ Taine, *On Intelligence*, 224.

⁶ Taine, *On Intelligence*, 222.

⁷ Hume, D. (1740) *Treatise of Human Nature*, Book 1 Part III Section III. *Of the Ideas of the Memory and Imagination*.

⁸ G. Deleuze, *Desert Islands and other Texts* (Semiotext(e), 2003), 165.

10. Immanuel Kant will continue to grapple with the cognitive faculties' tendency to extravagance. Hume had introduced the notion of faculties which must unite in the common goal of producing a unified experience of the world, but found himself powerless to legitimate the principles by which they achieve this. Kant indeed famously admitted that Hume thus alerted him to the pressing need to resecure the legitimacy of knowledge – who 'awoke him from his dogmatic slumbers'; But he was roused equally by the spiritualist Swedenborg, against whom he wrote his 1766 'Dreams of a Spirit-Seer', which opens with the warning: 'The realm of shades is the paradise of fantastical visionaries ...'. Kant's caution of vigilance against the tendencies of the faculties to project their energetic strivings into real objects is continuous from this text to his major critical works. Perhaps the movement between the dreams of a spirit seer and the vigilance of critical philosophy is the bridge between the traditional and modern valences of 'hallucination'; from a battle against phantasmagorical spectres, Kant moves to the attempt to supply corrective mechanisms to prevent the mind from taking its own 'foci imaginarii' as real. There would then be a sense in which the transformation of the notion of hallucination reflects the way in which the enlightenment's driving out of all ghosts and illusions from objective reality only drove them into the mind, making the latter a dangerous site of illusion, and giving rise to the modern fear of madness, along with the link between insanity and visionary artistic genius.

11. We can thus trace the emergence of what Alliez calls the eye-brain back to the empiricist insight that constitutive to the basic mechanisms of perception is a susceptibility to delirious usage. My suggestion, then, is that Hecker's work, as an interrogation of the *ear-brain*, can be placed in the same philosophical lineage. The work consists in a process of hallucination-experimentation similar to that which Alliez sees at work in modern painting; a process whereby the artist explores and intensifies sensation outside the creation of recognisable images or forms, exercising the sensory organs outside their organic function of representation.

12. The notion of de/naturalisation is important here: Hecker's work can only exist in the climate of a philosophical perspective that sees mind as subject to naturalised understanding, susceptible to having its logic of sensation isolated and, consequently, manipulated. But the *naturalisation* of the mechanisms of perception leads to a *denaturalisation* of the image: No longer subordinated to its organic role in the function of representation, the sensory organ becomes instead engaged in this loop of experimentation and hallucination; where there no longer seems anything 'natural' about the referential relation between auditory object and sound source. In Hecker's work, the notion of an *object* of hearing is problematised by an understanding of the mechanisms whereby we construct - or hallucinate - such objects from auditory sensation.

14. The question of a sonic object must be handled carefully. Of course, when we hear sounds, we tend to attribute them to some source. But sonic objects exist in advance of any such attribution. We can already describe a sound without having any idea of its source. Moreover, we already posit a sonic object when we speak of 'a' sound, since this implies that a series of changes in molecular pressure detected by the ear have been synthesised, and understood by the brain as belonging together, as forming a sonic object that can be understood as something external.

15. Understanding how this process works – bridging the gap between the purely mechanical, physical description of sound waves and our experience of a world of sonic objects independent of ourselves – is the task of the science of psychoacoustics - a problematic complex of physics, physiology, sensation, perception, cognition. Psychoacoustics is interesting as a science precisely because of this problematic status. And Hecker draws on psychoacoustics much as Alliez suggests the modern painters drew on the scientific logics of sensation available to them.

16. The synthesis of auditory information into objects takes place at many different stages: of course, there is information in the sound waves themselves, but these are subject to physiological mediation, the inner ear carries out complex transformation, limitation and selection of the waveform, which is then converted to neural stimulus. What psychoacoustical experimentation tends to aim at is a delimitation of the conditions of objecthood: it tells us under what conditions sound will be grouped together and understood as belonging to one object.

17. The hearer needs to answer a series of problems: how many sound sources? Are the discontinuities I hear breaks in one sound or the end of one and the beginning of another? Should multiple groups of sound be

understood as one complex sound, or several simpler ones? The ear-brain is a detective, trying to deduce (on the basis, no doubt, of rules refined by evolutionary adaptation – *not* supplied by a rationalist ‘harmony’ between perception and reality) – trying to deduce from the informational evidence how the clues fit together with no remainder.

18. Psychoacoustician Alfred Bregman’s work on Auditory Scene Analysis exemplifies this. Rather than talking about ‘objects’, Bregman talks about the way in which we perceive sound as belonging to ‘streams’ which persist through time; and his work explores the set of conditions under which this unification into streams takes place. Auditory Scene Analysis interrogates the way in which we decide which parts of the sensory stimulation partition the evidence into separate streams that tell us about ‘the same’ environmental source or event. Bregman’s experiments involve changing various parameters – separation in time or frequency, difference in timbre – in order to reveal the threshold where the perceptual allocation of some segment of the sound to one object rather than another takes place. What ASA aims at, therefore, is a ‘map’ of our allocation mechanisms. By varying different parameters we can get an ever more precise ‘map’ of this kind, telling us how events are segregated.⁹

19. Now, if we understand how the detective operates and what methods he has at his disposal, we can play with these mechanisms, place false evidence in his path. It is here that Hecker’s practice of hallucination-experimentation intervenes. *Auditory Scene (5 fold)* dramatises the process, in effect allowing us physically to explore this ‘map’ and its thresholds in physical space; as we change position, the auditory components assemble themselves into different groupings. In revealing to us that the mechanisms through which we perceive sound objects, it demonstrates to us how our construction of sound objects is, in Taine’s sense, hallucinatory.

20. In *2x3 Channel* this is even more clear, as, depending on the focus of attention, we are able to shift the priority of the sound objects. As the listener actively shifts the focus from one stream of sounds to another, they effectively transform the nature of the sonic objects.

21. And in *Untitled* the sound source shifts – the varying of the tone changes our localisation of it, whether it is emanating from the speaker or from the sound ‘mirror’. Hecker has explored this further in a piece at Evento (Bordeaux) in 2009 that used multiple ‘sound mirrors’, as does the new work ‘Event, Stream, Object’, to be shown at MMK Frankfurt in 2010.

22. This inculcation of uncertainty as to source corresponds to Taine’s theory of ‘antecedents’: In another grotesque example Taine describes a man who ‘sees, with eyes closed or open, the perfectly distinct head of a corpse three paces in front of him’ when in fact there is only an armchair ... Usually, this sensation has as its antecedents a certain molecular motion of the optic nerves, a certain impingement of luminous rays, lastly, the presence of the real head of a corpse. But it is usually only that these antecedents precede the sensation. If the sensation is produced in their absence, the affirmative perception will arise in their absence, and the man will see a corpse’s head which is not actually there ... the presence of the last intermediary is sufficient to cause the perception to arise; it matters little whether the antecedents exist or not ... their intermediary replaces them; it is equivalent to them’.¹⁰ Here Taine clearly identifies the operative insight of his contemporary painters, who sought for the first time to produce and reproduce *impressions* rather than to depict *forms*. *They seek to insert the canvas, not as a reproduction of the form of an object, but as a reproduction or indeed production of pure sensation, decoupled from its source and operating in a hallucinatory manner.*

23. Of course we could say that the entire history of electronic music answered to this description of a de/naturalisation of sound. And this indicates the role played by technological here too – as soon as we have loudspeakers, we have a dislocation of sound from its source etc. Electronic dance music is made entirely from phantom sonic objects, creating hallucinations of non-existent, even impossible, sound sources. We are so used to this that it does not seem remarkable. The collective laboratory of dance music has thoroughly explored these phantasmagorical auditory objects-without-sources; but (as demonstrated perfectly by the

⁹ Bregman, A. S., *Auditory Scene Analysis*. (Cambridge, MA: MIT Press, 1990),

¹⁰ Taine, *On Intelligence*, 220.

abrasively non-complementary nature of his live performances with Aphex Twin, more battles than collaborations) Hecker's practice refuses even these metastable, shifting, fluid objectalities.

24. In the crisis of aesthetics and of the image Alliez finds articulated in Taine's work, he describes the emergence of what he calls (in an 'inclusive disjunction') the 'image/non-image'. Likewise Hecker could be said to operate in sound/non-sound: it alerts us to the not-yet-sound; sensation before it is synthesised into a semantically-charged object belonging to the world; they offer us a portrait of the process of objectification, exposing its hallucinatory nature. In drawing on the naturalisation of the mechanisms of hearing, the sound object becomes denaturalised, so that we hear the world differently, inhabiting a world of sonic forces of which our selection is a 'constructive reduction'.

25. Finally one might detect an element of aesthetic futurism or utopianism here: if the naturalisation of perception leads to the freeing the sensory organ from its organic function, if the denaturalisation of the ear-brain disrupts the continual (re)creation of a unified world-experience, then we must say that we don't yet know what the ear-brain can do, what objects it can create, once thus freed from representation and set free into the delirium that is its element.