

VISUAL FRICTIONS

Seeing with special requirements: visual frictions during the everyday

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Abstract

The predominant approach in visual studies, explicitly focusing on how vision is socioculturally constructed, tends to neglect the physiological substrate for vision. Images, and our visual surroundings, are often considered from the premise that those dealing with them specifically see with average eyesight and that differences in seeing can be accounted for by cultural and ideological analyses. I set out to question this premise and the normalisation of vision it implies, by drawing on accounts of seeing by Conrad, a friend and colleague who sees with special requirements. His well-articulated verbal description of the requirements involved in his seeing makes it clear that our vision is tightly intertwined with visuality. Our visual surroundings are the way they are partially on account of the ability to see implied. As Conrad puts it, “they are designed for average eyesight.” I posit that the concept of activated affordances is useful for taking into account that vision is socially constructed, as suggested in important works in visual studies, and that physiological substrates for vision exhibit variation. I will focus particularly on how the designed environment becomes an area for Conrad in which visuality is lived out differently in accordance with how this eyesight happens to manifest itself. Conrad’s use of “social hacks” provides a case in point for discussing how Conrad activates affordances in unforeseen ways, in order to fulfil desires for socially meaningful action that does not reduce him to stereotypical behaviour when being treated as visually impaired. Maintaining that vision and visuality remain difficult to disentangle, I will argue that we all see with special requirements, even if we might not notice this. For studies of visuality, I suggest reflecting on presumed understandings of vision. The argument in textual form is complemented with a brief video that features an edited interview focusing on Conrad’s account of seeing with special requirements.



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It is supported with visualisations representing an attempt to render aspects of his seeing. Instead of purporting to visualise exactly how he sees, I intend the imagery to provoke reflection of seeing as a complex process, mediated via our ability to see and by the social construction of what to see.

Keywords: *affordances; activated affordances; visual culture; vision; visibility*

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A short film *Seeing with special requirements* by Asko Lehmuskallio.

<https://www.youtube.com/watch?v=9I7c8EHBkhQ&feature=youtu.be>

The dominant approach in visual studies, explicitly focusing on how vision is socially constructed, tends to neglect the physiological substrate for vision. Studies both of images and of our visual surroundings often proceed from an implicit premise that those dealing with them see with average eyesight and that differences in seeing can be accounted for by cultural and ideological analyses.

Here, I question this premise and the normalisation of vision implied, by drawing on accounts of seeing offered by Conrad, a friend and colleague who sees with special requirements. As his eloquent verbalisation of the requirements for seeing makes clear, our vision is closely intertwined with visibility.¹ In part, our visual surroundings are the way they are because of the ability to see implied. As Conrad puts it, “they are designed for average eyesight.”

In the discussion that follows, I will focus particularly on how the designed environment becomes an area where visibility is lived out differently depending on the kind of eyesight one happens to have. I wish to argue that we all see with special requirements, and that our requirements linked to seeing differ, depending on our physiological substrate for vision. When attending to designed environments, we situationally adapt to prescribed

ways of seeing that are culturally and ideologically formed. I suggest that the concept of activated affordances is helpful for taking into account both the physiological substrate for vision needed for seeing and the cultural and ideological formations that suggest which affordances get activated instead of others.²

The argument in textual form is complemented by a brief video that includes an edited interview focusing on an account of seeing with special requirements. The interview is supported with visualisations intended to render aspects of Conrad’s seeing. Instead of claiming to visualise exactly how Conrad sees, I use the imagery to stimulate reflection of seeing as a complex process, mediated via both our ability to see and the social construction of what to see.³

A PARADOX IN VISUAL STUDIES: THE NORMALISATION OF VISION

In a well-regarded preface to an edited work on vision and visibility, Hal Foster explains how scopic regimes seek to essentialise vision, naturalising and normalising a certain way to see. He maintains that although vision is based on physiological processes, it is also very much culturally and socially informed. Sight and its techniques intertwine in ways that make them difficult to disentangle, whereas vision and visibility remain woven together.⁴

Much of the important and influential work published in visual culture studies tends to focus on the latter, the social construction of practices related to vision and visibility, emphasising ways in which power structures, visual orders, scopic regimes, and various gazes direct our attention, our ways of looking, and the meanings that we give to what we see. In doing so, they situate observers, subjects, or bodies within nuanced patterns of power-laden and structured visual interactions.⁵

These studies explicitly work with the social construction of vision and constitute attempts

to uncover asymmetric power structures and to counter them. While doing so, much of this work takes implicitly a particular physiological substrate of vision for granted, although influential figures such as Foster or Mitchell warn against doing so.⁶ In many of these studies, pictures and the mental images they occasion are deemed so powerful because people can see them. Studies on visual culture seldom reflect from this perspective the premises behind their work; paradoxically, it seems that much of the work explicitly questioning a normalised visuality as socially constructed normalises the physiological substrate of vision.⁷

I suggest that the concept of *activated affordances* is useful for understanding the intertwinement of vision and visuality, of how bodies and their environments merge within seeing, helping to point both towards affordances as a relation needed for seeing in the first place and to their activation as a particular cultural form of attention and meaning-making.

James J. Gibson coined the term *affordance* to discuss the complementarity of animals and persons with their environments.⁸ Affordances, in Gibson's understanding, always describe *relations* between living beings and their particular environments, and these relations depend both on the living beings and on the environments in question. For example, a small mobile phone screen is perceivable, readable, and therefore usable for text messaging by those with sufficiently good eyesight (for perception and reading) and adequate motor skills (for texting) but not, for example, by many elderly individuals with poor eyesight. The latter can perceive the mobile phone's screen but, because of both poor eyesight and the limited screen size, cannot read it. The mobile phone does not afford them the same kinds of uses it affords others. Gibson's use of the notion of affordance is of assistance for pointing towards the relationality and variety of affordances, but he does not give culturally sensitive explanations addressing why some affordances are preferred over others.

For accounting for cultural contextualisations, it is useful to think of *activated affordances* if one wishes to comprehend the actual use of particular objects, and how their use is embedded in social meanings, as Gillian Rose has proposed in her work on everyday photography.⁹ The focus on the activation of affordances is useful for pointing to culturally meaningful ways of interacting in visual

environments. In Conrad's case, as will be shown later, there is, for example, an explicit activation of coarse-level visual features of friends and colleagues for purposes of identifying them (among these are hair type/style, colour of clothing, and ways of walking), because this kind of activation of affordances is socially meaningful. Being able to identify someone as an individual person is very much encouraged, at least in the so-called Western societies, and, for doing so, some affordances have to be activated rather than others. The affordances available depend, again, not only on the social construction of seeing but also, just as much, on the particular ways in which we are able to see.

Conrad's account of the visual frictions encountered in his everyday life is useful for a discussion on how the affordances activated depend both on socially meaningful action and on the physical opportunities for action available to each of us. Mitchell has importantly pointed out that "[i]t is not just that we see the way we do because we are social animals, but also that our social arrangements take the forms they do because we are seeing animals."¹⁰ Unfortunately for those seeing with special requirements, many social environments continue to be designed with average eyesight in mind.

SEEING WITH SPECIAL REQUIREMENTS

Conrad provides a good example for a discussion on this possible normalisation of vision and the way in which it rests on particular assumptions about visualities, especially regarding designed environments. Many do not necessarily recognise that Conrad is visually impaired, because he tends to act and talk in ways that do not distinguish him from most others. Although he wears thick eye-glasses, it is not clear to many people that he actually sees very differently than many others do. Whereas he is thus able to "blend in" in diverse situations, he does so by activating other affordances than most people with average eyesight do. Where this possibility is not available, he finds that many have a hard time even believing him to need help when he expresses this need.

I have many situations in which people don't really realize how much I see, because I have so many tricks, and I hack myself through life somehow. So a lot of times when I tell them

I am visually impaired, they sort of don't believe me, and that is a really big problem for me when I try to achieve accessibility or equal behavior, or something like that.¹¹

Conrad has created social hacks, particular activations of affordances that enable him to interact such that his special requirements in seeing are not that readily noticed. These social hacks provide him with a way of rendering his behaviour in front of others so that his actions are not constrained beforehand for reason of his vision. When acting as yet another person who sees as everyone else does, and thereby as someone who is able to navigate built environments and social situations as those with average eyesight do, Conrad allows himself to be drawn into situations that he might not enter if others made judgements in keeping with his impairments in vision.

Conrad would not differ from most other people if his visual system were more commonplace. His use of the concept of *seeing with special requirements* implies that all human beings have particular requirements for their sensory perception and action upon the environment, and that these requirements differ from person to person, just as Gibson suggests with the notion of affordance.

As the examples Conrad cites from his life experience make clear, many designed environments are geared towards those with average eyesight, disrupting their use by people with different visual systems. Even everyday utility articles and artefacts such as computers, houses, or cars are often designed for people with normalised, average vision. Conrad points out:

[I]f they would be just slightly changed in their designs to meet my requirements, I wouldn't have so many problems actually getting around in the world. If I use the term 'people with special requirements', it always implies that it's not my fault that I can't do this thing at the moment or can't operate this machine or that it takes much longer, but it's actually the fault of the design, because [the problematic element or item] wasn't designed for my requirements but was designed for someone else's requirements.

Here, vision and visuality intertwine in ways that show how a variety of designed environments rely on an assumption of average eyesight, a necessary condition for taking up a relation, an affordance, in the first place. Thus, designed artefacts are socially

constructed to fit the requirements of particular kinds of people.¹² Slight changes in designed environments could enable a better fit between Conrad's body and the material artefacts around him, but designed environments tend to be oriented towards normalised vision rather than allowing for other kinds of activations, such as Conrad's social hacks discussed below.¹³ Whereas, as Gibson suggests, these differences between individuals may vary significantly, too often there is the tendency to think in discreet binaries, such as normal and special, leading to design decisions that do not take variety into account.¹⁴ Acknowledging we all have special requirements in seeing is helpful for deconstructing this binary opposition.

FLUID BOUNDARIES OF THE BODY

We need a particular physiological substrate for vision if we are to act in environments designed for average eyesight.¹⁵ Perhaps, because of the need to adapt to these environments in order to participate in the diverse social interactions presented, devices that allow eyesight that is closer to average eyesight can be felt to be almost as necessary as parts of the body, as is the case with Conrad. Devices modifying our bodies can afford seeing and acting in environments designed for average eyesight: One's body has to be moulded if it is to fit these designed environments. Conrad makes this relation explicit by stating that "my glasses are not really an object for me; they are more a part of my body like an arm or something like that." His eyeglasses enable him to partake in meaningful social relations, to activate affordances he would not be able to activate without them.

The boundaries of his body are described as not neatly contained but, rather, fluid, such that some material artefacts can be felt to be, in essence, body parts, not that different from an arm or fingers, for example. This understanding provides an example suitable for advancing the thesis of relationality of affordances, particularly addressing how the designed environments we act upon might mould and modify both our bodies and our understandings of them. This fluidity of bodily boundaries becomes understandable when the role of our bodies as a medium for action is underscored, as done in theories of media put forth by John Durham Peters and Hans Belting, among others.¹⁶ Our bodies, once moulded, afford novel relations

to our environments, a novel fit, and this novel fit might be achieved through glasses, mobile phones, and/or other kinds of artefacts, effectively enabling the distribution and mediation of our selves.¹⁷

Action in environments designed for the requirements of average eyesight necessitates media that facilitate it. For some, the physical body itself provides a sufficient medium for doing so, being capable of adapting to the requirements of average eyesight in various environments; however, ever more people need specially fabricated eyewear in order to achieve fit with their environments. There is constant need for spectacles, contact lenses, and other media for being able to see in environments designed for average eyesight.

SOCIAL HACKS

Although Conrad's glasses feel more like a part of the body for him, he continues to see differently than those who by wearing spectacles approximate normal vision. When using eyeglasses, he must still rely on more prominent features of the people and objects he perceives, thereby explicitly activating affordances that he can rely upon in order to act in a socially meaningful way.

Normally, I can't recognise people by their face when they are decently far away, so I use a lot of rough features, like what their body structure looks like, what kind of hairstyle they have, and how they walk. I even try to remember what clothes they wear. It's easy to recognise people by how they walk, because a lot of people walk very distinctively. When they move their upper torso, or even how the body proportions are, how long the legs are and so forth. It all influences how people walk, so this makes it very easy for me to recognise people. [...] I'm very conscious about that.

Body movements, colour of clothing, and hairstyle become particularly important since they remain recognisable cues for Conrad. Although those with average eyesight too notice these aspects of those they interact with, this often remains implicit and has to be brought up directly before it is considered, as has been discussed with regard to habitus.¹⁸

This friction in fitting within designed environments and social situations whose assumptions rely on average eyesight calls particularly in unfamiliar situations for Conrad's so-called *social hacking*, a particular way of activating affordances, allowing

him to explore novel kinds of relations that enable him to circumvent his special requirements. In social hacking, Conrad activates other affordances than people with average eyesight do, with the intention to approximate a socially accepted behaviour that does not reveal his visual impairment.

When I go through the world, one technique that I use is that I always ask people a lot of things if I can't see it or get that information at the moment. So I would even ask indirectly whether something is going on in the street. If I don't see what's going on, I ask people what it is.

Ordering food at a restaurant might be such a situation. If it is Conrad's first time at the restaurant and its offerings are not known to him beforehand, Conrad has to rely on a variety of techniques that those with average eyesight do not need. Since he is often unable to read the menu, which where we met (in San Francisco's Bay Area) was often behind the counter, Conrad has to socially hack. Because he cannot identify what is on offer, he has to ask for recommendations, order what someone else is eating or has ordered, just point at some food, or ask about food for special diets (such as vegetarian food). These social hacks circumvent the problem that designed environments do not always afford him the same information that these environments do for those with average eyesight. Many of these social hacks might be used by those with average eyesight as well, but then for other reasons than not being able to read the menu behind the counter.

Also, computation devices allow Conrad to gather information about upcoming situations, helping him navigate in environments he cannot see. These devices allow Conrad to plan some of his actions in advance, so that he knows how to act in social situations that entail partial reliance on average eyesight. One of his situational social hacks is to look up the menu of a restaurant on that venue's Web site before going there, so that he knows what is available.

The role that these devices receive in Conrad's day-to-day life has become very intimate, since they help him to expand his experiences of the environment, affording him relations he might not engage in without them. As Conrad points out, these devices become a bit like friends, in that they facilitate his every day.

They help me a lot, I give an input and the machine replies. All of them actually have a name: my computer, my phone, my Kindle. I name them. They are active, they reply to what I say.

Whereas, for Conrad, eyeglasses feel like a part of the body, computation devices end up taking on social roles, since they are even more integral to the many social situations he can navigate with their aid. Both glasses and computation devices enable him to activate affordances in designed environments that otherwise do not fit his requirements.

CONCLUSIONS

Conrad's account of visual frictions in the course of his everyday life provides a case in point for considering how the physiological substrate for vision and the social construction of visibility are intertwined. The notion of activated affordances is helpful for stressing the relationality between these two with regard to the particular environments under discussion, by enabling particular attention to be paid to why some affordances are activated instead of others. Conrad's use of social hacking is a way to circumvent some of the restrictions he has for activating affordances in environments designed for those with average eyesight. In social hacking, Conrad seeks to activate other affordances in order to act in socially acceptable and meaningful ways, without having to take up the role of being visually impaired. Instead, he can act along with others taking other primary social roles, such as that of a student, an employee, or a young man, for example.

For studies in visual culture, this case provides examples for considering both the role of embodied practices and that of material environments for grasping vision and visibility. Presentation of this material in textual form and also as a multimedia narrative allows for the depiction of slightly different readings, which get experienced differently. In line with who the reader or viewer is, this text and the accompanying video afford different kinds of relations, and perhaps some of these might get activated in unforeseen ways.

With his eloquent descriptions of how he experiences his surroundings, Conrad reminds me of how we all deal with special requirements, all the time. Vision tests might prove that I see in a manner conforming to the ideals behind these tests, but the

test results say little about the variance in seeing that we all experience. Aching, sore eyes after a day at a monitor or when out in the wind; the eyelids closing when one is trying to remain awake; and the assault of brightness after a night in the dark woods all are ways of seeing that entail a need to adapt to designed environments if one wants to take up a relation with them, thus activating an affordance.

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Notes

1. See also Hal Foster, "Preface," in *Vision and Visuality*, ed. Hal Foster (Seattle, WA: Bay Press, 1988), ix–xiv.
2. The concept of activated affordances is developed by Gillian Rose in *Doing Family Photography. The Domestic, the Public and the Politics of Sentiment*, Kindle Edition (Surrey: Ashgate, 2010). I have found it useful also in Asko Lehmuskallio, *Pictorial Practices in a "Cam Era." Studying Non-Professional Camera Use* (Tampere: Tampere University Press, 2012).
3. William John Thomas Mitchell, "Showing Seeing: A Critique of Visual Culture," *Journal of Visual Culture* 1 (2002): 165–81.
4. Foster, "Preface".
5. For a range of examples, see Nicholas Mirzoeff, ed., *The Visual Culture Reader* (London: Routledge, 1998) or the discussions in Janne Seppänen, *The Power of the Gaze: An Introduction to Visual Literacy* (New York: Peter Lang, 2006).
6. See Foster, "Preface"; and Mitchell, "Showing seeing."
7. Important exceptions include Georgina Kleege, "Blindness and Visual Culture: An Eyewitness Account," *Journal of Visual Culture* 4 (2005): 179–90; Georgina Kleege, "Visible Braille/Invisible Blindness," *Journal of Visual Culture* 5 (2006): 209–18; and Gili Hammer, "Blind Women's Appearance Management. Negotiating Normalcy between Discipline and Pleasure," *Gender & Society* 26 (2012): 406–32.

8. James Jerome Gibson, "The Theory of Affordances," in *The Ecological Approach to Visual Perception*, ed. James Jerome Gibson (Hillsdale, NJ: Lawrence Erlbaum Associates, 1988), 127–43.
9. See Rose, *Doing Family Photography*; and Lehmuskallio, *Pictorial Practices in a "Cam Era."*
10. See Mitchell, "Showing Seeing," 171.
11. All quotes from Conrad are in the attached video, seeing with special requirements. This kind of blending in is discussed by Harold Garfinkel as passing. In contrast to his example of Agnes, Conrad does not seem to have a similar fear of disclosure, for him passing seems rather to facilitate a shift in focus of attention to other social aspects than those regarding his vision, see Harold Garfinkel, *Passing and the managed achievement of sex status in an "intersexed" person*, in *Studies in Ethnomethodology*, *ibid.* (Englewood Cliffs, NJ: Prentice-Hall, 1967), 116–85.
12. Heidi Rae Cooley discusses this "fit" in particular in "It's all about the Fit: The Hand, the Mobile Screenic Device and Tactile Vision," *Journal of Visual Culture* 3 (2004): 133–55. For a discussion again of social constructions of technology, see Wiebe E. Bijker, *Of Bicycles, Bakelites, and Bulbs. Toward a Theory of Sociotechnical Change* (Cambridge, MA: MIT Press, 1997).
13. Normal vision is a judgement made via tests of various kinds and thereby conforms to or is governed by a rule, as the post-classical Latin etymology of "normal" suggests (see the OED). A common way of deciding if vision is "normal" is assessment via measurement of visual acuity with the Snellen chart; see Peter Fells and Colin Blakemore, "blindness," in *The Oxford Companion to the Body*, eds. Colin Blakemore and Sheila Jennett (Online Version: Oxford University Press, 2003), <http://helios.uta.fi:2267/view/10.1093/acref/9780198524038.001.0001/acref-9780198524038-e-108?rskey=MhmfP5&result=12> (accessed March 15, 2015).
14. Kleege, "Visible Braille/Invisible Blindness."
15. For an introduction to perceptual visual psychology, see Robert Snowden, Peter Thompson and Tom Troscianko, *Basic Vision. An Introduction to Visual Perception* (Oxford: Oxford University Press, 2006).
16. See Hans Belting, *Bild-Anthropologie. Entwürfe für eine Bildwissenschaft* (Munich: Fink, 2001; Translated by Thomas Dunlap as *An Anthropology of Images. Picture, Medium, Body* (Princeton, NJ: Princeton University Press)) and John Durham Peters, *Speaking into the Air. A History of the Idea of Communication* (Chicago, IL: The University of Chicago Press, 1999).
17. Alfred Gell discusses such distributions as distributed selves; see Alfred Gell, *Art and Agency. An Anthropological Theory* (Oxford: Oxford University Press, 1998).
18. Marcel Mauss provides a classic discussion of the importance of techniques of the body and how these develop in relation to bodies' social and material environments. He coined the term "habitus" for these particular physical dispositions, and the term has become particularly influential for its role in Bourdieu's sociological theory. For Bourdieu, the material environment does not play the role it does in Mauss's rendering of the term. See Marcel Mauss, "Techniques of the Body," *Economy and Society* 2 (1973): 70–88.