DESIGN ETHNOGRAPHY AS A "DIRTY" PRACTICE

Design refers to something from which it has to differentiate itself, which is why Bruno Latour ascribed revolutionary power to the discipline: "to design is always to *redesign*. There is always something that exists first as a given, as an issue, as a problem." [1] Design always has points of reference in specific living environments, about which designers in many cases initially know very little. For this reason, conducting research is inherent in every design process. In design practice, research often leads to project-specific knowledge bases that remain tied to a person and also, perhaps, to the social environment that interacts with them. [2] Alain Findeli describes this as *Recherche für Design* ("research for design"), which has no memory. [3] It begins anew with every new project, and is barely accepted in the sciences. What's more, it is based on certain research practices whose methodologies are rarely reflected upon.

[1] Bruno Latour, "A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk)," keynote speech at *Networks of Design*, Design History Society Conference, Falmouth, Cornwall, September 3, 2008, 5, accessed July 15, 2019, http://bruno-latour.fr/sites/default/files/112-DESIGN-CORNWALL-GB.pdf.

[2] Claudia Mareis, "The 'Nature' of Design," in Entwerfen – Wissen – Produzieren: Design-forschung im Anwendungskontext, eds. Claudia Mareis, Gesche Joost and Kora Kimpel (Bielefeld: transcript, 2010), 125.

[3] Alain Findeli, "Die projektgeleitete Forschung: Eine Methode der Designforschung," in *Erstes Design Forschungssymposium*, ed. Swiss Design Network (Zürich: Swiss Design Network, 2004), 41f., accessed May 11, 2017, http://swissdesignnetwork.ch/src/publication/erstesdesignforschungssymposium-2004/ErstesDesignForschungssymposium_2004.pdf.

[4] Franz Schultheis, "Disziplinierung des Designs," in *Forschungslandschaften im Umfeld des Designs*, ed. Swiss Design Network (Zurich: Swiss Design Network, 2005), 68.

[5] Lucy Suchman, "Anthropological Relocations and the Limits of Design," *Annual Review of Anthropology* 40, no. 1 (2011): 3.

[6] Bazon Brock, "Objektwelt und die Möglichkeit des subjektiven Lebens: Begriff und Konzept des Sozio-Designs," in *Ästhetik als Vermittlung: Autobiografie eines Generalisten*, ed. Bazon Brock (Cologne: Dumont, 1977), 446.

[7] Jeanette Blomberg and Helena Karasti, "Ethnography: Positioning Ethnography within Participatory Design," in *International Handbook of Participatory Design*, eds. Jesper Simonsen and Toni Robertson (New York: Routledge, 2013), 87.

However, design also has to engage with methodological questions and establish its own methods, such as design ethnography, if it wants to create *compatible* knowledge. This interdisciplinary compatibility is necessary because designers *always* work at interfaces to other disciplines. Design is always situated in a heterogeneous field of disciplines that have an impact on it—such as social psychology, the technological sciences, sociology, behavioural economics, neurology or geriatric medicine. At the same time, design has an impact on other disciplines too—such as when it materialises

or adapts their findings, or translates them into specific systems or new contexts. A completely isolated design project is an impossibility.

Design needs a reflective approach to its methods so that it can "transform itself from an 'illegitimate art' to a legitimate field of scientific theory and research." ⟳ The anthropologist Lucy A. Suchman insists that design ought to find its own place, that it should "locate itself as one (albeit multiple) figure and practice of change." ⤳ The fact that it finds it difficult to do this also has historical reasons. Design emerged in the wake of industrialisation and was bound up with designing products that were afterwards produced in mass manufacture. The 1960s saw the emergence of the *Design Methods Movement* at a time when more and more theoretical and epistemological issues relating to design were being addressed. In the 1970s, Bazon Brock demanded the creation of "Socio-design" and an "expansion of the design concept" that should emancipate itself from the industrial production of goods and focus on designing ways of life, values and linguistic gestures. ⧉ At the same time, in Scandinavia, participatory research and design approaches were being established. ⧉ In the 1980s, "workplace studies" were founded at the Xerox Palo Alto Research Center in California, in which ethnomethodological approaches were applied to new technologies such as copy machines in working situations. ⧉ It was also in the 1980s that *user-centred design* emerged. At its core was the living environment of users and their "members' point of view," which design ethnographers approached by using methods such as on-the-spot observation, informal interviews and video recordings. The cultural sociologist Yana Milev criticised the fact that "the doggedly purposeful, functional view of design" ⧉ made an ideology of design as a progressive pacesetter for consumer goods, and instead demanded "anthropological and participatory design research." ⧉

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However heterogeneous these approaches might be—from the entrepreneurial and applied to the critical—they can nevertheless be assigned to a discussion that may be described as "design anthropology" ⧉ or—if it has a methodological focus—"design ethnography." ⧉ These approaches are notable in that here design is viewed from the perspective of cultural anthropology. Reality is not simply present here in an ontological sense, but is made, designed. Design ethnography is a method that describes and analyses this network of connotations.

Lucy A. Suchman, *Plans and Situated Actions: The Problem of Human-machine Communication* (Cambridge: Cambridge University Press, 1987).

Yana Milev, *Emergency Design: Anthropotechniken des Über/Lebens* (Berlin: Merve, 2011), 46. Milev, *Emergency Design*, 46

Alison J. Clarke, ed., *Design Anthropology: Object Cultures in Transition* (London: Bloomsbury, 2017); Wendy Gunn, Ton Otto and Rachel Charlotte Smith, eds., *Design Anthropology: Theory and Practice* (London: Bloomsbury, 2013); Yana Milev, ed., *D.A.: A Transdisciplinary Handbook of Design Anthropology* (Frankfurt a. M.: Peter Lang, 2013); Christine Miller, *Design + Anthropology: Converging Pathways in Anthropology and Design* (New York: Routledge, 2018); Sarah Pink, "Digital-Visual-Sensory-Design Anthropology: Ethnography, Imagination and Intervention," *Arts and Humanities in Higher Education* 13, no. 4 (2014): 412–427; Rachel Charlotte Smith et al., eds., *Design Anthropological Futures* (London: Bloomsbury, 2016).

Andrew Crabtree, Mark Roucefield and Peter Tolmie, *Doing Design Ethnography* (London: Springer, 2012); Galen Cranz, *Ethnography for Designers* (Milton Park: Routledge, 2016); Francis Müller, *Designethnografie: Methodologie und Praxisbeispiele* (Wiesbaden: Springer VS, 2018); Nicolas Nova, ed., *Beyond Design Ethnography: How Designers Practice Ethnographic Research* (Berlin: SHS, 2014); Tony Salvador, Genevieve Bell and Ken, "Design Ethnography," *Design Management Journal* 10, no. 4 (1999): 35–41. Herbert A. Simon, *The Sciences of the Artificial* (Cambridge, MA: MIT Press, 1996), 2. Mary Douglas and Baron Isherwood, *The World of Goods: Towards an Anthropology of Consumption* (New York: Penguin Books, 1978), 62.

In his book *The Sciences of the Artificial,* published in 1969, Herbert A. Simon showed how we live in an artificial, manmade world. We mostly move through spaces that have an artificial temperature of roughly 20 degrees Celsius, and we add or remove artificial moisture to/from the atmosphere. And if we breath in impure air, it's because we've produced it ourselves. The sacralisation of Nature—which is particularly prevalent in Switzerland—is a cultural construct that goes back to Jean-Jacques Rousseau and Johann Gottfried Herder. This Romantic understanding of Nature alters little about the fact that we use light switches and refrigerators, or that we wear clothes, cut our hair, groom our bodies and modify them (through specific diets, sport, laziness, stimulants etc.), ride bicycles, communicate using smartphones and use means of transport to travel to other cities. The British anthropologist Mary Douglas has pointed out that the things we consume and use in everyday life do not satisfy needs, but are symbolic carriers of meaning:

> "Instead of supposing that goods are primarily needed for subsistence plus competitive display, let us assume that they are needed for making visible and stable the categories of culture. It is standard ethnographic practice to assume that all material possessions carry social meanings and to concentrate a main part of cultural analysis upon their use as communicators."

Ethnography seeks to map out the processes with which people create these meanings. It investigates the "native's point of view," though it is not subjective perception to which it refers,

but instead the intersubjective conditioning that enables reality to be interpreted in a specific way. Ethnography posits that we put ourselves physically in other realities (except for online ethnographies ⟩⟩⟩) and thereby expose ourselves to the unforeseeable influences that come with them; ⟨⟨⟩ ethnography then documents this and interprets it. Here, it is "not primarily about new knowledge that is to be pursued teleologically, but about a reticular, ramified palpating of latent knowledge that is in part already extant, that cannot be seen or grasped directly, and which in the process of research is made newly accessible and is combined." ⟨⟨⟩⟩

In his article "From the World of Science to the World of Research?," Bruno Latour writes that "Science is certainty; research is uncertainty. Science is supposed to be cold, straight, and detached; research is warm, involving, and risky." ☀ If a research project is led from the start by hypotheses that do not change during the process itself, this can hinder immersion and exploration. ⟨⟨⟩⟩ Ethnography is genuinely risky. It means leaving your comfort zone, which can at times unsettle your own world view (and ought in fact to do just that). The sociologist of knowledge Anne Honer demands that ethnographers should be ready to let themselves be confused, to experience shocks and to factor out their own moral notions for a certain period of time. ⟨⟨⟩⟩ This can clearly be seen in the ethnographic research into

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Clifford Geertz, "'From the Native's Point of View': On the Nature of Anthropological Understanding," in *The Insider/Outsider Problem in the Study of Religion*, ed. Russell T. McCutcheon (London: Cassell, 1999), 50–63.

Robert V. Kozinets, *Netnography: The Essential Guide to Qualitative Social Media Research* (Los Angeles: Sage, 2019).

Erving Goffman, Erving, "On Fieldwork," *Journal of Contemporary Ethnography* 18 (1989): 125.

Erving Goffman, "On Fieldwork," *Journal of Contemporary Ethnography* 18, no. 2 (1989): 125.

Bruno Latour, "From the World of Science to the World of Research?," *Science* 280, no. 5361 (1998): 208, accessed August 29, 2019, http://science.sciencemag.org/content/280/5361/208.

Bronislaw Malinowski, *Argonauts of the Western Pacific* (London: George Routledge & Sons, 1932), 16f.

Anne Honer, "Lebensweltanalyse in der Ethnografie," in *Qualitative Forschung: Ein Handbuch*, eds. Uwe Flick, Ernst von Kardorff and Ines Steinke (Reinbek b. Hamburg: Rowohlt, 2008), 203.

Spanish bullfights by the social anthropologist Sarah Pink. ⚞ If she only idealised the bullfight or condemned it on moral grounds, then her perspective would be one-sided and she would find out little about the cultural grammar in which the bullfight is embedded. This is why Crabtree et al. emphasise the "professional indifference" ⚟ of design ethnography. Anyone who wants to colonise the living environment under study and to overwrite it with their own moral concepts is hardly likely to discover anything new. The expression "poverty of morality" would instead be applicable here. ⚟ Ethnographic research means taking implicit knowledge that is situated in the certainties and routines of a specific social living environment, and making it explicit; this requires empathy and sensitivity.

Keith M. Murphy and George E. Marcus have mapped out commonalities between ethnography in social research and design: (1) *Design and ethnography exist as product and process*, (2) *Design and ethnography are focused on research,* (3) *Design and ethnography are people-centred*, (4) *Design and ethnography are at the service of more than the thing itself* and (5) *Design and ethnography are reflexive*. ⚟ At the same time, differences come into play that are linked to the following characteristics of design: *Future-oriented, intervention and collaboration.* ⚟ Whereas ethnography in social research depends on long-term immersion in foreign living environments, design ethnographies often last a shorter space of time, for reasons relating to time and economics—hence, for example, the term "short-term ethnography." ⚟

Ethnography in the social sciences aims primarily to investigate "the naturalistic backstage areas of foreign groups" ⚟ that are not triggered by the researchers, whereas the interventions of design ethnography create "artificial" situations. ⚟ The "naturalistic" usage context of a new design object cannot be investigated empirically, because its placement in a living environment is already an intervention.

Disruptions have epistemological qualities—and this is crucial to design ethnography. They make something visible that remains hidden in our everyday world. A good example of this is our routine interaction with technology, which sneaks quietly into our

Keith M. Murphy and George E. Marcus, "Epilogue: Ethnography and Design, Ethnography in Design ... Ethnography by Design," in *Design Anthropology: Theory and Practice*, eds. Wendy Gunn, Ton Otto and Rachel Charlotte Smith (London: Bloomsbury, 2013), 257ff.

Ton Otto and Rachel Charlotte Smith, "Design Anthropology: A Distinct Style of Knowing," in *Design Anthropology: Theory and Practice*, eds. Wendy Gunn, Ton Otto and Rachel Charlotte Smith (London: Bloomsbury, 2013), 3f.

Sarah Pink and Jennie Morgan, "Short-Term Ethnography: Intense Routes to Knowing," *Symbolic Interaction* 36 (3) (2013): 351-361.

Michael Dellwing and Robert Prus, *Einführung in die interaktionistische Ethnografie: Soziologie im Außendienst* (Wiesbaden: VS Verlag für Sozialwissenschaften, 2012), 54ff.

Sarah Pink, *Visual Interventions: Applied Visual Anthropology* (New York: Berghahn Books, 2007);
Sarah Pink, *Doing Sensory Ethnography*, 2nd ed. (Los Angeles: Sage, 2015), 7.

Bruno Latour, *Die Hoffnung der Pandora: Untersuchungen zur Wirklichkeit der Wissenschaft* (Frankfurt a. M.: Suhrkamp Verlag, 2002), 223; Francis Müller, "Pluralizing Perspectives on Material Culture: An Essay on Design Ethnography and the World of Things," *DIS Journal* 4, no. 3 (2019): 45.

Humberto R. Maturana and Francisco J. Varela, *El árbol del conocimiento: Las bases biológicas del entendimiento humano* (Buenos Aires: Lumen, 2003), 13.

Christine Hegel, Luke Cantarella and George E. Marcus, *Ethnography by Design: Scenographic Experiments in Fieldwork* (London: Bloomsbury, 2019).

Joachim Halse and Laura Boffi, "Design Interventions as a Form of Inquiry," in *Design Anthropological Futures*, eds. Rachel Charlotte Smith et al. (London: Bloomsbury, 2016), 89.

everyday environment, but in fact alters it fundamentally. Smartphones, for example, have in the space of a decade—a relatively short space of time—brought about a drastic shift in how we communicate and interact, and how we behave in private and in public: in other words, how we live. Hardly anyone who owns a smartphone has any inkling as to how its technology actually functions. Nor is this necessary, either, because our knowledge of how to use it in everyday life is sufficient. It is only in a crisis—such as when either a specific app or the smartphone itself no longer functions—that its complexity, which is normally concealed by a smart interface, is revealed. It is only then that we concern ourselves with its inner workings, and a smartphone becomes a black box. In other words: a crisis makes blind spots visible. Such crises can be created by design interventions that give expression to design-specific modes of cognition. We can describe such interventions as experiments, though here we mean open-ended experiments, not experiments that are strictly scientific in nature and can be either verified or falsified. Joachim Halse and Laura Boffi write of "design interventions as a form of inquiry":

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> "In short, we propose that design interventions can be seen as a form of inquiry that is particularly relevant for investigating phenomena that are not very coherent, barely possible, almost unthinkable, and consistently under-specified because they are still in the process of being conceptually and physically articulated."

Design ethnography is thus a "dirty" practice in which passive observation and active intervention, recognition and design are interlinked. The duality of the two levels of research and design is an ideal-typical construct that does not exist in design-ethnographical practice. Design ethnography does not adhere to the usual approach of design research in which basics are initially investigated using empirical methods, in order for the resultant findings to be transferred into design in a second step. These processes take place on a continuous basis, and are enmeshed with each other. A design-ethnographic process is abductive. Abduction was introduced to the social sciences by Charles S. Pierce. It is a learning process that brings new knowledge through experience, not along any logically ordered path. Jo Reichertz emphasises how what is new can "flare up" as an idea: "[…] abduction is sensible and scientific as a form of inference, however it reaches to the sphere of deep insight and new knowledge." ⌾

Jo Reichertz, "Abduction: The Logic of Discovery in Grounded Theory," in *The Sage Handbook of Grounded Theory,* eds. Antony Bryant and Kathy Charmaz (Los Angeles: Sage, 2007), 216.

Paul Feyerabend, *Wider den Methodenzwang: Skizzen einer anarchistischen Erkenntnistheorie* (Frankfurt a. M.: Suhrkamp Verlag, 1976).

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In this sense, design ethnography follows the above-mentioned concept of research as defined by Bruno Latour, and differentiates itself from programmes with strictly scientific quality criteria, such as reliability and validity, which would in fact constrict design-specific modes of cognition. Design ethnography has the characteristics of an epistemological anarchism. ⌾ It can allow for serendipity, which is quite in contrast to the positivistic natural sciences, where this is also important—just think of LSD or Viagra—but is generally not disclosed. The constructivist dimension, which is inherent to both design ethnography and the positivistic sciences, is a similar case. Ethnography is constructivist *per se,* because ethnographic reports do not depict the world objectively, but reconstruct it according to certain narrative patterns. ⌾ The positivist sciences are constructivist too: the laboratory, measuring devices etc. are human-made constructs that embody a specific thinking style. ⌾ The objective knowledge gained by positivistic research is not unconditional, but is embedded in a specific culture of interpreting the world. However, in the positivistic sciences, this constructivist dimension is obscured by an ethos of objectivity.

Design ethnography can and should reveal this constructivist dimension. It is permitted to burst open conventions, explore boundaries and expand cognitive horizons. It can emancipate itself from the need for repeatability. Design ethnography can mean observing social situations passively in order to change them afterwards through interventions, then observing the results again, and so on. It is obvious that design ethnographers cannot leave Plato's cave and ascend to higher levels of cognisance. However, they have more opportunities to deal playfully with their data. This does not entail total randomness, but requires explication, reflection and discipline. The procedure involved is not linear, but iterative—it is "research through design." ⌧ Sarah Pink proposes cooking with participants as an ethnographic method: "The practice of eating food prepared by people with whom one is doing research (or preparing food with or for them) is an obvious way to participate in their everyday lives." ⌧

James Clifford and George E. Marcus, *Writing Culture: The Poetics and Politics of Ethnography* (Berkeley: University of California Press, 1986); Clifford Geertz, *Works and Lives: The Anthropologist as Author* (Stanford: Stanford University Press, 1988).

Ludwig Fleck, "To Look, to See, to Know," in *Cognition and Fact: Materials on Ludwig Fleck,* eds. Robert S. Cohen and Thomas Schnelle (Dordrecht: Springer, 1986), 147ff.

Findeli, "Die projektgeleitete Forschung," 44.

Pink, *Doing Sensory Ethnography,* 108.

Robert Prus, *Subcultural Mosaic and Intersubjective Realities: An Ethnographic Research Agenda for Pragmatizing the Social Sciences* (New York: State University of New York Press, 1997), 27ff.

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These processes ought to be mapped out in order to create a "mosaic" ⌧ of the living environment to be investigated, and "grounded theory" is ideally suited for this. ⌧ Precisely because it allows a lot of freedom in the research process, it is a very demanding method—it would be much easier to create bar charts with a few numbers in order to connote scholarliness. Grounded theory does not lead through the research process in a linear way, but repeatedly makes one aware just how contingent the data is. One of its co-founders, Barney

Glaser, says that grounded theory is only suitable for people who are tolerant of uncertainty. ⧉ One important element of grounded theory is making memos. This involves writing down associative questions and speculative thoughts. Memos are like post-it labels. "Memos are preliminary, partial and correctable." ⧉

Micro-sociological grounded theory is generally based on the analysis of texts. In concrete terms, this procedure consists of coding texts or marking significant concepts in them, though the selection criteria are semantic, not syntactical in nature. The coding refers to meanings, not formal units such as a word or a sentence. Quantity is definitely not the important thing here. Categories—overarching themes—are created, based on the codes that have been marked.

However, the context of design ethnography generally not only produces linguistic data but also, for example, sketches, photos, films or artefacts. Sarah Pink proposes that visual data should not be analysed separately from texts, but that we should, rather, seek cross-connections between them:

"[…] it involves making meaningful links between different research experiences and materials such as photography, video, field diaries, more formal ethnographic writing, participant produced or other relevant written or visual texts and other objects. These different media represent different types of knowledge and ways of knowing that may be understood in relation to one another." ⧉

This is not done after gathering the data, but continuously, throughout the process. The links between the data mentioned by Pink can probably be realised in most cases by means of keywords—in other words, using language. Design ethnography can thus not get by without language. Only language enables us to make explicit its ramified paths and experimental and explorative methods, and thereby to make potential links to other disciplines accessible.

Ultimately, every investigation also produces language at some point—at the very latest, at the time of discussing the data together. An interpretation of an image, for example, only becomes communicative and intersubjectively accessible when it is carried out in language ⧉—and it is the same with designed things, interventions, sys-

tems etc. Language means creating a distance to oneself, which is a genuinely reflective process. ⌨ We depersonalise and abstract intra-subjective thoughts when we verbalise them—and by so doing, we make them intersubjectively accessible to others, thereby enabling (potential) further communication, adaptation and transformation. The potential of "dirty" design ethnography, which is not (nor can be) a closed-off method, lies in swift changes from images to words and from words to sketches, a process that is continually being articulated and reflected upon. Language creates points of departure for our imagination and new design potential—precisely because it is also a process of abstraction. Design ethnographers exist in an interplay between closeness and distance and in a role-change between researching and designing, between passive observation and active intervention. They break down reality as it reveals itself to us aesthetically and seek microscopic meanings which can, in turn, be transferred to interventions. This analytical engagement with the data—as grounded theory clearly shows—thereby offers creative, while design offers "epistemic," momenta.

Findeli, "Die projektgeleitete Forschung," 45.

Barney G. Glaser, "The Future of Grounded Theory," *The Grounded Theory Review 9*, no. 2 (2010): 4, accessed September 9, 2019, http://groundedtheoryreview.com/wp-content/uploads/2012/06/GT-Review-vol-9-no-21.pdf.

Kathy Charmaz and Richard G. Mitchell, "Grounded Theory in Ethnography," in *Handbook of Ethnography*, eds. Paul Atkinson et al. (Los Angeles: Sage, 2009), 167.

Pink, *Doing Visual Ethnography*, 144.

Angelika Poferl and Rainer Keller, "Die Wahrheit der Bilder," in *Fotografie und Gesellschaft: Phänomenologische und wissenssoziologische Perspektiven*, ed. Thomas S. Eberle (Bielefeld: transcript, 2017), 314.

George H. Mead, *Mind, Self & Society* (Chicago, IL: University of Chicago Press, 2015).

DISRUPTIONS HAVE EPI-STEMOLOGICAL QUALITIES