

JULIEN MCHARDY AND KAT JUNGNICKEL

Since Foucault (1978) we are used to thinking about the apparatus of knowledge production. But what does it look like if we take this literally and think of enquiries as machines with particular materialities and capabilities? What are the socio-technical mechanics of an enquiry? On what materials does it operate, and what kinds of stories can it make? This chapter explores the making and use of *enquiry machines* (EMs), an interdisciplinary collaboration in which we made a series of, sometimes annoyingly, interactive machines to explore socio-cultural topics. We use the EM project as a way to make explicit and experiment with the materiality of knowledge production and transmission.

Foucault, used here as a stand-in for much that has been written on materiality before and after the death of the author, conceptualized enquiries as machines. The notion that “power-knowledge” is gained, transmitted, and transformed in material-semiotic apparatuses is a core insight of STS, but while calls to engage with materiality beyond written discourse are increasingly sophisticated, materiality is still mostly considered the object of study. Machinic metaphors are frequently employed to grant materiality agency, yet

such metaphors tend to displace into sanitized academic discourse the potential of things to mess with abstractions, the excitability of bodies, and the multiplicity of practices.

Our shared background in design and art practice as well as training in sociology might explain our frustration with calls for an engagement with materiality that are fully contained within written academic discourse and conventions. The potential value of considering analytical work as a material practice has been demonstrated sufficiently, the question that remains—how this is to be done—is one that needs to be practiced. While we are drawn to the analytical potential of making things and frustrated with the employment of materiality as metaphor alone, we are equally skeptical of the fetishization of materiality common to design and innovation industries and research. This volume, as we understand it, assumes that thinking is a material practice. Consequently, it gathers experiments in thinking with, not just about, things. As one of these experiments, our contribution asks what it takes to render the notion of material-semiotic apparatuses literally, not as another readily employed tool in the analytical arsenal.

For the purposes of this enquiry, we approached the question of how making things can help us to make sense of things with an angle grinder (Jungnickel 2018b). A keyboard is no less material than a power tool, but it matters that the motor of the latter kicks back a lot more assertively than your butterfly keys. While an angle grinder might not offer the subtlest mode of dissection, we recommend it to anyone intent on engaging materiality beyond metaphor, analytically or otherwise. Its spinning diamond-coated disc made quick work of thin bicycle tubing, in the backyard of an inner-city that doubled as our temporary workshop for the construction of Enquiry Machine 1 (EM1) during the summer of 2010.¹ At first the glowing tail of screaming sparks lent our operation a feeling of immediacy. Then the yard was scattered with cut pieces, no less romantic and just as daunting as the curtailed ambitions, rubbish fragments, and problematic paragraphs that litter text documents in times of assembly. As with cowering, differing skills, ideas, and energy levels come to the fore while others emerge more slowly or have to be brought in, propped up, or outoured. Our mutual eagerness to cut and dismantle materials initially mapped on to a shared inability to affix the burgeoning array of discrete parts. Our ideas may have eclipsed some technical proficiency, but this did not constrain the outcome. The plasma arc laid on the connecting bicycle tubing by an expert in an adjacent welding shop helped to stabilize its form and function as a reflexive interview machine. What we were building, much as in writing, became clearer over a month of returning to the backyard, in the wee hours when even London office workers abandon their screens. This analytical incubation, involving cuts and conversations, trials and recombinations, led to EM1.

EM1 TRAVELS

EM1 was performed at the European Association of Science and Technology Studies (EASST) in Trento (2011) and in various locations around London, from Enquiry Open Days to intersections in Dalston and innovation labs. Enquiry machines featured in several workshops, for example, at the Society for Social Studies of Science (4S) annual conference at the Copenhagen Business School (2012), and at various hackdays at Goldsmiths, London’s Makeriversity (2015), the Critical Wearables Lab at University of the Arts London (2015), and the Digital Cultures Research Lab at Leuphana University (2016), where participants prototyped enquiry machines to practice and explore their research questions.

The project expanded further and its central proposition, to think about things through things, has been applied to other projects and sites. EM2, the Serendipity Engine, was a collaboration between Jungnickel and Aleks Krotoski in response to a claim by Google that the search engine was serendipitous.² Consisting of a series of bicycle-powered arduino-connected suitcases, this machine critically explores attempts to operationalize serendipity in search functions where the term gains currency as the limits and repetitions of search algorithms become apparent. EM2 was performed at the Royal Institution of Great Britain during a specially curated event exploring connections. Krotoski demonstrated further iterations of it at a Google Zeitgeist conference and produced a Radio 4 program featuring the machine (Krotoski 2013). In 2014, EM3, Battery-Operated Wind-Up Merchant, was an interdisciplinary

collaboration between sociologists, designers, and computer scientists at the Leibniz Centre for Informatics at Schloss Dagstuhl, Germany.³ Taking the form of a chataleine, EM3 is a piece of wearable technology that enquires into socio-cultural and political aspects of failure. Finally, EM4, The Decey Organ, a Public- and Problem-Making Machine, was a ProtoPublics, ProtoDesign code-sign experiment that set out to prototype ways of making problems and publics. Funded by the British Arts and Humanities Research Council (AHRC), it was performed at Glasgow’s Imagination Festival in 2015.

Along the way, EMs pass and continue to pass through different iterations. From impulse to weird pastime, from provisional assembly of discarded bike parts to welded structure, from the x-ray made by French border police at their end of the Eurotunnel to still and moving image documentation, from textual description to 3D and 2D renderings. Schlepping the machine through London on the bus, then train, past vigilant security eyes, to Italy is a character-building, sweaty affair, quite different from later shaping an argument on paper or relating the imperfections of the improvised contraption in the blue glow of computer-aided design programs. Extruding, cutting, delimiting and moving lines in Cartesian space, or Boolean joining freely downloadable xml bike parts differs significantly from sinking an angle grinder into old tubing in the shadow of the overground. In text and drawings, in Skype conversations and scribbles on paper, EM1 was made and made again, and the machine continues to iterate, beyond the intent of the operators. It went missing from a college office storage unit sometime after 2012, when it was presumably mistaken for rubbish and thrown away.

EM1

EM1 is an interview machine that seeks to explore what Les Back has called “taken-for-granted norms of sociological craft” (2012, 246). Interview authority is tied to an extensively tried and tested past, its adaptability to varied contexts, and the richness and the lure of immediacy of the data generated. Interviewing techniques are taken for granted to the point that they become invisible. As for many qualitative researchers, interviewing has been a primary mode of knowledge production for Back over the years. When his recording device finally stopped working, it gave him pause to examine this normative practice and question how the “habitual nature of our research practice has obscured serious attention to the precise nature of the devices used by social scientists” (246). Paying attention to moments when the wheels stop spinning, as Back has done, is an established method for making the mundane visible for analysis (Star 1999; Michael 2000; Latour 2005). Paying attention to knowledge apparatuses in practice is another. We read the broken recorder as a machine of enquiry into the sociomaterial relationships, physical demands, skilled practice, and infrastructures that enable and sustain interviewing. Following the later rule, EM1 is designed to render visible the politics, labor, and networks of humans and nonhumans embedded in interview practice.

An interview goes well when it flows, that is, when the practice of interviewing seemingly becomes invisible. EM1 by contrast is designed to reflexively exercise interviewing, which makes it an awkward machine.⁴ Interviewer and interviewee are seated on opposing

ends of the device (1 and 2 in figure 3.1) and engaged in a stationary pedaling exercise. Shared power transmission moves the conversion along by way of turning cogs (3) and pages (4). The required balancing of the body-discourse-machine in motion leads to a precarious shared intimacy (5). Successful operation is indicated by the lit status light (6) and the emergence of a shared interviewer/ee intersubjectivity that affects and shifts what can be said (7). EM1 is simultaneously about the mechanics of conversation and the conversation of mechanics. Yet, like other conversational machines of enquiry, such as barbershops, restaurant tables, bistro bars, lovers’ hideouts, torture chambers, lecture halls, psychiatrist couches, interrogation rooms, grandma’s chair, parliamentary enquiries, or cruising cars, EM1 makes some subjects and some expressive registers possible and not others.

What is unusual about EM1 is that failure to verbally and physically converse leads to the disintegration of the interview machine. This makes disintegration available as a practical category of analysis. Disintegration commonly begins with a transmission disruption, followed by the unintentional debarcation of human (8) and non-human parts (9), which in turn force ejects the remaining operator, who suddenly reindividualized cannot maintain equilibrium alone (10). The interdependence of bodies, materials, and techniques imposed by the machine shift the material-semiotic relations at play in interviewing. The possibility of disintegration leads to a heightened practical reflexivity, frequently articulated as laughter and embarrassment. EM1’s primary function, in summary, applies the sociomachinic character common to enquiries to interviewing. If you want different stories, try different machines.⁵

OF MACHINIC POETICS

What is it that enquiry machines do? So far, we have claimed that they do not transmit but transform power-knowledge, but how? And what is the role of materiality? Several recent publications in the area of STS argue that after the material turn, all enquiries have to be considered apparatuses of knowledge production. Knowledge objects, claims, and methods, in other words, are established in material practice. So what sets machines of enquiry apart from any other apparatus of knowledge production? “Inventive methods” (Lury and Wakeford 2012) take the notion that methods enact realities to its conclusion, namely that methods partake in the invention of the social. If we take seriously the statement that social scientific methods partake in the invention of the social, then they are not different in kind from artistic and literary methods that are more explicitly involved in the invention of social worlds.

An interesting question that these methodological advancements raise is, if inventing creates a social relationship, then where is that relationship beyond the moment of research? Or, more simply, is a method inventive if it doesn’t creatively engage a public? This collection hinges on the idea that the moment of invention and dissemination are not separate. Celia Lury and Nina Wakeford have argued that while methods are not “different or external to the problem,” an inventive method “should not leave that problem untouched” (2012, 3). Similarly, we consider the knowledge transmissions facilitated by EMs as complicated, integral, and dynamic parts of the research process. They act as public-making tools that continue to generate data

beyond the moment of research. Adding to Lury and Wakeford’s point, that methods touch their problems, we argue that this implies that research methods cannot be conceptualized apart from the ways in which work is thought to travel during and after the moment of research.

In design, the idea to use material interventions as part of research is established through methods of prototyping, for example (Suchman, Trigg, and Blomberg 2002, 166). Prototypes are deliberately kept unstable to make the process of the invention of the social available for interventions. In design research, materiality is most explicitly employed in the work on cultural probes and the consequent work on speculative design to articulate the idea being that probes of uncertain function help to inscribed desires, dispositions, or potential future applications. Work in this line tends to hold on to the notion of an “object” that is given to or inserted in a situation to elicit speculation about its possible use. Oversimplifying polemically, we note that social scientific work around inventive methods tends to offer a refined analysis of the need to engage with materiality, stopping short of moving from reflexivity to practice, while work around speculative design (Dunne and Raby 2013) remains committed to the notion of objects that precede and supersede analysis. Although both lines of work are committed to emergence, social scientific descriptions of material practice tend toward a romanticizing fetishism of material practice (our evocation of diamond-coated grinder discs throwing up sparks in grimy backyards is exemplary here), while design research tends to hold on to a fetish of the (designed) object. Neither answer the question of how enquiry machines work.

Kinetic art offers an established tradition of making machines to think about things that can offer a way out of the fetishization of

Every iteration irritates. EMs are not immutable mobiles. They do not fit conventional academic knowledge forms. They cannot be emailed. They make travel hard. They are difficult to get onto buses and trains. They attract attention at borders. Operating EMs is complicated and never the same. They require emotional, physical, and affective forms of labor. Using and transporting them can be embarrassing. They fatter and sometimes fail. An EM1 operator might lose concentration and pedal out of sync. A pedal might fall off and require reattachment. The mechanics of conversation might detach from the conversation of mechanics. They may not always do what is expected, but they always “work” in some way.⁶

Every iteration requires work, every transition a remaking, every translation a new machine, every format formatting different relations. Formats allow the formulation of some arguments and not others. E. J. Holtrop (2017) invites us to ask things twice in her study of evaluation reports. This is an invitation to move between formats to render multiple formattings and the shifts between them productive for analysis. Moving from one format to another, in her analysis, is a process of transforming that brings formats into productive friction, and in these frictions possibilities for analysis and practice arise. Drawing on her term *transforming*, we suggest that all transmissions reformat their objects. Enquiry machines, like all machines of enquiry, transform power-knowledge from one format to another. What is peculiar about enquiry machines is that they render the process of transforming visible, making it available for analysis.

The Enquiry Machine Project is set against a background of similar interests in instruments that tell new and different stories. Thus, it is in conversation with companion work such as that on live (Back

practice and of objects. One of the best known series of works by the artist Jean Tinguely, who helped to establish kinetic art in the mid-1950s, are his *Méta-Matic* machines that, through rotation, vibrating cogs, and wheels, make art, that is, abstract drawings. One of these drawing machines, *Le Cyclographe*, is mainly made from discarded bike parts and bears more than a passing resemblance to EM1.

Can we think of Tinguely’s machines as machines of enquiry? For Tinguely, what sets his artistic machines apart from engineered machines is that their technical organization is not geared toward not readily reduced to utility. As meta-machines, the precarious contraptions enquired into the conditions of abstract art and our relationship with machines among other things (See Cabafas and von Herrmann 2016). If we follow Tinguely’s intuition that they act as poetic instruments, we have to ask where we can locate their poetic potential, for it too must reside in material practice.

The philosopher Giorgio Agamben offers promising starting points in *The End of the Poem* (1999), which locates poetry in a particular textual institution. For Agamben, poetic potential arises when the line breaks, in moments of enjambment, when the flow of meaning is disturbed and the habitually assumed unity of syntax and semantics is broken. Enjambment, when the semantic order is disrupted by the layout of text, is where Agamben locates poetic possibility. For him then, poetry is achieved in particular material relations that, by enacting divergent orderings, break open the unity of syntax and semantics.

Poetry in this reading is a material-semiotic format that institutionalizes the disruption at the end of the line, when rhythm hits line break, as a productive moment. The cut is not an end of relations but

and Puar 2012) and inventive methods (Lury and Wakeford 2012), speculative design (Dunne and Raby 2013), speculative frictions, and critical fabulations (Forlano and Matthew 2014; Forlano et al. 2014; Rosner 2018). Since we built the EM1 in 2010, enquiry machines have continued to inform, challenge and change our (and others’) research practice. The irritations that EM1 cause remain active in our work, and this potential to disrupt knowledge practices is central to the machinic poetics of enquiry machines. Kat’s sociological sewing studio, which produces wearable artifacts from patents lodged by Victorian women as a way of engaging with the archive and cycling’s history (Jungnickel 2018a), Julien’s curatorial work, which explores the traffic between digital technologies and imaginaries (McHardy 2018), and this book, which can be understood as a collection of enquiry machines, demonstrates the ongoing irritations caused by EM1.

a moment where the relations that are introduced by the poem (between words, ideas, rhythms, syntax, form) are thrown into relief, allowing us to associate anew. Transmission, in poetry, is not fluid but dependent on the encounter of precise formulations (stops) and enjambments (overflows). A stoppage machine. Transforming Agamben’s theory of poetry to enquiry machines, we note that enquiry machines function as poetic machines, when they disrupt and thus make available for analysis different formats and orderings.

To identify enjambments in machinic practice, we need to be more precise about what enjambments could mean when transformed from the analysis of text to that of machinic practice. Agamben locates poetics in material arrangements that cause a disruption of material-semiotic unity. Enjambments, in his analysis, lead to such disruption. The philosopher of STS Helen Verran (1999) speaks of bodily disorientation to mark moments when the transforming of knowledge apparatuses becomes apparent enough that it disrupts our sense making, moments marked by uneasiness, fear, laughter, and sometimes poetics. Similar to enjambments, the notion of ontological disruption aims to make productive the moment of tripping, over the edge of the line, or the analytical apparatus. For our purposes we assume that Agamben’s enjambments can be treated as a form of crafted ontological disruption.

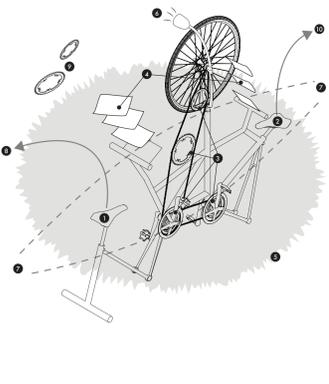


FIGURE 3.1 TECHNICAL DRAWING OF ENQUIRY MACHINE 1: INTERVIEW MACHINE. IMAGE BY THE AUTHORS

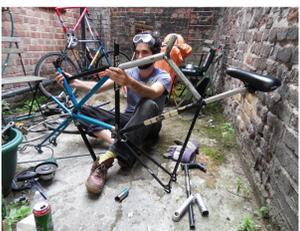


FIGURE 3.2 EM1 IN AN INNER-CITY OFFICE BACKYARD, CENTRAL LONDON (2010). PHOTO BY THE AUTHORS



FIGURE 3.3 EM1 ON HACKNEY STREET, EAST LONDON (2011). PHOTO BY THE AUTHORS

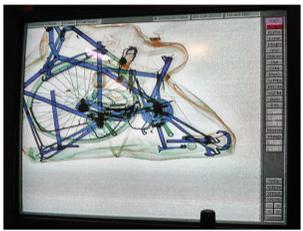


FIGURE 3.4 THROUGH A EUROTUNNEL LUGGAGE SCAN. PHOTO BY THE AUTHORS

MANUALS AS ENQUIRY MACHINES

Manuals are productive for thinking about enquiry machines as they offer a liminal format, among text, machine, and practice. Manuals prescribe how machines should be assembled, maintained, and used. Readers of manuals, however, are acutely aware of transmission gaps between text, illustration, machine, and practice that lie between one step and the next. Manual instructions are not as singularly deterministic as they appear. In practice, manuals unleash a plethora of possibility between what is shown and what is to be done. This slippage in the manual format can be productive of utter despair, laughter, and unexpected application. This is how we approach and invite others to approach the EM manual.

Practitioners with license to employ materiality productively, such as poets, hackers, makers, designers, or artists, and so on, might read manuals as an articulation of productive gaps, much like social scientists who read scientific text less as descriptions but as material to be employed. Manuals, read in tension with practice and with the license to do things differently, function as enquiry machines.

Making this explicit, however, takes work. The manuals of the Danish art collective N55, which offer instructions for making objects as diverse as walking houses and public land, give us a lead on how the transforming implicit to manuals can be made explicit and therefore productive. N55 uses manuals in a way in which the friction between the prescriptive format of the manual and the objects

they describe opens a political space to think about how these things might be made and employed differently.⁷

N55’s manuals render the materiality of supposedly abstract objects, such as public land, explicit, making them available for practical experimentation and intervention. They do so by moving between the manual format and its practical instructions and the universalizing ethos of abstract objects. All manuals transform among text, machine, and practice. N55’s manuals deploy transforming strategically. The philosopher Donna Haraway (1994) employs the game cat’s cradle as a metaphor for knowledge making, where patterns emerge by passing between formats and actors. To follow a manual here is to get into a tangle, a game of cat’s cradle with stuff, where every move formats possibilities. The fixed shapes outlined by manual inscriptions make visible potential openings when read against practice. N55’s manuals are manuals to think with and programs to practice, and such is the manual for enquiry machines.

All machines, all manuals have poetic potential. Enquiry machines are different from other machines not in kind but in organization. All machines and manuals can trip you up, drawing you into relations that cause ontological disruption. Enquiry machines aim to make ontological disruption available for analysis in practice.

So, where are we to locate enjambment in a machine? Riding EM1, you are at risk of falling over the edge of interview protocol, if not the machine itself. Interview practice, limbs and cogs, inevitably get out of sync, creating enjambments that force multiple openings. In machinic practice, enjambments cannot be as tightly controlled as in poems, but unexpected ruptures between machinic syntax and semantics hold the potential of machinic poetics. Tinguely articulates

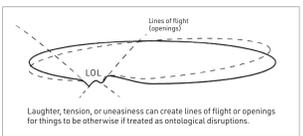


FIGURE 3.5 ONTOLOGICAL DISRUPTIONS. IMAGE BY THE AUTHORS

AFTERWORD

This contribution jumps formats, from conventions of manuals to diagrams, from academic explication to empirical reflection, from STS to design and art history, and from poems to machines. We attempt thus to put in writing what we aim to do with enquiry machines, namely, to render visible transmission as a process of transforming.

Writing about making things to think about things raises the question of how textual and material/practical analysis relate. We draw on Agamben’s theory of poetics to locate the poetic potential of enquiry machines in their capacity to engineer enjambments that make divergent openings available for analysis. Agamben allows us to do so, because in our reading, he treats poems as material. This allows us to put into question the problematic if not outright anti-intellectual tendency to juxtapose writing and reading with “making” things as if writing and reading were not material practices too. If thinking about poems helped us to locate the poetic potential of enquiry machines, enquiry machines in turn show us that writing too is a material practice of enquiry that comes with its own machines of enquiry, for what else is a metaphor? There is no difference in kind between doing writing and other forms of analytical practice. This matters because it helps to identify the just-do-it ideology in which engaging with stuff is considered fundamentally different from engaging with thought.

In this innovation ideology felt in academic discourse around materiality and experimentation, doing things instead of thinking about things is thought to deliver faster, more innovative, more real, or otherwise more valuable results. Harking back to our roots in Post-structuralist innovation practice and the claims that engaging stuff brings about speedy progress of thought and otherwise, we note that thinking with things is not inherently fast. Moving things to think might feed into the need for speed perpetuated by innovation discourses, but thinking with things can equally give reason to pause and hesitate, not to mention the fact that the cutting and joining of steel is costlier than that of words and paragraphs. Moving from the pile of discarded bicycle frames to an analytical machine, to an x-ray taken by the border police guarding the Eurotunnel through which the machine traveled to come to Trento, Italy, to an analytical story of what we wanted to do with enquiry machines, to the CAD drawings and this contribution, in any case took an amount of time and persistence that refutes the notion of speed associated with makers, hackers, and designers as machines of enquiry when read.

Doing things instead of thinking about things is faster and somehow more innovative

NOTES

- In preparation to build the interview machine, we amassed a collection of artifacts: tools, abandoned bike frames, dynamo lights, wheels, wire, duct tape, and cable ties. For a time-lapse video of the making process, see “Enquiry Machine 1—Making,” video, by Celia Lury and Nina Wakeford, 245:106. London: Routledge.
- For a time-lapse video of the machine in action, see “Tinguly Machines 1—Hackney,” video, by Celia Lury and Nina Wakeford, 2:49. London: Routledge.
- As Laura Watts puts it in defense of poetry.
- For Enquiry Machine 2, see “EM2—Serendipity Engine,” Kat Jungnickel, accessed May 20, 2016, <http://jungnickel.com/portfolio/enquiry-machines/>.
- For Enquiry Machine 3, see “EM3—Future Chantaine,” Kat Jungnickel, accessed May 20, 2016, <http://jungnickel.com/portfolio/enq3/>.
- de Laet and Mol (2000) illustrate in their study of the Zimbabwe Bush Pump how the form working is far from straightforward when technologies continue to operate in ways unintended by the designer.
- N55 strategy becomes most visible when applied to objects not commonly considered objects, such as in their manual for land. See N55 manual, N55 website, accessed May 14, 2016, <http://www.n55.dk/MANUALS/manuals.html>.

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a similar feeling: “For me the machine is above all an instrument that permits me to be poetic. If you respect the machine, if you enter into a game with the machine, then perhaps you can make a truly joyous machine—by joyous, I mean free” (quoted in von Herrmann 2016, 218). Machinic poetics thus understood is relational; it happens when the line trips, disrupting, transforming, opening the potential for new material-semiotic arrangements.

Machinic poetics is not limited to deliberately poetic machines such as EM1 or those conceived by Tinguely. On the contrary, the potential of machinic poetics, which can be found in all machinic practices, is what gives these works their power. In manuals, for example, the line of prescriptions that links one set of instruction to the next is constantly broken when transformed into practice. Just think of the repeated forth and back between instructions and practice characteristic of manual reading.

Manuals to hackers poetry to Agamben.

Usually this disturbance is something we aim to overcome in practice and one that is minimized as one gets more practice at the task at hand. Reading manuals in enquiry machine mode means to read the prescriptions they offer as points of contrast, against which the potential for things to be otherwise can be articulated. Hackers, designers, and so forth read manuals in the mode of enquiry machines. Tinguely observes regarding his poetic machines, “Most people have the same reaction ... while the machine is going they smile,

they think it’s ridiculous. Then it stops, and they begin to feel doubt, a kind of anxiety” (Lee 2004, 113). Poetry gone wrong is embarrassing. Enquiry machines too elicit enthusiasm as well as awkwardness and discreet distancing. To perform enquiry machines, in an academic context at least, is to risk losing one’s authority, for academic authority still rests on controlling one’s material, all claims to experimentation aside. Well-meaning colleagues in conversation classified EM1 as gimmicky, a gadget that takes you for a ride, somewhat embarrassing, amusing at best. There is no denying that EM1 can be rather silly, as when it shredded the trouser bottoms of a well-connected editor interested in publishing a piece about it. It also courts risk, as when during a performance an operator almost lost a fingertip between the chain and chain ring. Attention to the possibilities that open up if we hold on to one format, such as academic presentation, while attending to the enjambments when confronted with another format, such as that of balancing on EM1, speaks to our concern with transmission as a stoppage process. Disenchantment, articulated as uneasy laughter, we know from Verran (1999) and John Law and Wen-yuan Lin (2010), can mark an ontological disruption indicating a divergence of orderings or formats.

Enquiry machines perhaps cause two kinds of ontological disruptions, one marked by laughter or embarrassment, and one marked as poetic. How those relate goes beyond this contribution, but we note that the space for difference created by enjambments in practice that it fails to open up poetically, usually calls for uneasy laughter. In the case of enquiry machines, that embarrassment comes with analytical potential.

MANUAL FOR ENQUIRY MACHINES

- ASK A QUESTION.
GATHER THINGS. TREAT MATERIALS AS MATTER FOR ANALYSIS.
AVOID KNOWING WHAT YOU WILL MAKE BEFORE YOU MAKE IT.
RESPOND TO THE QUESTION THROUGH THE MATERIAL AND PRACTICE.
LISTEN, DISCUSS, AND DEBATE WHAT IS HAPPENING.
DECENTER THE HUMAN.
MAKE THINGS TO MAKE SENSE OF THINGS.
TREAT TEXT AS MATERIAL.
TREAT THINGS AS SEMIOTIC.
ESTABLISH STATEMENTS AND FUNCTIONS THAT SERVE AS JETTIES INTO SEAS OF POSSIBILITIES.
USE EXISTING SKILLS AND DEVELOP NEW ONES.
SUBJECT YOURSELF AND OTHERS TO THE MACHINE.
TREAT EMBARRASSMENT CAUSED BY MALFUNCTIONS OR SEEMING LACK OF PROFESSIONALISM AS AN ARTICULATION OF ONTOLOGICAL DISRUPTION.
BE AFFECTUALLY SENSITIVE.
REMAIN ALERT TO CUTS, POSITIONS, AND COLLECTIVES.
BUILD IT AGAIN. DIFFERENT MACHINES TELL DIFFERENT STORIES.

limits the potential of machines to open things up and to serve as machines of enquiry. If the poetics of machines lies in the introduction of cuts between their form and their meaning, then we can see that the process of inventing and translating ideas into their productive (rare) products. The poetic potential of enquiry machines, that is, their productive capacity, dies when treated as utilitarian. Enquiry machines stop functioning as machines of enquiry when read.

We can ask, for example, if Tinguely’s pieces—which were made in part to enquire into the condition of abstraction at the white cube—still function as machines of enquiry now that they are pinned to the pedestals and floors of contemporary art museums. Do not touch.

There are many machines of enquiry in design, prototypes mostly. Explorative devices. Following the thought that poetic potential dies when there are no longer enjambments, we note that function and form stabilize, and prototypes become products, their poetic potential dies. When prototypes are operationalized as product, service, strategy, or “implication for design,” their productive, poetic potential subsides. Given this, we can re-see Tinguely’s self-destructing machines, such as his studies for the end of the world, as attempts to make poetic machines that do not die, but that, having destroyed themselves, remain open indefinitely.

Not all need be poetic, but in enquiry machines, we are interested in maintaining poetic potential. How is that to be done with regard to social sciences? Social science too makes use of the poetic possibility that machines of enquiry can create. Treatments can be understood as textual machines of enquiry that can produce ontological disruptions by displacing meaning. When metaphors no longer displace meaning but become analytical letters, their ability to induce ontological disruption fades. Joining the ranks of readily employed explanatory devices, they cease to be productive, and they too are dead. Keeping the analytical machines of social scientific research productive is something that doing things to think about things and treating writing as material practice can do for social scientific research.

Enquiry machines are designed to make available the machinations of research to those who are implicated in it. They disturb the division of research, analysis, and dissemination, sometimes catastrophically so, to actively engage people in the production of research facts. Operating an enquiry machine, then, is to be simultaneously involved in the invention of publics and facts as well as their dissemination. Modes of transmission and public dissemination do not come after the fact but are enrolled in fact making. As such, the transmission of knowledges and practices, to rephrase it in the dictum of this volume, cannot be separated from research, development, or distribution.