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**Critical Proximity as a Methodological Move in Techno-Anthropology**

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**Abstract**

Techno-Anthropology is a new field, operating with a broad range of methodologies and approaches. This gives rise to the question: What does it mean for Techno-Anthropological research to be critical? In this paper, we discuss this question by developing and specifying the notion of ‘critical proximity.’ Critical proximity of- fers an alternative to critical distance, especially with respect to avoiding premature references to abstract panoramas such as democratization and capitalist exploitation in the quest to conduct ‘critical’ analysis. Critical proximity implies, instead, granting the beings, fields, and objects we study their own rights and abilities to problematize grand scale claims. Critical proximity further entails that we as researchers are impli- cated in issues and their formation in ways that allow us to register these critiques and methods, and to emphasize or supplement them. We work through two cases—one on the involvement of users in innovation projects and another on commercial web technologies for tracing issues—to show how critical proximity may be practiced. We sum up the lessons derived in four methodological guidelines for doing research with critical proximity.

**Key words:** critical proximity, methodology, issues, publics, Techno-Anthropology

**Introduction**

As a field of study, Techno-Anthropology is still very new and in the process of finding its feet. A central step in this process is a recent anthology in which the contributors discuss the question of what Techno-Anthropology is (Børsen and Botin 2013).1 All contributions are dedicated to studying human-technology relations and their effects, and the authors do so in relation to a wide range of empirical fields. Interestingly, however, the anthology also displays a broad diver- sity in theoretical and analytical commitments. There is, in other words, a great diversity in methodological approaches. For instance, we find methodological approaches more or less exclusively informed by the disciplines of Anthropology and Ethics respectively, while others draw on specific parts of the interdisci- plinary field of Science and Technology Studies (STS). In bringing this diversity to the fore, the anthology seems to suggest that one of the defining strengths of Techno-Anthropology is, exactly, that it offers many different methodological ap- proaches to studying contemporary human-technology relations and their effects. Acknowledging this diversity, we argue that different methodological approaches to human-technology relations afford different kinds of critical treatment of these relations. Our contribution lies in developing one such kind of critical treatment, that of critical proximity, in methodological detail.

It was the first professor of Techno-Anthropology in Denmark, Torben Elgaard Jensen, who initially made the suggestion that critical proximity might be a valuable notion for describing and developing Techno-Anthropological research practices and outlining their specific, critical contributions. In his inaugural lec- ture at Aalborg University Copenhagen, Elgaard Jensen proposed that Techno- Anthropological research might create “new types of critical proximity” (Elgaard Jensen 2013, 13).

Elgaard Jensen borrowed this notion from Bruno Latour (2005a), who developed it to remind us that to be critical does not necessarily imply a researcher critiquing a given phenomenon from an outside and distant position in an attempt to turn it into an issue that calls for public engagement. Being critical does not automatically involve what Latour terms critical distance. As an alternative slogan for the critically minded researcher, Latour suggests that we should “make sure that issues reach criticity” (2005a, 8). We take this advice to mean that it is not exclusively the prerogative of the researcher to turn phenomena into issues—this may already be happening in everyday and professional practices. For Latour, the job of the researcher is to care for such day-to-day ‘issuefications’ rather than adding new critiques.

In this paper we seek to develop the notion of critical proximity as an alterna- tive approach to making critical interventions in Techno-Anthropology. Our aim is to demonstrate how critical proximity might be practiced. Our goal is not primarily to debunk critical distance. This has been done and done well by authors such as Donna J. Haraway, who argues that when researchers claim to be producing unbiased and objective knowledge due to a privileged external position, this is the performance of a “god-trick of seeing everything from nowhere” (1991, 189). To Haraway, the god-trick is problematic because it claims a position of distance that lends an unwarranted innocence to the critiques deployed by researchers.

As her alternative, Haraway suggests a notion of objectivity that is “about limited location and situated knowledge, not about transcendence and splitting subject and object.” She continues: “In this way we might become answerable for what we learn how to see” (Haraway 1991, 190). To Haraway, knowledge produc- tion and knowledge claims are thus always located somewhere and never nowhere, they are “situated knowledges” (1991, 188).

It is worth noting that Haraway is not only hostile towards the performance of critical distance found in positivism. Her argument also works against relativist claims that no objectivity is possible because all knowledge claims are contingent and constructed. “Relativism,” Haraway states, “is a way of being nowhere while claiming to be everywhere equally” (1991, 191). Relativism becomes just another and equally problematic way of performing the god-trick.

The alternative to critical distance that we propose—critical proximity—is not so different from Haraway’s situated knowledge, but it has the advantage of explicitly taking up the notion of being critical and reorienting it. In this paper, we suggest how this might be achieved in concrete Techno-Anthropological research and educational practices. Our aim is to turn critical proximity into a useful meth- odological guideline. Thus, the methodological question we ask is this: How do issues develop ‘criticity’ and how might we as Techno-Anthropological research- ers contribute to this process?

Our answer falls into three major parts. In the first part, which is mainly theoretical, we explore Latour’s work a bit further in order to clarify the practices and processes through which Latour suggests we might help to ensure that issues develop criticity. We show how Latour’s suggestion is quite procedural and we contrast his approach with the one developed in the recent work of Noortje Marres (see, for instance, Marres 2012a, 2005). Taking inspiration from American prag- matism, she argues that the establishing of procedures of critique is exactly what is at stake when issues develop. Drawing on Marres, we suggest that ‘doing’ critical proximity in concrete research practices entails the recognition that critique is al- ways already present in the empirical cases we study as Techno-Anthropologists. The challenge for the Techno-Anthropological researcher is to find practical, methodological ways of latching onto and developing further such critiques.

In the second part of the paper, which is mainly empirical, we seek to illustrate how critical proximity might be cultivated by presenting two cases from our own on-going research. Both cases are about contemporary human-technology relations and both easily lend themselves to be scrutinized and critiqued from a distance. We show how the cases change character when the methodological approach of critical proximity is employed. The two cases come to illustrate how critical engagement in issues of public concern can be seen as a precarious effect of unfolding human-technology relations. In the first case, we discuss how critical proximity can aid us in re-appropriating the involvement of users in innovation projects. The difference is that these activities can be appreciated as enacting novel and imperfect forms of public engagement, rather than working as mere exten- sions of existing forms of capitalism or democracy. In the second case, we discuss how Techno-Anthropological research might re-appropriate commercial digital technologies for research on public engagement. Devices such as Google Trends and Facebook Pages are put to work as part of the research methodology instead of being critiqued at a distance. By discussing these two quite disparate cases of innovation projects and digital devices, we hope to demonstrate the flexibility of critical proximity.

As the third and final part of the paper, we offer four methodological guidelines for practicing critical proximity. These guidelines all ask researchers to refrain from seeing their core task as being one of generating and disseminating critiques of everyday and professional practices. Rather, the critically proximate researcher brings forward and supplements the problematization of given issues already happening in everyday and professional practices. One important advan- tage, we argue, is that public engagement becomes visible in hitherto less antici- pated locations and in new forms and that Techno-Anthropological research can aid the further development of such public engagement.

**What Does It Mean to Make Sure that Issues Reach Criticity?**

To start, let us go back to Latour’s statement that it is our task as researchers to ensure that issues reach criticity. The statement contains what can be understood as a critique of critique (Latour 2004b). According to Latour, we should defy the temptation to be critical by, for instance, too hastily operating too simple frame- works of the dominated and the dominating, or of the exploited and the exploiting. The temptation stems from the conventional imperative of maintaining a distance to one’s object of study. Introducing such frameworks or dichotomies orders the world in forceful strokes, which then provides the sense of an all-embracing handle on the world that allows us to keep it at arm’s length.2

In *Reassembling the Social* (Latour 2005b), Latour calls such frameworks the ‘panoramas’ of critical sociology. According to Latour, the problem with such panoramas is that they create the illusion of analytical distance, which blinds us to the task of paying close empirical attention to the issues in which we are interested. Latour proposes that instead of deploying critical distance, we must reinforce the criticity of issues through detailed descriptions of their sociotechnical formation.

As his alternative to critical distance, Latour suggests a two-step process facilitating the slow and careful composition of the common world. The first step consists of detailed descriptions of the formation of issues just mentioned. The point is to make sure that we, first, undertake careful investigations of “what there is in the world” (Law 2009, 4) before moving on to the second step of “mak- ing a common world that includes this” (Law 2009, 4, see also Latour 2004a). This also means that we should not assume such a common world (as little as we should assume simple frameworks of the dominated and the dominating, or of the exploited and the exploiting). Rather, Latour argues, “the world, in the singular, is precisely not what is given but what should be obtained through due process” (Latour 2004a, 239).

Latour’s approach falls into the category of what Marres (2012a) discusses as the cosmopolitical approach to determining the relevant public (see also Munk and Abrahamsson 2012; Law 2009). Marres is sympathetic to the notion of cosmopoli- tics, which brings to the fore the normative question of how we might craft a good common world (Stengers 2005), and which she sees as the dominating perspective within STS. For instance, in contrast to a more classic liberal approach to sorting out issues, which would assume that the legitimate process for doing so can be determined, the cosmopolitical perspective offers the suggestion that the correct process of sorting out issues is never pre-given. And where a standard materialist perspective assumes that the relevant ontology can be determined, that is not the case from the cosmopolitical viewpoint.

Nevertheless, Marres maintains that all three approaches—the cosmopoliti- cal, the liberal and the materialist—share the assumption that a proper framing of issues is indeed possible (Marres 2012a, 36). All three approaches assume that there is a way in which issues can be resolved peacefully. They believe that there is some kind of process to be found, if not through the conventional parliament then through some kind of “hybrid forum” (Callon, Lascoumes, and Barthe 2009, 18). They assume that “a political space is already in place in which the articulation of material relations and objects can take centre stage, and which is shielded from forces that could derail this process” (Marres 2012a, 36).

Against this palette of different proceduralist approaches, Marres argues with inspiration from the American pragmatists John Dewey and Walter Lippmann that public engagement is “inherently problematic” (Marres 2012a, 41). The point is that the issue and the public are problematized simultaneously. This shifts the focus away from determining procedures or ontologies toward the question of how issues are made relevant at all, which means how publics become engaged in issue *formation*.

One way to think about the difference between Latour’s more proceduralist and Marres’s non-proceduralist approach is to make a distinction between con- troversies and issues. In STS, ‘controversies’ tend to be used to refer to scientific knowledge controversies or technological development projects that call for a proceduralist approach. ‘Issues,’ on the other hand, is used to cast a wider net and catch problems that form in a more fleeting manner in everyday and professional practices. Issues therefore often challenge the default arenas of proceduralist en- gagement such as public hearings and other forms of institutionalized public de- bate. It is exactly the fleeting manner in which issues and publics may or may not form in everyday and professional sociotechnical practices that we are interested in here. We seek to develop methodological guidelines for detecting and caring for such fragile and simultaneous formations of issues and publics.

These considerations make it possible to qualify what might be understood by saying that issues reach criticity: The slogan can be seen as referring to an on-going struggle among a diversity of actors to turn a phenomenon into an issue and to form the public that is relevant to this issue. This ‘issuefication’ work is not exclusive to researchers or other authoritative human actors, which means that the research question of how to determine adequate procedures or ontologies recedes in favor of the question of how problematizations happen through sociotechnical dynamics. A focus on issuefication also raises the question of how Techno-An- thropological research might contribute to such problematizations. We now turn to two empirical cases to show how, methodologically speaking, this may be done in Techno-Anthropological research and educational practices by reappropriating and redescribing everyday critical interventions. The first empirical example is taken from on-going research on user-involvement in innovation projects.

**Reappropriating User-Involvement**

Methods for involving all kinds of users in all kinds of innovation endeavors are currently proliferating. Attempting to get to know their users better and to involve them in their research and development activities, private companies and public sector institutions systematically operate a broad range of methods. The assessment of the upsurge in such user-involving activities is, to a large extent, polar. Some researchers and commentators are concerned that the detailed and intimate knowl- edge about users produced through such activities might lead to (further) capitalist exploitation of the users’ wants, needs and desires as consumers (Thrift 2006, 1997), or their work as employees (Suchman 1995). Others argue that this interest in users results in the (further) democratization of innovation, as more ‘voices’ are brought to the fore and taken into consideration by innovators (von Hippel 2005; Asaro 2000). While giving very different assessments of user-involvement and its outcomes, the concerned and the celebratory approaches are also similar. They both utilize a more-of-the-same logic. They point to an *extension* of capitalism or an *extension* of democracy as the outcomes of user-involving activities.

To study, assess and take part in research and development processes lies at the heart of Techno-Anthropological inquiry. We suggest that the application of a ‘more-of-the-same logic’ in such research and education is increasingly problem- atic. The reason is that many contemporary innovation processes cannot easily be given labels such as ‘capitalist’ or ‘democratic,’ since the projects often involve combinations of different disciplines and different sectors. While one partner from one sector may attempt to advance democratization through user-involvement, a second partner may be exclusively focused on the economic bottom line. As the concrete projects unfold such motivations become entangled and the aim of the projects becomes increasingly unclear for the parties involved.

This also goes for researchers, who are often invited to take part in and contribute to interdisciplinary and cross-sectoral innovation projects. The exact contribution of researchers and the value of these contributions remain opaque, however, not only for the researchers themselves, but also for other parties involved in such innovation projects (Elgaard Jensen 2012; Jespersen et al. 2012). How might Techno-Anthropologists study, assess, and take part in interdisciplinary and cross-sectoral innovation projects? What might be the contribution and value of such involvement? Focusing on concrete user-involving activities, we suggest that Techno-Anthropological researchers should resist the temptation to label activities as either an extension of capitalism or an extension of democracy. Such grand scale ideas should instead be seen as part of the matter that becomes entangled and problematized in user-involving activities. To grasp and re-appropriate such entanglements and problematizations might be a timely Techno-Anthropological contribution here.

To put some empirical meat on this suggestion and to illustrate how this might be done methodologically we now turn to a study of a concrete innova- tion project. We will show why it might be tempting to be critically distant when engaging with concrete innovation projects. And we will illustrate why it might be worthwhile to resist this temptation—at least for a while—since user-involving activities can produce sparks of public engagement that can be reappropriated by the researcher.

*Resisting Being Critically Distant*

The innovation project was located at the gynecological outpatient department of a hospital just outside Copenhagen. The department was to move to an entirely new building within the next five to six years.3 Anticipating this move, a mixed group of consultants (some employed at the hospital, others privately employed) and researchers (with a mix of technical and social science backgrounds) planned and executed a user-driven innovation project that aimed to design the organizational and functional features of the future department. The project entailed observations of existing working procedures, workshops concerning possible futures and last but definitely not least so-called tabletop simulations of what was evaluated as the most promising possible futures. The project involved a group of local users: doctors, nurses and secretaries employed at the department.

Petersen came across this project during his engagement in a strategic re- search alliance, which attempted to describe ethnographically how user-driven innovation projects practically unfold and to what kinds of effects.4 He set off to explore the project in a traditional, ethnographic fashion. He contacted the proj- ect manager and gained access to meetings and the then still on-going activities of involving users. He obtained all the publicly available documents produced by the project. The consultants and researchers also forwarded him documents meant for internal use only. He went to the meetings and activities and undertook observations and took photographs, paying close attention to the simulations. He also introduced the idea to conduct a follow-up interview with the consultants and researchers involved on the basis of his preliminary observations and analysis. The consultants and researchers agreed to take part in this interview on the grounds that it might be useful for them to talk the project through with an ‘outsider,’ as they might use such a conversation in the writing up of the final report of the project.

Soon, the temptation to be critically distant arose out of a confrontation be- tween the consultants and researchers’ rationale for involving the local users. A document outlining a detailed script for the simulations stated that the advantages of involving users was to enable a design of the future gynecological outpatient department that might increase quality in several ways: first, the quality of treat- ment as assessed by the department, second, the quality of treatment as perceived by the patients, and third, the overall efficiency of the department. During the user- involving activities, the consultants and researchers would refer to this ambition of reaching three different goals at once through user-involvement.5

For the critically distant researcher this ambition of achieving three quite different goals simultaneously seemed suspect. The health care sector is under pressure due to an aging population, among other things, so it is very tempting to analyze the innovation project as a case of economical rationalization. The consultants and researchers might be cast as rationalization experts, while the in- volvement of users might be seen as a tactical maneuver on the consultants’ and researchers’ part to prevent future uproars among the hospital staff. The project might be seen as a case of rather clever exploitation. While not denying that this might be the best way to analyze the project and its effects, it would be premature for the critically proximate researcher to enter into such a line of analysis on the grounds of a few observations. From the point of view of critical proximity, we might ask: What happened to the three different goals during the simulations? How did the users respond? And what about the simulations as a method for in- volving users—what did it generate?

*Sparks of Engagement during the Simulations*

As mentioned, the simulations of the future outpatient department were conducted according to a script, detailing among other things an agenda for the simulation, the questions that the simulations were expected to answer, and possible blind spots and drawbacks of the simulation method. This script was distributed among the group of consultants and the group of users taking part in the simulation, but, in spite of this, the question of what to simulate lingered during the simulation. It did so in a number of ways, posing different challenges to the ambition of achiev- ing three objectives at once through the involvement of users.

One challenge was to describe what the consultants talked about as “typical patient trajectories,” meaning the typical ways for patients to go through diagnosis, treatment and recovery (cf. Law and Singleton 2005). One of the consultants sought to write down the crucial steps of a typical patient trajectory on a white board, but the group of users continuously problematized these steps. “It’s just not that simple in the world we have here,” a doctor noted. For instance, there are dif- ferences among patients, a nurse underscored. Some patients are young and some are old, some take a long time undressing, others are quick, some become very sad during treatment, others keep their nerve, the nurse elaborated.

In seeking to outline the typical patient trajectory, a second challenge arose. The ‘real’ issue did not seem to be the design of the organizational and functional features. The present patient trajectory was actually pretty simple, as the outlining of various patient trajectories suggested. What was rather time and resource con- suming was the booking system. “We have a problem with double bookings,” the nurse chipped in. The doctor elaborated that “people need to have their dogs taken care of and all kinds of stuff,” thereby suggesting that the issue was not exclusively located in the working procedures of the department, but outside of them as well.

A third challenge concerned the future. The consultants and researchers had the ambition to develop a future-proof design. Accordingly, the simulation took place in 2020. But what will 2020 look like? Will there still be desktop computers or only mobile devices? Will it be necessary for patients and anesthesiologists to meet face-to-face or will a conversation mediated by Skype, for instance, suffice? What about blood samples—can these be taken by a machine? Throughout the simulation, the consultants, researchers, and the users found tentative answers to such questions—sometimes jokingly and sometimes based on their current work experience.

A fourth and last challenge to be mentioned here is the distinction between the organizational and functional features of the design or, in other words, the dis- tinction between the working procedures and the spatial layout of the department. One of the consultants asked: “The question is: Are we making [work] flow or [examination] rooms?” A doctor responded: “It depends on whether we [the staff] or the rooms are the most expensive.” Again: no clear answer was found.

The tentative tackling of these four challenges suggests that rather than an ex- ercise in rationalization, the simulations can be appreciated as problematizations of the ambition of the project to simultaneously increase the quality of treatment as assessed by the department *and* the patients, while *also* improving overall ef- ficiency. The questioning of whether it makes sense to talk about a typical patient trajectory, the questioning of the relation between the working procedures within the outpatient department and the life of the patients when not physically present at the department, the questioning of the technological future, and the question- ing of whether rooms or hospital staff are the most expensive all contribute to achieving this problematization. The critically distant researcher might view this questioning as a sign of the consultants’ and researchers’ methodological failures (Law and Singleton 2005). For instance, one might emphasize how the consultants and researchers did not know how to make clear distinctions between what hap- pens in the department and outside of it. The alternative, critical proximity, urges us to view such distinctions as purifications to be explored rather than deployed, that is, as made rather than pre-given (Latour 2013; Lynch 2013). It is a bit of a “mess” (Law 2007, 2004), and as such the simulations can be examined as part of a process through which issues reach criticity.

*Summing Up*

We have here sought to discuss how Techno-Anthropological researchers and students might study, assess, and take part in multidisciplinary and cross-sectoral innovation projects. Such projects entail an ambition to create value for all of the partners involved. Studying such projects from a distance, two possible outcomes come to mind. If it is found to be impossible to create value for all parties, these projects can be understood as an extension of capitalism, revealing how some actors are being exploited. If, on the other hand, it is found to be possible to create value for all parties, these projects are better understood as extensions of democracy. With critical proximity, a third possibility surfaces: Activities of user- involvement can be appreciated as sites where tentative critical engagements in issues of public concern come into being. These engagements problematize what it means to create value at all, and for all, rather than determining whether this is possible or not. The focus, in other words, is the making of frames rather than the applicability of procedures.

**Reappropriating Web Technologies**

In the previous case, we discussed how the assessment of user-involvement in innovation projects has been guided by polarizations between concerned and celebratory approaches. This is also the case for evaluations of the Internet as a resource for social research. Some authors highlight the web as a harbinger of new methods for information aggregation and dissemination, such as crowdsourcing and open source Wikis, which is associated with the democratization of knowl- edge (Sunstein 2006; Benkler 2006). Within the same lines of argument, however, some authors also hold that this potential is being squandered by a recent surge in the personalization of web content, through, for instance, customized search results and egocentric social media (Pariser 2012; Sunstein 2006). Such person- alization is seen as detrimental to the perceived democratic potential of the web, because it supposedly confines users to echo chambers, where existing opinions are reaffirmed rather than challenged. This personalization dynamic is seen as driven by private, commercial interests, bringing ‘neoliberal dynamics’ to the web (Dahlgren 2013). These widely circulating evaluations of web technologies, then, come with a more-of-the-same logic similar to the one used to evaluate user- involvement. According to this logic, the test is whether web technologies extend democracy or undermine it by providing new kinds of leverage for pre-existing capitalist interests.

Such accounts are based on critical distance in the sense that they understand online practices by relating them to panoramic vistas of neoliberalism or democ- ratization. When deploying these panoramas, researchers take it upon themselves to raise issues and generate public engagement by comparing web technologies to abstract constructs. Following up on the first case, the question we wish to raise here is a different one. Instead of pursuing an agenda where it is the privilege of the researcher to be critical, we ask how web technologies might be appreciated as having critical potential themselves. In other words, we ask: What happens if we stop holding web technologies out at arm’s length and instead consider them as alternative resources for ensuring that issues reach criticity?

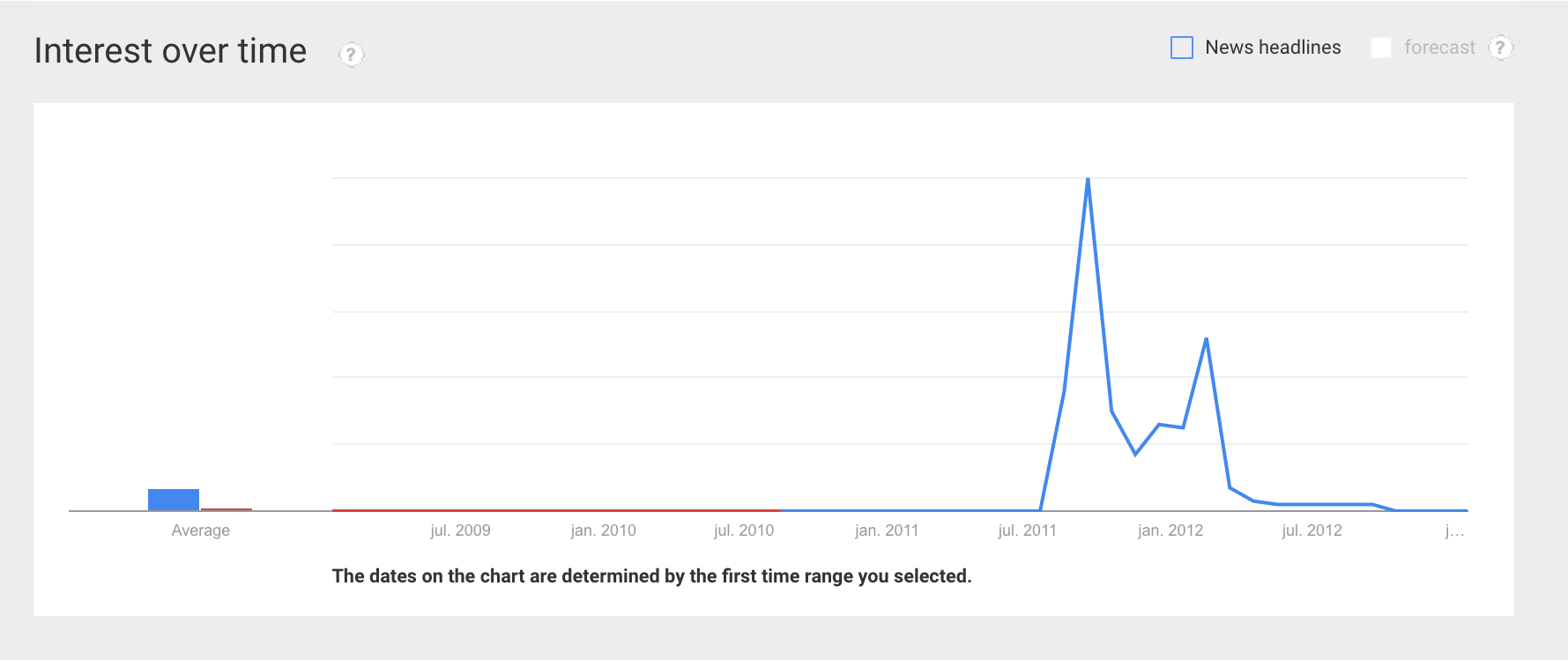
In the following, we will discuss how commercial web technologies might be reappropriated by Techno-Anthropological research informed by critical proxim- ity. The discussion draws on Birkbak’s on-going work on the controversy around the plan to introduce congestion charges in the Danish capital of Copenhagen, a plan that came to be known as ‘the payment ring.’ The plan was to charge motor- ists a small fee each time they crossed a specific line around central Copenhagen in order to reduce congestion. The idea of a payment ring had been around for at least a couple of decades, but when it was presented as part of the political program of two center-left parties in advance of the 2011 national elections, the policy pro- posal became a hotly contested public issue. The controversy culminated with the new prime minister’s decision to drop the project in February 2012, although she had won office on a platform that included the payment ring plans. The payment ring project had to be discontinued, she argued, because it had become apparent that large parts of the population were against the payment ring (Vester 2012).

Much more could be said about the specifics of the payment ring contro- versy, but what is relevant here is that some actors drew the news media into the controversy by arguing that this public resistance against the payment ring only existed in the heads of journalists and news editors (Meilstrup 2012). Other actors drew social media into the controversy, using Facebook Pages to spark resistance against the payment ring project. Based on the ‘democratization’ panorama, these observations about media effects could lead researchers to develop an echo cham- ber critique along the lines outlined above, suggesting that media technologies resulted in the downfall of the payment ring by creating a self-referential and self- reinforcing opposition to the project. However, instead of pursuing this opportunity to deploy critical distance towards media, the question we wish to raise is how web technologies might be also be reappropriated to problematize the prime minister’s claim that broad parts of the population were opposed to the payment ring. We start by suggesting how Google Trends can be reappropriated to problematize in- dications of critical public engagement. Second, we propose that Facebook Pages can serve to problematize specifications of this engagement. Again, the main point is to demonstrate how critical proximity can work in practice.

*Google Trends*

Google Trends is a free service offered by Google that makes it possible to query how frequently Google users have searched for a term over a given period of time.6 The service produces a graph that depicts the search volume over time for one or more search terms. Figure 1 is the result of a query for the term ‘betalingsring,’ which is the Danish term for ‘payment ring’:

**Figure 1:** Google Trends query for ‘betalingsring.’ http://www.google.com/trends/. Accessed March 30, 2015.



The graph claims to depict ‘interest over time’ based on an index scale, where 100 is equal to the peak search interest. The use of these words—‘interest over time’—suggests an interpretation made by Google Trends: When a user searches for a term, Google understands it as an expression of ‘interest.’ In the payment ring case, Google suggests that there existed an especially high interest in the issue from July 2011 to April 2012, peaking in September 2011 and February 2012.

Looking at Google Trends from a critical distance makes it possible to gener- ate several reasons for not considering the graph in more detail. A critique fuelled by a concern with commercial interests, for example, might note that there is no such thing as a free lunch: Google must have some kind of monetary interest in making this tool freely available. This could, for instance, be the need to showcase search volumes in order to convince businesses to buy advertising space. The result is a tool that is way too opaque for research purposes. This points to a related way of generating critical distance, namely by flagging a concern with democratization and noting how the graph does not provide any absolute numbers. It only shows relative change in search volume, which makes it impossible to tell to what extent the graph represents the concern of ‘the Danish people’ in general.

Instead of rejecting the value of Google Trends on these terms, however, one might ask how these limitations can be rendered useful. By focusing solely on the relative change in payment ring interest, the graph problematizes the idea that there is any absolute threshold above which something qualifies as a public issue. Such absolute thresholds reproduce the idea of a general public that either is or is not engaged in an issue, as when a survey speaks with statistical significance about the general population of Denmark. Google Trends instead articulates a controversy not about the abstract standard of the Danish population, but about itself. This is a valuable challenge to conventional methodologies (Rogers 2013). Moreover, Google Trends is immediately useful for problematizing the Danish prime minister’s suggestion that February 2012 was a key point in time for inter- vening in the payment ring project. The graph indicates that the issue had been in a critical state for more than half a year at that point in time, something that can be used as a prompt to further interrogate the prime minister’s claim that she was making a timely intervention.

This way of interpreting Google Trends can be seen as a reappropriation of a commercial and non-transparent web service for research purposes. Such a reappropriation is problematic, but it is only problematic in a negative sense if a critical distance is employed to undermine the value of Google’s services due to its status as a private company. Pursuing problems in the spirit of critical proximity instead means to appreciate that neither Google nor the researcher are in full methodological control.

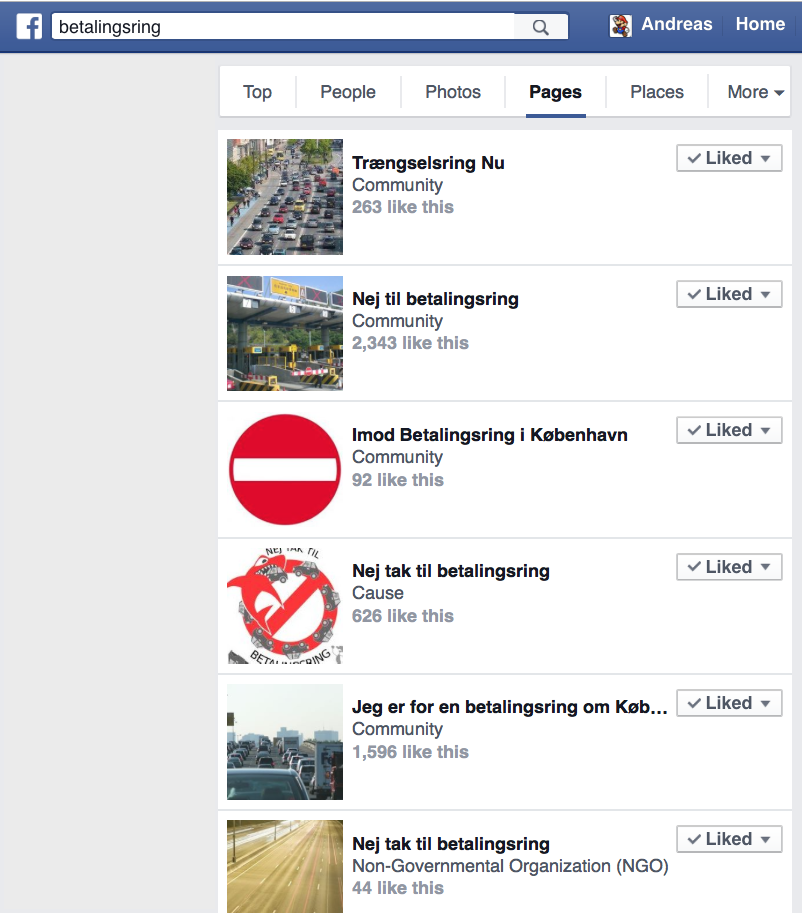
Google Trends’ way of lending criticity to the payment ring issue is not the result of a centralized effort for which any single actor can take responsibility in the same way as a consultancy company might be responsible for a survey. Rather, the process is distributed across at least three entities acting relatively independently. First, Google users have to come up with an interest in the payment ring and decide to satisfy it by making a Google search. Google then has to not only cater to these queries, but also store them and make them accessible through Google Trends. Finally, a researcher has to query Google Trends and interpret the search interest as an expression of the payment ring being a controversial issue for a certain period of time.

As Marres (2012b) points out, digital research here becomes a visibly distributed process. While all research is likely to be accomplished in a distributed way, Google Trends and other web technologies offer the advantage of making the dis- tributed nature of research methods explicit. When deploying a critical distance, we run the risk of overlooking this distributedness and rejecting Google Trends simply because it ‘belongs to Google,’ which amounts to lending a coherence to Google’s services and a controlling power to Google that they do not have in practice (on this point see, for instance, Mitchell 2002). With critical proximity, on the other hand, the explication of the distributedness of methods can become an occasion for discovering and appreciating other, more mundane, critical engage- ments. This point will be developed further in the next example.

*Facebook Pages*

One thing that Google Trends cannot tell us is what prompted individual users to type ‘payment ring’ into Google and hit ‘search.’ Google does offer to plot related news stories into a Google Trends graph, hinting at what might explain changes in search interest over time. However, we propose the reappropriation of a second web technology, Facebook Pages, as a useful way to specify and situate the interest in the payment ring that we elicited and problematized together with Google Trends.

Like Google, Facebook can also be queried for ‘payment ring.’ In Facebook’s case, doing so reveals that more than a dozen pages were founded in relation to the issue. One thing that Facebook already provides in the search results is the number of “likes” that a page has attracted. In the case of the payment ring, the results shown in Figure 2 reveal that there are pages both for and against the payment ring project, some of which have been ‘liked’ by more than a thousand people.



**Figure 2:** Facebook Pages query for ‘betalingsring.’ https://www.facebook.com/. Accessed March 30, 2015.

This observation makes it possible to reappropriate Facebook to problematize the idea that there was a ‘general’ public resistance to the project, as the prime minister claimed. Instead, at least two quite different dynamics become apparent with Facebook. First, a closer look at the content of the Facebook pages shows that many user comments contribute to specifications of what the payment ring issue was about (see also Birkbak 2013). On one page against the payment ring, for example, a rich variety of related issues are brought up: The project is seen as related to the need for economic growth in Denmark. It is also related to the ob- servations that there is lack of parking in Copenhagen. Some users take the chance to argue that it is harmful to have a left-leaning government, while others stress how a GPS-based road pricing system would be a better solution. Some suggest that moving workplaces out of the city center could solve the issue of congestion; others stress that levies on new cars are too high in Denmark. Still others remark that the previous right-wing government was in fact supporting the payment ring project. There are also users who focus on the need for better public transportation in order for the payment ring to make sense.

Seen from a critical distance, such diverse and specific comments might be lumped together and viewed as confirming the suspicion that social media are egocentric devices that can only serve special interest politics, not more holistic rationales. Drawing on critical proximity, however, we might notice that all these attempts at linking the payment ring to other issues have consequences for what and who should be taken into account when trying to settle the payment ring issue. Such comments can be reappropriated as a resource for problematizing empiri- cally how the project was delineated in the first place, suggesting how the initial plan was also an abstraction that left many things underarticulated.

The second dynamic we wish to highlight from these Facebook pages is that they do not reveal a public, which is simply made up of ‘the people.’ Instead, the many comments and posts demonstrate how the pages are populated by a hetero- geneous group of Facebook users, including politicians, activists, lobbyists, small business owners, and researchers. A relatively well-known politician, for example, was very active on several of the pages against the payment ring, trying to link the issue to other pro-motorist pages such as one promoting a new harbor tunnel in Copenhagen and one against cyclists. This diversity of ‘people’ also appears on the pages supporting the payment ring. One page, for instance, seems to be founded by a person who brings a mix of political, commercial and NGO interests to the issue. This person is thus both a candidate for a political party, a lobbyist for a car sharing company, and a board member of an organization promoting sustainable develop- ment. These different identities are made both explicit and implicit in various posts on the Facebook page. Such dynamics problematize the notion of ‘the people’ as a general entity that is opposed to the payment ring by showing how Facebook users are engaged in different and multiple ways (see also Birkbak 2012).

At this stage one might once again deploy a critical distance based on ideal versions of democracy and methods for eliciting publics. Whereas deliberative democracy involves a constructive rational dialogue between opposing viewpoints, the Facebook pages contain a lot of sharp language, ironic and humorous com- ments, incomplete arguments, and mixed interests. However, these observations might also serve to problematize the existence of citizens rationally making up their minds about whether they want a payment ring or not. On Facebook, Danish citizens appear far from disinterested, but rather caught up in a lot of other is- sues and plans, which inflect their thinking about the payment ring project. While survey results and election polls are deliberately designed to screen out such en- tanglements, Facebook Pages offer a venue for their proliferation and documenta- tion. As such, it might be less fruitful to understand Facebook pages as attempts at rendering public opinion measurable, i.e., to determine what ‘the people’ think. Instead, these sites appear to be useful for appreciating how publics not only take a stance on issues, but also offer heterogeneous problematizations of what the issue is about and what counts as public engagement in relation to it.

*Summing up*

To reiterate, what we have tried to show is that approaching web technologies with less critical distance and more critical proximity means turning their apparent limitations into sources of problematizations. As the discussion of the use of web technologies for inquiring into the payment ring controversy has shown, Google Trends and Facebook Pages do not simply reveal the voice of the people, nor do they fall short of accounting for public engagement in any simple way. What these devices offer to the critically proximate researcher are empirical opportunities to problematize what public engagement is and how it comes into being. This approach casts commercial web technologies as potential resources for Techno- Anthropological inquiry rather than dangerous blockades for research and/or democracy.

**Guidelines for Practicing Critical Proximity**

Through the two empirical cases just presented, we hope to have shown how issues and their related publics form in unison. In the first case, the issue of the organiza- tional and functional future of a gynecological outpatient clinic was problematized in new ways together with the involvement of various users. In the second case, the Copenhagen payment ring issue was transformed together with digital engage- ments and their problematizations of how to account for the relevant public(s). In addition to showing how issues and publics form and change together, we also described the methodological moves we as researchers employed in our attempts at staying close to the formation of these specific issues and publics instead of distancing ourselves.

Are there also more general methodological lessons to be learned from these two cases? We believe so, and bringing critical proximity to bear on two quite different cases has strengthened the basis for claiming that critical proximity is a flexible concept that might do valuable work in a wide range of contexts. In this section we seek to tease out four methodological guidelines that we recommend to the Techno-Anthropological researcher or student keen on experimenting with critical proximity. The list is neither to be understood as exhaustive nor fail-safe. We agree with Haraway (1991) that any research endeavor is situated and entails specific attachments to various stakeholders, interests and agendas (Jensen 2007). This means that the guidelines we offer should not be understood as comprising a complete and detached recipe for conducting ‘good’ research. Rather, they are to be seen and utilized as methodological resources that inevitably will be translated into specific research projects with their specific concerns and preoccupations. It is within concrete research projects that the guidelines will find their form and generate specific effects (see also Law 2004 on this point).

The four guidelines for practicing critical proximity that we propose are:

1. Hesitate before deploying critical distance;
2. Regard purifications as empirical topics to be explored rather than as analytical resources;
3. Allow new roles and relationships for researchers and actors in the field; and
4. Appreciate new positions for methods.

*Hesitate before Deploying Critical Distance*

The first guideline—to hesitate before deploying critical distance—is a fundamen- tal one not only within STS, but also in anthropological research. Through our two cases we showed how tempting it is to evaluate the involvement of users in inno- vation projects and web technologies with the grand strokes of either democracy or capitalism. It is tempting because it would give our analyses a critical nerve and a sense of a unique and clever contribution on the part of the researcher. We sought, however, to resist this temptation by staying empirically close to the actual involvement of users and the actual use of web technologies. The result was that rather than reproducing or relying on grand strokes, users were seen to problematize and entangle these notions. Enabling descriptions and understandings of such problematizations and entanglements through critical proximity seems especially pertinent today, where research and innovation policies and projects, web tech- nologies, CSR, sustainability issues, and so on, make it increasingly impossible to divide reality into neat boxes of “the social,” “the financial,” “the natural,” “the cultural,” and so forth—or “exploitation” and “democratization,” for that matter.

*Regard Purifications as Empirical Topics to be Explored rather than as Analytical Resources*

If a phenomenon such as a user-driven innovation project or a payment ring ap- pears purely social, purely technical, purely natural, or purely cultural, that is an *outcome*, rather than the way a phenomenon is by default. Our second method- ological guideline is thus to turn such purifications and their coming-into-being into an object of study, rather than employing them as analytical resources. This means abstaining from seeking to determine prematurely what a given phenom- enon is *really* about: that user-driven innovation projects are really just about ratio- nalization and that the payment ring is really just about taxes, for instance. Instead we recommend an exploration of all the—sometimes surprising—heterogeneous actors and entities that become connected to or disconnected from the issues and publics under formation. These relations show themselves if purification is made into an empirical topic rather than an analytical resource for generating critical distance.

*Allow New Roles and Relationships for Researchers and Actors in the Field*

At this point the reader might ask: If the researcher is no longer to inform the public about what a given phenomenon really involves, then what is the role of the researcher? We hold that if it is recognized that ‘issuefications’ happen with or without help from a researcher—as both empirical cases demonstrated—then this offers different positions for researchers, informants, devices, and other actors. The user-driven innovation project and the plans to build a payment ring generated problematizations that overflowed the initial frameworks of the project and the plan. A researcher could not have predicted these overflows and their contents by his or her own power (Michael 2012). On these grounds, our third methodological guideline is to understand actors in the field as allies in the quest for problema- tizations, which also means that researchers can no longer define themselves as mastering a special kind of critical distance.

*Appreciate New Positions for Methods*

People and devices in the field become allies within critical proximity because they employ a range of methods that problematize panoramic abstractions such as democracy and capitalism. The researcher who explores innovation methods ‘in action’ or who draws on Google Trends and similar devices is thus no longer the only one using research methods, but is rather deploying methods *on methods*. Rather than construing this as a problem where ‘our’ methods have fallen into the ‘wrong’ hands and we can no longer control the effects, the fourth and last methodological guideline is to find practical ways of appreciating this new posi- tioning of methods. Instead of casting companies like Google and Facebook, and consultants utilizing methods inspired by ethnography, as enemies, we suggest understanding them as taking part in an inherently distributed research process. As we have sought to demonstrate, research can benefit from methods deployed by creative consultants and users, along with corporate data centers, as well as care- ful researchers. Conducting research with critical proximity entails just as much a dynamic of reappropriating methods used by other actors as the deployment of methods unique to research.

**Conclusion**

In this paper, we have sought to contribute to on-going methodological discussions in the new field of Techno-Anthropology. Our primary contribution lies in the attempt to demonstrate what it might mean to conduct Techno-Anthropological research based on critical proximity instead of critical distance. We have argued that while deploying critical distance is very tempting and might also generate piercing critiques, it risks ending up in an oscillation between abstract panoramas, such as democratization and capitalist exploitation. The notion of critical proxim- ity offers an alternative stance where the people, fields, and objects we study are also granted the rights and abilities to problematize grand scale claims and deploy methods. One advantage of critical proximity is that when Internet corporations choose to keep precious information to themselves, or when informants start prob- lematizing the very innovation experiment in which they are enrolled, the ‘hands off’ reaction of methodological failure is not the only possible option. Instead, such limitations and challenges can be seen as valuable problematizations that the researcher can latch onto in an attempt to help make issues under formation reach criticity together with other actors in the field.

Far from being non-critical, this ambition, we feel, is much more productive than defending a position where researchers have special and exclusive perspec- tives of critical distance. Researchers are implicated in issues in specific ways that allow us to register critiques and methods, and emphasize or supplement them. In this paper, we have offered two cases to illustrate the methodological moves necessary for achieving critical proximity. These methodological moves have been summed up in four methodological guidelines: 1) Hesitate before deploying criti- cal distance, 2) Regard purifications as empirical topics rather than as analytical resources, 3) Allow new roles and relationships for researchers and actors in the field, and 4) Appreciate new positions for methods. Fortunately, this is not a recipe that one can follow blindly, but rather a starting point that we invite other students of Techno-Anthropology to use, challenge, and supplement in their situated at- tempts at contributing to issues reaching criticity.

**Notes**

1. The anthology is not the first to use the notion of ‘Techno-Anthropology’ and to seek to establish Techno-Anthropology as a field of study. However, the approach in Børsen and Botin 2013 is much broader than earlier attempts that mainly focused on developing anthropological approaches to online cultures. See, for instance, Morley 2007 and Colobrans et al. 2012.

2. For a related critique of critique within anthropology, see Marcus 1995.

3. Existing Danish healthcare facilities are currently being redesigned and rebuilt, and completely new ones have been added to the map. The vision of this fif- teen-year, state- and regional-supported project with a total budget of €5,5 billon is to “create a future-proof hospital service where the patients are the focus” (http:// www.godtsygehusbyggeri.dk/Maal%20og%20styring/Vision.aspx, accessed March 4, 2014). The user-driven innovation project explored here is not directly part of this larger project, but aimed to contribute to it.

4. The research alliance is entitled *Performing Temporary Spaces for User-Driven Innovation* (TempoS) and is supported by the Danish Strategic Research Coun- cil. See www.tempos.dk for more information.

5. This ambition of simultaneously creating value for all of the different parties and stakeholders involved was symptomatic for the user-driven innovation projects explored in the TempoS research alliance. For two further examples, see Petersen and Munk 2013.

6. http://www.google.com/trends/explore.

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