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Contexts in Action—And the Future of the Past in STS

Kristin Asdal[1]

Abstract

Since the early 1980s, actor-network theory has contested the status of "context" as an explanatory resource. Expressions and concepts such as "transformations of social worlds," "enactments," and "ontological politics" provide resources for grasping the ways in which agents actively transform the world and *add* something new. This has been of immense importance and serves as a warning against reducing events and actors to a given context. But a side effect of this *forward looking move* is that not enough attention is given to that which enables issues and situations to emerge in the first place. Moreover, the focus on that which is constantly being enacted seems to have privileged the contemporary as the object of study and ethnography as the method of inquiry. History and the study of texts—from the past—seem, increasingly, to get lost in Science and Technology Studies. The aim of this article is instead to use actor-network theory resources as a *historicizing* method. The article explores the tense concern for the animal in political debates at the turn of the twentieth century. The article argues that contexts should not be seen as something external, but rather *integral* to the relevant text and situation, thus the very issue at stake.

[1] University of Oslo, Blindern, Oslo, Norway

Corresponding Author:
Kristin Asdal, Centre for Technology, Innovation and Culture, University of Oslo, Pb. 1108 Blindern, Oslo 0317, Norway
Email: kristin.asdal@tik.uio.no

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Text and Context, Science and Technology Studies (STS), and History: Introduction and Reader Manual for this Article

In recent years, science studies scholars and historians of science have debated and problematized the ways in which these two fields of inquiry have come to be related—or rather, drifted apart (see e.g., Daston 2009; Dear and Jasanoff 2010).[1] In her analysis of how this development has come about, Lorraine Daston suggests that it can be linked to the ways in which historians of science have become increasingly disciplined—into the discipline of history. Historians of science, she argues, have to an increasing extent come to identify themselves with the historian's task of providing a detailed and thorough *historicizing*. In other, or my own, words, it could be said that on the technical side footnotes have become their specialty, while on the intellectual side it is their ambition to understand the past event on its own terms.

Science studies scholars, on the other hand, Daston argues, have remained undisciplined or interdisciplined. But then we could add that while historians of science turned to historicizing, science studies scholars, or the field of STS, have, to an increasing extent turned to the study of *contemporary* events. This, we could argue, is related to a form of disciplining too, as ethnography has come to stand out as the most promising and prevailing method of inquiry (see for instance, Knorr-Cetina 1995). This in turn may have contributed to "the great departing": Whereas historians of science went native in the archives, STS scholars went into "the wild," into sciences and practices *in action*. Hence, not only did their methods part ways, so did their objects of inquiry. Whereas historians of science are concerned with reading (past) texts, STS scholars have become concerned with following the actors in real action. This "contemporary turn" can be linked to a specific version, or interpretation, of actor-network theory.

No matter how we diagnose the relations and possible tensions between "history" and STS, or more specifically actor-network theory as a part of and particular branch of STS, work needs constantly to be done in order to keep these fields of knowledge and practice in touch with one another.

And there is a certain irony to the above mentioned contemporary turn accompanying actor-network theory, as actor-network theory can, just as well, be read as method for doing history—a *historicizing* tool. At least, this is what this article argues. Actor-network theory can be read as a form of inquiry that, in principle, ought to be cherished as the historian's method. This is so even if historians have tended to see "context" as their most precious tool, whereas the trademark of actor-network theory has been the opposite, namely to contest context.

The topic of this article is this notion of "context" or rather, ways of doing and ways of approaching "context." Context very often serves the role as explanatory resource. We, humanists and social scientists alike, often *explain* our findings by referring to an outside context or we understand and interpret the actors we study and their way of acting with reference to their embeddedness in a specific and wider context. In this sense, context is very often thought of as a (for the time being) stable background to which our original findings and claims can relate. However, on the other hand, the topic comes with little else but trouble: What *is* context and what role do contexts actually play in our efforts at working out what is at stake in *texts* that come to us from the past? What is the relation between text and *con*text? Is text necessarily something which stands in opposition to, or against—*con*—context?

The ambition of this article is not to solve the text–context problem. Neither is the ambition to heal the troubled STS-history relation. To think of these as solvable problems, and solvable within a single academic article, would be quite foolish. I am particularly interested, however, in the ways in which the text-context issue and the relation between history-STS and more specifically actor-network theory go together. Or put it more actively, I am interested in interrelating them, working on them both, together.

This article starts with a theoretical section, where I give a brief, indeed very brief, background on selected approaches to context *in* STS, and show how actor-network theory emerged as an anticontextualizing approach within STS. I demonstrate that actor-network theory has been concerned with that which is enacted; hence *the new*, rather than with the context that may be said to enable or condition the new. I call this a philosophy of adding. Then I turn to the theory and philosophy of history and discuss resources developed within this field in order to approach the text-context problem. I point here to speech-act theory in the tradition of the philosopher Austin which has been developed differently within versions of STS than in theory and philosophy of history. Whereas STS authors have made use of speech-act theory to underpin the performativity argument and an ontological politics where the focus is on that which is enacted, the world-transforming elements of actions, the intellectual historian Quentin

Skinner has developed speech-act theory in order to address more closely the relevant *context,* taking to mean *the situation* from which the utterance sprang in the first place.

In drawing these two versions of speech-act theory together, the purpose is to pinpoint tensions as well as challenges. How to combine the text and a concern with *the new*—the move "forward," the concern with what texts *do*—with a concern with context, "the past," that which enables or conditions the act, the text and the relevant utterance? The article then continues with an empirical section in which my aim is to work on the text-context problem from a point of departure in a juridical text, namely a draft penal code presented to the Norwegian Parliament toward the end of the nineteenth century. I read this text, and selected contexts, to explore the sensibility to pain and the feeling for the animal (Holmberg 2008), which others have pointed to as a significant feature of late-nineteenth century societal debates (e.g., Bittel 2005; Turner 1980; Ritvo 1984; French 1975).

In tracing a few of the relevant contexts of the draft law text, I argue that context and contexts are not something which simply surround the text or within which the text is embedded. Contexts instead actively take part in enacting, producing the text, that which stands out as the relevant issue. It is in this way, I suggest that we understand contexts to mean *situations*, combined with a little help from actor-network theory and the notion of *collectives* and *versions of society*. The latter may help us to focus not only on human actors and the history of political *ideas* but on nonhumans and the objects and materialities of politics as well. As I will argue from my case, *conflicting* versions of collectives may interfere and interact and together take part in enacting a specific situation—in this case a tense concern for the animal.

Contexts in STS

Within the broad field of STS, the context issue has been a key concern and is directly related to the ways in which scientific practice has been understood and explained. If science *is* culture, in what ways do we as scholars work with and demonstrate this, through reference to context? The context issue was, for instance, a key issue for the radical science movement as well as for feminist history and philosophy of science.[2]

In the late 1970s and early 1980s, a series of studies sought to find ways out of established internalist ways of perceiving science, that is, the understanding that science was driven exclusively by its own inner logic. Studies under the label of Sociology of Scientific Knowledge, for instance, argued

for what at the time was called a more "naturalistic" approach (Barnes and Shapin 1979). The claim was that an approach which simply saw science as an ordinary part of culture would ensure that the internal versus the external in the history of science would no longer be such a source of interest or controversy. Thus, just as much as one sought to avoid the internalist trap, the ambition was to avoid traditions of seeing science as simply a function of its social context, hence *reduce* science to the external context. Instead, the aim was to grasp science as forms of culture and explore the ways in which anthropological and sociological methods could be applied to the study of science for the benefit of a more disinterested and a more profound analytical approach (Barnes and Shapin 1979). The approach, however, remained and was indeed also labelled "contextual" (Shapin 1979), where the strategy was to replace the older and assumingly false image of science as autonomous and transcendent.

The remaining task was how to do this in practice: *How* was science to be treated as a cultural product (Shapin 1979)? In order to improve the methods for doing this, the authors involved invited both experimentation and explicit speculation. One of the results of such "experimenting" work was, for instance, a contribution by Brian Wynne (1979) on late Victorian physics in which he argued that concepts and principles developed and upheld within physics at the time could not be explained simply by referring to their technical value, but also had to be related to their *social* value. Hence, contexts, in the form of the social context, arguably played themselves into the technical content of hard core physics in profound ways.[3] "[T]he burden of proof lies firmly on those who reject the social context of use as a formative influence on scientific knowledge," Wynne (1979) argued.

Anticontext and Actor-Network Theory

There are many ways to describe and analyze the emergence of the tradition of research under the name of actor-network theory. But one way of doing this is to see it as a direct response to the above-mentioned contextual and what was perceived by some as a reductionist approach to the study of science: Actor-network theory emerged instead as an anticontextualizing approach.[4] Rather than seeing interests, for example, as something "out there" in a surrounding context, what was to become actor-network theory implied a reformulation of the question of interests into something that was constantly undergoing transformation and constantly transforming social worlds (see e.g., Callon and Law 1982). Rather than working from an assumption that there *was* an outside context within which actors to different degrees were embedded, the focus was on

actor-networking, that is, the ways in which the transformation of interests and material and social reality were enabled.

Hence, interests were not to be understood as stable entities, neither were interests to be seen as background factors, a backdrop or a surrounding context. Both "interest" and "context" were done away with for the benefit of grasping worlds in the making.[5] This also implied that the focus was redirected toward what was *to become*, rather than the reasons for and the background to its becoming.

This move was helped through a number of concepts, such as "enrolment" and "inscription devices." Inscription devices, so crucial to the later laboratory studies, were the kind of apparatus which enabled transformations, as well as settings, things on the move, in the first place (e.g., Latour and Woolgar 1987; Latour 1987). It is when bearing this in mind that we can understand one of the other labels of this approach, that is, a sociology of translation (see e.g., Callon 1986). Integral to this was a break with "the social" as a separate entity and explanatory resource.[6] Actor-network theory became a strategy for exploring that which was moved and translated into something different, hence *new*.

In this article, I suggest calling the above approach *a philosophy of adding*, by which is meant that the actors, or rather the actions, being studied *add* something to the world which was not there to begin with. Actions cannot be reduced to an external context, or machinery, which determines and explains the actors' movements. Actors cannot be *reduced* to their position in a social framework, and social scientists (or humanists for that matter) were not seen as competent to judge other people's actions on the basis of knowledge of a social structure the actors themselves would not necessarily acknowledge. Instead, *irr*eductions (Latour 1988), became the program. The strategy implies reading utterances literally, hence to be open to the richness and the novelty of the actions and the actors we study.

The downside to this approach is that the attention on worlds in the making has come to imply a focus on that which is in the process of becoming, *not* the past or that which enables events. And in practice this has come to favor the study of *contemporary* events. Actor-network theory has been linked to the contemporary as the object of study and ethnography as the dominant method of inquiry (which can be traced back to the laboratory studies of the 1980s).

Enacting Speech–Act Theory Differently

Even if historians may be said to have "context" as their (or our) most precious concept and contextualizing as their (or our) most precious tool, this is

not to imply that tracing contexts is necessarily thought of as a straightforward procedure, that is, something which is done very easily. The work of the influential Cambridge historian of ideas and political philosopher Quentin Skinner, for instance, points in quite other directions. Skinner's way of developing speech-act theory also stands in illuminating opposition to how speech-act theory has been developed as a performativity resource. This may serve to underline that pursuing history and actor-network theory have implied quite opposite moves. But at the same time, the inspiration from Skinner can help highlight actor-network theory as a radically historicizing tool.

In 1955, the philosopher John L. Austin (1962) gave his talks on performative utterances or speech acts that has later come to inspire a number of authors and which has been interpreted and developed into strategies for different ways of working: To speak and to write is also (sometimes) to perform an action. Simply put, this is the essence of speech-act theory in this tradition. Rather than merely *representing* (by way of words) the entities "behind" the words, utterances (written as well as spoken) are in themselves forms of action.

STS scholar John Law, who was a leading proponent of actor-network theory in the early 1980s, has later both laid out and played on Austin, starting with the two words "I do": "If these particular words are uttered at the right moment and in the right place (. . .), then they are also actions and not just words" (Law 2002). The point is to get away from mere representations for the benefit of exploring the ways in which (for instance) texts or theories or practices enact, that is, the way they *move* and *do* take part in transforming the world. Sometimes utterances are also a form of enactment, a way of *doing* the world, hence the notion of "ontological politics" (Mol 1998; Law 2004). This is in keeping with my own notion of a philosophy of adding which I used above. STS scholar Donald MacKenzie (e.g., 2006) has likewise made use of speech-act theory in this version to underline the performative aspect of economics.

Above I linked a contextualizing approach to a strategy for tracing that which "lies behind" the relevant action and from there is part of explaining it. Skinner, however, follows a somewhat different approach. His way of developing speech-act theory into a methodology for doing history does not attempt to seek out that which is "behind" the action in the form of interests, intentions, or motives in a conventional sense. This is not to say, he writes, that beliefs, for instance, do not have a role to play. It is rather that utterances need to be placed more carefully within a context. The task at hand is to "recover" the particular context "which serves to exhibit the

utterance in which we are interested as one that was rational for that particular agent, in those particular circumstances, to have held to be true'' (Skinner 1988, 247). This means that the relevant utterance should be made part of a context, albeit in a quite particular meaning: What was the author doing while making that utterance? (Tully 1988) According to Skinner, the question that needs to be answered is what was the utterance an answer to?

Thus, despite the shared inspiration from Austin, there is indeed a major difference between the ways in which ''speech acts'' are interpreted or reinvented within actor-network theory, or the later ontological politics, and this specific contextualizing historical method: Here, the emphasis is less on what the text (or the utterance) enacts as the new, hence the move ''forward,'' but more on the situation the relevant text (or utterance) can be said to be part of. Speech (or a written utterance) *enacts*, but it is also the result of a specific situation.

The above two versions of speech-act theory underline the tension I have already pointed out, namely the focus on what becomes, what is *added* to the situation, versus a focus on the situation the relevant utterance could be said to be part of, hence a focus on that which conditions the utterance. Perhaps, we could put it this way; while Law, or an ontological politics more generally, tends to focus on the speech as a specific form of *action,* Skinner points to a larger degree to *the act* in relation to a specific *situation*.

However, in its foundations and contextualizing method, Skinner's approach may serve to highlight ways of working which are crucial to actor-network theory precisely in their anticontextualizing approach. Hence, as I intend to show, there is also important common ground. Perhaps, text and context do not necessarily need to stand in opposition to one another after all? And perhaps actor-network theory can just as well be read as a historicizing tool?

Against Context: Reading Utterances Literally

As should already be clear from what I have outlined above, the contextualizing approach proposed by Skinner is not contextualizing in the sense that it *reduces* utterances to their context (e.g., social classes, interests, anxieties, or sensibilities) that was already present. On the contrary, Skinner explicitly seeks to avoid such reductions and problematizes such forms of reasoning up front. According to Skinner, there is a genuine problem with a type of reasoning that seeks to understand statements ''either as the expression in symbolic form of the structure of the speaker's society and his or her commitment to uphold this,'' or a statement that expresses ''in a

displaced or distorted form some deep and unacknowledged feeling, such as frustration or anxiety.'' The problem with this sort of reasoning is that we do not take what is said literally. Instead, we are ''instructed to take it as a symbolic or displaced way of saying something else'' (Skinner 1988, 246-47).

This is a way of reasoning that is in direct agreement with the philosophy of adding that I indicated earlier: in keeping with a symbolic framework we do not grasp the real action that is taking place. Instead, we keep referring to an external framework, a framework to which the actors whom we study do not themselves have access.

There is thus a shared ambition in the speech-act version of Skinner and the reasoning underpinning actor-network theory. This shared approach consists of taking the utterances you study literally, hence to not reducing actors and their utterances to ''really'' being something else, for example, expressions of a given external context. Linked to this is a shared ambition of grasping the events of your study as, literally, unique events.

Context as Collective and Situation: That Which Enables Agency and Utterance

But there is another theme we need to address that has to do with the question of a history of *ideas* versus a material semiotic approach integral to actor-network theory: actor-network theory was founded not only in opposition to ''context'' but also in opposition to conventional lines of division within the academy in which the humanities and the social sciences address ''ideas'' and a presumed ''social'' or ''cultural'' sphere, whereas the natural sciences address the perceived ''material'' and ''the natural.''

Skinner's focus can be said to reside rather comfortably within the humanist sphere: his concern has predominantly been with classical texts and the history of political ideas. A concern with materiality and the nonhuman, so crucial to actor-network theory and material semiotics is neither prominent nor necessarily present in Skinner's work.

The same applies to Skinner's approach to politics and text reading. Skinner has been placed firmly in a hermeneutical tradition when it comes to reading and interpretation and in the tradition of Hannah Arendt when it comes to politics. As Peter Janssen (1985) puts it, ''It is in activities of politics, and especially in speech, that Arendt notes man's specifically human condition,'' and he then goes on to relate precisely this approach to Skinner's philosophy. But whereas some stress Skinner's concern with the relation between a given utterance and the wider *linguistic* context, thus repeating Skinner's own words about reading texts as a linguistic enterprise

(Janssen 1985; Skinner 1969), there is the possibility for a somewhat different reading and to underline that also to Skinner, such enterprises are nevertheless related to real-world political conflicts (see Tully 1988 and his arguments for linking Skinner to Foucault's work).

Nevertheless, there remain important differences between the history of political ideas and the readings of texts, normally in the form of political treatises, pursued by Skinner, and actor-network theory as a *material* semiotic and nonhumanist enterprise.

Moreover, drawing actor-network theory and the text-reading enterprise of Skinner together points out an important challenge, namely, being able to grasp not only the enactments but also the acts as the result of a specific situation. To Skinner, this may be a linguistic situation. With a point of departure in actor-network theory, this can be grasped somewhat differently. The network in actor-network theory is that which, very concretely, *enables* agency. Thus, it is not a matter of a "context" lying out there, in the external surroundings so to speak, but rather something which is integral to the very action. Thus, the *situation* as the context that needs to be "recovered" is that which conditions or enables a specific utterance to happen. Hence, in turning to the text, the situations we are looking for can be a linguistic as well as a material-semiotic situation—or situations.

"Text" comes from the Latin *texere*, meaning to weave, and context derives from *contexere*, meaning to weave together or to weave with (Janssen 1985). Context then can rather be seen as that with which a text is woven together.

The strategy then, I argue, is simply to begin tracing such weavings. The place from where we ought to start is the relevant *text* in question, and to take what that text utters literally. In doing this, we need to bear in mind that contexts, situations or that which we from an actor-network perspective could also call collectives do not always come in the singular. As I will aim to demonstrate through the case below, radically conflicting contexts may *interact* within a text and *together* produce an issue, a concern, a sensibility—hence, a particular situation.

Reckoning with the Beast: The Penal Code and the Feeling for the Animal

In 1902, the Norwegian Parliament voted on a new penal code. This penal code, which has a high standing in Norwegian political history and history of law, was a radical new version of the former penal code from 1842. The Act is, however, considered radical not only in relation to *former* versions

but also in relation to contemporary European versions at the time it was introduced. Although the Act had, for a large part, been written by the Norwegian lawyer Bernard Getz, it was also the result of a series of transnational meetings and discussions in relation to contemporary questions of law (see e.g., Dahl 1992), and exchanges between the emerging social science disciplines and medicine.

My focus here is not on the Act as a whole, but rather to take as my point of departure the section concerned with human–animal relations, here the mistreatment of animals. This section reads as follows:

> whoever ... should be guilty of gross or malignant mistreatment of animals, or whoever aids or abets such an act, will be punished by fine or imprisonment up to six – 6 – months. This decision does not hinder the King, or someone to whom the King has bestowed authority, from allowing appointed persons in designated places to conduct painful experiments on animals for scientific purposes. (*Proposition to the Odelsting,* No 24:1898/99)

In Parliament, the section won the majority vote, a vote secured by means of a utilitarian reasoning, and which was also coupled with the argument that, in principle, the paragraph in this section of the Act on experiments on animals for scientific purposes, which brought animal experimentation and laboratory medicine before Parliament as a (in principle) criminal act, ought not to have been included in the Act in the first place. The majority vote made animals integral to society but only within a hierarchy where animals served human purposes for achieving higher ends (human progress as enabled by medicine; Asdal 2008, 2006).

However, the debate leading up to the final voting was longstanding and fierce, reached far beyond Parliament, played out in the public sphere and engaged "the pillars of society" as well as political actors, not least women, who did not yet have the right to vote. So how should this tense concern with mistreatment of animals, this feeling for the animal (Holmberg 2008), be understood and possibly explained? What was the stuff with which this concern with animal pain and mistreatment had been woven?

In his influential study "Reckoning with the Beast," James Turner (1980) has pointed to the commonly held understanding among those interested in the nineteenth century that two revolutionary changes in outlook helped to transform the Anglo-American mind. The first was the realization that human beings were not supernatural but were directly descended from beasts; the other change was the rising esteem of science as a model of intellectual endeavor and as the key to the future of the race. The nineteenth

century was, however, also an era of enhanced sensitivity to *pain*: "[T]hen, for the first time men and women developed that dread of pain—that 'instinctive' revulsion from the physical suffering even of others" (p. xi-xii).

Turner argues that the fact that this occurred should be linked to fundamental social transformations: "[T]he shock of massive industrialisation and urbanisation, wrenching people loose from old habits of mind and putting the relationship between man and nature on a radically new footing." According to Turner, "the entire developing ethos of kindness to animals reflected the worries and psychological stresses of a once-agrarian society suffering the trauma of modernisation." This all came together to raise the question: "How ought people to treat the animals around them?"(Turner 1980, xii).

My strategy in the following is not to transport the context that Turner has already established into yet another context and controversy; instead, I shall take the text of the Act as my point of departure and suggest that there might be more to explain and other contexts in action than Turner has already alerted us to. I will suggest that the new experimental medicine was not only contested by society's emerging sensibility to pain, it in itself took part in framing and enabling the draft text and the ensuing controversy and sensibility. And not only was the feeling for the animal related to a concern with protecting and defending society from *the new*, it was also related to a concern to promote a new radical democracy concerned with protecting the individual. Hence, conflicting contexts together took part in enabling the text and the ensuing tense controversy and sensibility.

Individual Pain and the Bounded Individual in a Criminal Law Context—Part I

First, what does section 382 of the new penal code say or do? First, it establishes the mistreatment of all animals as a criminal act—including animals in places designated for conducting painful experiments on animals for scientific purposes. In principle, such places are on equal footing with all other places in society. Hence, in this respect, the scientific laboratory is made part of society and animal experiments are, in principle, designated ordinary activities, equated with all other human–animal relations.

At the same time, the laboratory is granted a (possible) exemption from this general rule. Mistreatment of animals is made a criminal act, but persons practising animal experiments for scientific purposes can, possibly, be given the privilege to do so, that is, to mistreat animals by inflicting pain.

Let us set aside the possible *exemption* for a moment, and focus on the principle and its related concern with pain. Recent studies of law have suggested that rather than being an embedded feature of the world, categories of persons and things are produced by techniques of law (Pottage 2004, 3). Could it be that the notion of pain was producing, not persons or things, but the category of the animal, as well as the version of society, the collective, which the animal was made part of?

The text enacts animals as objects with the (in principle) individual right to be protected from pain—by law. Rather than belonging to someone, being someone's property or simply being part of nature, animals are made to stand out as discrete, separate organisms capable of an individual feeling of pain. Hence, the animal is made part of the collective in an individualized way. Rather than seeing the concern about mistreatment of animals and the sensibility to pain as an expression of a longing for *the old*, the paragraph can alert us to the ways in which this concern is spearheading *the new*. Put differently, the paragraph enacts or performs, it *adds* to a possible new radical or liberal democracy in which "the individual" is to be an integral part. In this way, the paragraph can be read according to the notion of the bounded individual which was part and parcel of the economic and political liberalism at the turn of the twentieth century (Otis 1999; see also Hagemann 2003).

Reckoning with Medicine: The Material with Which "The Social" is Woven—Part II

The Norwegian Parliament was not the only arena for such tensions and contestations over human–animal relations at the turn of the twentieth century. In portraying such widespread concern over human–animal relations, it is tempting to say that "society" was protesting against a (pervasive) science, in this case experimental medicine. Hence, "society" can be put up against "science." However, what are such assumed *social* concerns based on?

The stuff of "the social" is sometimes technical or comes from science (see e.g., Callon 1986). The very objects or issues at stake are often produced, made real or realized by means of a former science (like the role of statistics to Pasteur in Latour 1988). As in our case, perhaps "medicine" played a role in producing the object of concern, the very issue, to begin with? The expression "painful experiments," may indicate that the issue might have been woven by means of a medical discourse.

The problem of pain has a long history in medical science. But the philosophy of Descartes implied a break with the position that animals, and not only humans, were capable of feeling pain: according to Descartes, the animal did not suffer because it did not *think* that it was suffering (Rey 1995). The eighteenth century saw a shift in the perception and understanding of pain, characterized by the measurement of sensibility, and by research into the properties of the living fiber (Rey 1995; see also Krefting 2005; Rey 1995; and Williams 1994). Hence, sensibility constituted the framework within which the problem of pain could be examined.

To medicine, or physiology, the research question developed into a question of being able to empirically identify the site where sensitivity was situated (see e.g., Gross 1979). This means that sensibility was articulated in physical terms and understood to be located at a defined site within the body. Pain was framed as a physiological phenomenon.[7]

The fact that physiology and medicine worked on animals because of the assumption of likeness between animal and human bodies already may have contributed to drawing humans and animals closer together (cf. Turner 1980 in relation to Darwinism). But then, the practices of experimental physiology may have enabled the object of the individualized animal in pain also in other ways: first, by empirically demonstrating and scientifically grounding the sensory roots of animal bodies (hence demonstrating not only their capacity to suffer from pain but also where this sense is located) and second, by proceeding in exactly the way they did: through inflicting pain on individual animal bodies.

To summarize this part of the argument: The transformation of the notion of pain as a definite site located *within* the individual animal body may have taken part in producing the object, that is, the (individualized) animal body which was subjected to regulation and concern. Put differently, medicine can be understood as a context which interfered with the text and took part in producing the relevant object and then the relevant issue.

Moreover, this suggests that the sensitivity to pain is not necessarily to be seen as an expression of anxiety or stress about the loss of the old. Rather, it can be traced as an enactment of *the new*.

Multiple Contexts; Individual Pain versus Public Offence—Part III

But the penal code was not only enacting *the new*. It was also an archive of former cases and traditions which were folded into and reinvented in the

new Act. This points in the direction in which I will now move: A legislative text can advance different, even quite radically conflicting, contexts. Just as there are many times within the present (Mol and Berg 1998), there are multiple times within the present, that is, within a given time, of the past. "Context" does not come only in the singular, and a document, such as a penal code, does not contain only one version. To trace another version, we need to shift the focus in our reading. So far, the focus has been solely on the section 382 itself, primarily the second part of it. If we address the *first* part, however, there is one striking difference. Unlike the second part, the first part does not refer to the concept of pain. Instead, "mistreatment" stands out as the crucial notion. This already points in a somewhat different direction than the concern with "pain."

A legislative text, such as a penal code, is organized into chapters and it is not until we expand our look at the Act, to the heading of the chapter under which the section and paragraph are placed, that we can find traces of what constitutes a radically different, even conflicting, context to the one I outlined above.

The title of the chapter under which section 382 is placed reads "offences against public decency." Other such "public offences" in the same chapter are, for example, "Gambling," "Public Indecency," and "Immorality." How should we read this? First, what we can note is that the definition of the problem has shifted: the problem is no longer related to "pain" but framed as an "offence."

The notion of decency was a key concept in the public debate toward the end of the nineteenth century and concerned the morality of society and social order (Hagemann 2003). Contrary to the individualizing approach I outlined above, this enacted a version of society concerned with the *problem* of individualizing and secularizing. This was rather a conservative (cultural, paternalist, or moralist) position concerned with the subjective moral sensibility capable of upholding society, a moral sensibility linked with the established social order. Hence, contrary to how the debates on decency in this period have often been portrayed, this issue of decency ran much deeper and wider than a debate focused exclusively on sexual moral (Hagemann 2003).

Others have already pointed out that this assumingly "old" or "old-fashioned" theme of decency reappeared in the new penal code (Langeland 2005; Skålevåg 2009). This also applies to the ways in which the issue of mistreatment of animals was framed: the chapter frames the problem in a distinctively different way than the section *within* the chapter. Framed as a "decency-issue," the problem is not whether the animal is capable of

feeling pain. On the contrary, the issue has nothing to do whatsoever with the animal as such or with tracing pain within the individual animal body. The problem is rather the offence, the effect that the treatment, or the mistreatment, of animals might have upon the public, on *humans*.

So whereas the actual section of the Act is concerned with protecting the animal from exposure to pain, the chapter in which it is embedded is concerned with protecting society. Thus, in this sense, the penal code should not be read as the expression of one, and only one, context. Instead, it consists of layers containing different, potentially conflicting contexts. Within these contexts, not only "the animal" differed but also the very composition of society.

To put it another way, the contexts we can trace are made up of two quite radically different collectives in which the animal is an integral part—only in opposing ways. The chapter enacted a conservative position which had nothing to do whatsoever with the individual or an emerging liberal democracy. What was enacted here was rather a moral-conservative context that *opposed* the new, including practices that were perceived to be immoral. This then, is a position that doubts the liberal project of the future (Gradmann 2009; MacLeod 1982).

This version can also be said to have been partly coproduced by medicine, or rather by the *absence* of a medical answer to the relevant issue of sensibility. Contrary to the version of medicine I outlined above, this is a version which has no answer to the troubled question of animal sensibility and pain, thus a version which leaves a moral space open and leaves it to the sensory system of the humans, not those of animals, to decide. The section that follows, will examine this.

Conflicting Versions of Medicine—Part IV

The first version of medicine I outlined above was structured in a linear manner, a manner through which medicine moves as new discoveries are made. But then we must critically ask does that mean that older versions of medicine simply fade away or lose their significance? What about *former* practices and framings of sensibilities, practices that did *not* define pain as a property of fibers within the individual body?

If we follow the penal code document out of the Act itself and into the ensuing debate in Parliament (*Negotiations in Parliament 1901*/1902), we can find traces of another version of medicine: "In practice, it is not possible to judge whether animals really are suffering pain as part of animal experiments," it was argued by one of the elected members of Parliament.

The argument was supported by referring to a former legal case and the related juridical debate on mistreatment of animals through which precisely this question had emerged.

"In reality," the conclusion to this former debate read, "the relevant question is not how the action really affected the animal or its sensory system; but how the act related to the human sensibility or, if one wants, to the sensory system of humans" (Juridical Notes No. 4 1864).

As we can see, the concern with sensibilities was not an outdated phenomenon even if medicine (or physiology) in *some* places had moved beyond this framework. This is a version of medicine that does *not* equate the sensory organs of human and animals, but a version which rather sees differences than likeness, both in between animals and between animals and humans.

When digging deeper into this actual case, we find that the medical faculty had been brought in by the court to give expert advice. The question of whether the case could be said to be a case of mistreatment revolved around the concept of consciousness, an issue which the medical faculty was not able to settle when it came to animals (Boeck 1862). As it was not possible to answer the question of pain in precise medical terms, the concern with mistreatment of animals was defined within a *moral* framework, for instance, as formulated in the juridical literature in 1864 and to which I referred above:

> Our duties towards the animals are of a pure moral character. (Juridical Notes No. 4 1864)

The note referred to the old, well-established rule that mistreatment of animals could be subject to punishment only in so far as it concerned the violation of another person's property. To the extent that mistreatment of animals was subject to punishment, this was "not out of consideration for the animals, but out of consideration for civil society, thus Man" (Juridical Notes No. 4 1864). On the other hand, if the mistreatment of an animal was subjected to punishment out of consideration for the animal itself, this would imply that one presupposed the violation of the animal's personae. And, as it was stated, no one would seriously consider ascribing animals a distinct personality, or consider animals *subjects of law*.

Hence, the conservative approach which was concerned with decency and which framed the chapter in which section 382 was embedded, can in this way be said to have been underpinned by an "old fashioned" version of medicine and former versions of legislation: animals belonged to

humans, and by mistreating an animal it was the owner of that animal who was being offended, not the animal itself. The animal was considered, not as a subject, but as another person's object, or property.

Conclusion: Opposing Contexts in Interaction

I have suggested that the tense "feeling for the animal" (Holmberg 2008) at the turn of the twentieth century can be seen as helped by two radically different, even conflicting contexts or versions of society. On one hand, the animal was enacted as a discrete individual body, and was, if not a full-fledged persona or subject of law, made part of an emerging version of a liberal democracy in which "the individual" was an integral part. This version, or context, was partly produced through science—the new experimental medicine and physiology and its definition of pain as something which was located within the individual (animal as well as human) body.

On the other hand, the animal was enacted as a body to be protected for the sake of the public as well as the animal's owner. Hence, the animal was made part of a moral and conservative version of society in which mistreatment of animals was a threat to society and human sensibility, rather than the sensibility of the animal. This again was supported by a medical science concerned, not with pain, but with senses and sensibilities and which argued that on this matter medicine had nothing definite to say.

Thus, these contexts reckoned with the beast (Turner 1980) in radically different ways. Whereas the one took part in a context in which the animal body had the right in principle to be protected because of its individual sensation of pain, the other took part in a context in which the animal was to be protected from mistreatment because of the sensibility of the public. But *together*, these two versions contributed to shaping the Act and the concern with, sensibility to, and revulsion and dread of pain. Hence, the concern with the animal was produced by the intersecting (Law 2004; Mol 2002; Moser 2006) of contexts. The two otherwise conflicting versions converged in their concern for the animal.

Returning to Skinner and the question of what the relevant utterance can be said to be an answer to: Very generally speaking, the Act was a response to the general question: How ought humans to treat the animals around them? (cf. Turner 1980) In this sense, it was also a response to the kind of question Latour (2004) has formulated: how are we to compose our collective? However, the point of this article has not been to answer such questions in the above deliberative manner. Rather, the point has been, if not to recover, then at least to point out, outline and trace some of the radically

conflicting compositions of collectives that *together* took part in producing the political situation which challenged experimental medicine and its use of animals, and enacted a strong feeling for the animal.

History, Context, and Actor-Network Theory

"History" is not a given stable entity, the context, within which the open present is embedded. Thus, in this sense, we should treat history on more of the same footing as "the present"; more open ended (Bowker 2006), with a multiple set of possible collectives. The two contexts I have outlined, with a point of departure in the draft text, have been essays in doing this. And the two versions of society, the situations or collectives, I have outlined have been an effort to give space to those collectives which did not "win" history; but which, nevertheless, I would argue, still may play a part in motivating and explaining concerns for those who are, to use Haraway's (e.g., 2008) words, "not us." Tracing contexts that were involved in producing an issue, but which later became marginalized, may alert us to that challenges and problems that may now stand out as new and are, in fact, linked with former contexts and past ways of reasoning and composing collectives. Actor-network theory resources may inspire "history," I have suggested, to read texts in more radically historicizing ways and, in doing just that, *undisciplining* history somewhat; opening the discipline for a little bit more theorizing (Asdal 2003) and experimenting. Could this possibly also be a way of bringing history and texts from the past closer to STS, and to actor-network theory in particular?

In order to do this, that is, draw STS and history together, "text" is a crucial and potentially fruitful notion. Rather than drifting apart, historians to the archives and STS scholars to actions as they unfold in an ongoing practice, text is an object of research to which both historians and ethnographers (and others) can meet and (often must) relate. Studying texts is not only the historian's task. All texts are, in principle, utterances from the already past, hence historical products (Asdal et al. 2008). Moreover, reality is to a large degree already made textual, that is, textualized. This is an insight that comes from STS and more particularly actor-network theory, just as much as philology and literary theory.[8]

If actor-network theory has implied what I have called a philosophy of adding, this philosophy of adding should be seen as a response and a protest to a philosophy of reducing, of reducing the actors and the actions that are studied to mere reflections of an underlying or determining context. Actors *do* something in and *to* the world which cannot be traced back to that which

was already there. *Against*-context has been the actor-network theory method. One of the lessons to be learned is that if we do not read utterances literally, we do not see the richness and the novelty of the actions and the actors we study.

Rather than putting actor-network theory in opposition to history, actor-network theory may be employed as a historicizing method that may serve to fruitfully problematize a conventional contextualizing approach. But tracing the situations from where utterances speak, I have argued, does not need to be reducing, but can, on the contrary, open for the strangeness, the uniqueness of a given utterance, hence open the past and *multiply* the possible versions of how to approach issues and compose collectives. This as well might perhaps be added to a philosophy of adding? Moreover, methods for studying history may serve as a resource for actor-network theory for a renewed focus on *the text* and that which *enables* textual utterances. But then, this article has argued, text does not have to be approached as something which stands in opposition to, or against—*con*—context.

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2. The point here is not to write the history of the context debate within STS but simply to give some background or context [*sic*!] for the questions this paper works and elaborates on. For a general introduction to these "interest-debates" see also Asdal, Brenna, and Moser (2007). For a more specific example on this context issue as a feminist STS concern, see for instance Donna Haraway (1992) "Otherworldly Conversations ...." where Haraway analyses and critically responds to Robert M. Young (1985)—and what he allows to count as the

relevant contexts in his own criticism of the Cambridge school in the history of science.

3. This contribution was later reprinted in Barry Barnes and David Edge (1982). Even if positioning itself more pragmatically and inclusively, this book should still be seen as a continuation of these debates. Here, it was argued, the aim was to "give prominence to the relationship between the subculture of science and the wider culture which surrounds it" or more generally put, to stress the interaction between the scientific community and its context.
4. For a recent and explicit version of this, see for instance the conversation between the professor and student in Latour (2005).
5. These terms shaped the debate in STS and arose from the concern with context or what the Edinburgh school had termed "the wider culture." For this "interest-debate," see Pickering (1992).
6. There is, of course, no overall agreement that this is the better approach. For one version of the debate see Pickering (1992). Latour's (1988) review of Shapin and Schaffer's book *Leviathan and the Air-Pump* in which Latour criticizes Shapin and Shapin for not thoroughly problematizing "the social" in their analysis.
7. One of the most important events in this respect is said to be the discovery early in the nineteenth century that the dorsal and ventral roots are also the sensory and motor roots (Cranefield 1974)
8. Here, it suffices to be reminded of the importance of literary inscriptions to laboratory studies underpinned by actor-network theory (e.g., Latour 1987; Latour and Woolgar 1986).

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Bio

Kristin Asdal is a historian and professor of STS at the Center for Technology, Innovation and Culture at the University of Oslo. She has publised widely on nature-related issues and is also particularly concerned with method-questions.