

Moving Inter Disciplines

What kind of cooperation are interdisciplinary historians and sociologists aiming for?

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When in 2009 the first Annual Seminar of the Bielefeld Graduate School in History and Sociology looked at the state of the relationship between the two disciplines with the question whether or not there was an end of messages, the committee of organizers had in mind a particular episode of interdisciplinarity: the establishment of social science history in Germany, promoted by historians at the newly founded Bielefeld University. From this point of view, the 1970s appeared to be a time of lively interdisciplinary exchange, with historians borrowing theories and methods from the social sciences and sociologists becoming interested in the empirical data that historians generated. Asking provocatively whether the disciplines have stopped sending messages to each other, the convenors of the doctoral conference implied that the new graduate school could, should or inevitably has to define itself in reference to a heritage of interdisciplinarity at Bielefeld University.

A year later, our picture has become far more complex. More discussions, further reading, establishing contact with historical sociologists and social-scientifically-minded historians abroad and not least with the experience of interdisciplinary encounters at the graduate school have widened our perspective in many respects. The following article is an attempt to present the resulting ideas about interdisciplinarity in a systematic way. It tries to identify conditions and factors that facilitate an orientation towards neighboring scientific disciplines, differentiates levels of interdisciplinarity and assesses the potential of research that is interdisciplinary. Our aim is to formulate questions that we would like to see

taken up by others who want to contribute to an advanced understanding of interdisciplinarity or locate themselves between disciplines.

The text is the outcome of the collaboration between a sociologist and a historian who found a common language by borrowing concepts from Pierre Bourdieu's social theory. Drawing from Bourdieu seems all the more appropriate as his work has been an attempt to overcome the »sterile divisions« and »false quarrels« that he saw as the result of the compartmentalization of academic work in the social sciences (Bourdieu 1988: 779). In keeping with a programmatic concern with reflexivity – which we will introduce during the course of this paper to be one critical condition for perpetuating interdisciplinary communication – this is also an opportunity for discussing the usefulness of theoretical concepts in describing the nascent field. Moreover, we will give special consideration to the notion of fields, a theoretical category of potentially high significance for socio-historical research within our projected long-term assembly.

The text consists of two main parts that sketch two different scenarios of interdisciplinarity. We refer to the first mode as »oppositional interdisciplinarity«, which can be understood as an episode in a dialectic process of disciplinary development. In this scenario, the relationship between scientists from different academic realms serves them as a resource to challenge dominant positions within their disciplines and with the potential to ultimately transform them. At the end of this process, the interdisciplinary challenge becomes incorporated into a reconfigured discipline. We will then discuss a second mode of interdisciplinarity, which we have named »autonomous interdisciplinarity«. This mode involves a more sustained and substantial dialogue by researchers from different academic fields using a shared set of questions and methods. Autonomous interdisciplinarity outgrows existing disciplines. It achieves a high degree of independence from neighboring scientific fields by establishing its own incentives, field-specific capital and institutions. It implies the emergence of an interdisciplinary field *sui generis*. Outlining the two modes of interdisciplinarity, we will discuss the requirements, structures

and perspectives for future research at the interface of, or in a realm beyond, history and sociology.

We think that a debate about the level of interdisciplinarity that history and sociology should strive to establish is needed to realize the full potential of research »inter disciplines«. Superficial references to another discipline are not enough even to strike up oppositional interdisciplinarity, let alone to assemble an autonomous interdisciplinary field. While interdisciplinarity may once have sounded like heresy to disciples of disciplines, there is now a universal consensus that interdisciplinary research is a »good thing«, an acceptance that is surely encouraged by the fact that interdisciplinarity is funded. We think that interdisciplinarity has to go further than this and reach a state of mutual irritation. Any interdisciplinary dialogue, whether it brings about the reconfiguration of a discipline or the establishment of an autonomous field, requires substantial issues to engage with. To try and differentiate the »false quarrels« from the right ones, to take Bourdieu's lead, seems necessary to establish a sustained interest in interdisciplinary communication. We also suspect that once historians and sociologists start to discuss the level of cooperation they are willing to achieve and maintain they will find out that interdisciplinarity is more controversial than currently realized.

Oppositional interdisciplinarity as an episode in disciplinary change

Before we can talk about interdisciplinarity, we have to begin with a few remarks on the character of scientific disciplines and how we would like to consider them as particular social fields. Fields are distributions of participants and resources across positions (cf. Bourdieu 1993; Martin 2003). These distributions emerge from participants relating to one another through repeated interaction in which they strategically invest various resources. Participants' positions are the outcome of such reiterated interrelating, and position-takings are a shorthand for a broad set of participants' individual efforts and strategies at claiming and defending positions within the field (Bourdieu 1993: 30; Emirbayer & Johnson 2008: 14-17). Various resources and forms of capital are utilized in po-

sition-takings, with the respective value of resources defined by the structure of distributions within a field, and the embedding of the field as a whole in other fields. Which kind of cultural capital, for example, turns out to be valuable within a given field depends on participants' habitus, i.e. their disposition to recognize and evaluate »proper« cultural competence (cf. Bourdieu 1984). The standing and autonomy of any given field with respect to other fields may best be estimated by the relative value of that kind of capital that can only be generated and acquired by participants within the field (cf. Anheier et al. 1995). Such field-specific currencies tend to be referred to by the notion of »symbolic capital« (Bourdieu 1991b: 66-76; Emirbayer & Johnson 2008: 25f.). Scientific capital is symbolic capital mobilized in terms of scientific knowledge, reputation, publications, contributions to or recognitions within scientific discourse (cf. Bourdieu 2004: 33f., 55-62). This resource can only be gained by engaging in position-takings within scientific fields, and it cannot be generated on the spot by deploying other kinds of resources, for example economic capital. Participants can gain scientific capital by investing money, but they have to spend it on actual research, publications, and so on, and wait for these investments to turn out one way or the other, rather than by simply buying knowledge, reputation, or truth (cf. Bourdieu 1975; 1991a). The standing and autonomy or, if you will, the power of the field, is determined by its ability to define and monopolize access to its genuine currency, the symbolic capital generated within it.

The core property of disciplines therefore is their autonomy, an autonomy that has initially to be won and subsequently be defended within larger scientific fields (Cambrosio & Keating 1983: 327f.). Academic fields have their own reward system in which peers – not state regulators, corporate sponsors, philanthropists or rating agencies – define scientific standards and evaluate objects of study. Scientists themselves distinguish between »good« and »bad« science, and they award reputation as the field-specific capital accordingly (cf. Crane 1976). While autonomy is undoubtedly a requirement for science, it is also a structural factor that tends to work against change. In a field in which capital is distributed

unequally, there is a strong tendency for participants to be drawn towards the most reputable peers, as these have the power to consecrate. This in turn strengthens their position and allows them to set the agenda of the respective field. The eminence of the most reputable peers attracts not only followers, but also challengers who, by addressing the same phenomena, problems and questions that the dominant actors define, reinforce the structure of the field (cf. Bourdieu 2004: 11-13).

This means that autonomy does not only save scientists from non-scientific impositions, but that it also enables isomorphism, a convergence towards the centre of gravity of the disciplinary field (DiMaggio & Powell 1983). The practical consequence is that new research questions are primarily generated from disciplinary discussions and get ever more intricate, self-referential and less irritated by phenomena that most people outside the discipline would see as »important«. At that stage, scientists invest mental effort by complicating existing positions in order to carve out niches in a crowded space. An overproduction of highly particular studies in turn facilitates mutual ignorance. To outsiders the disciplinary field, the relevance of this research appears questionable and the interest in its findings is limited, as internal differentiation gets harder to communicate as »groundbreaking« to wider audiences.

When a discipline has reached such a phase of stagnation, turning towards other disciplines might open the field for new theories, methods and objects of study. Challengers may draw upon interdisciplinarity to formulate new research programs that can diverge from the disciplinary mainstream to some extent. They can »discover« subject matters that have been neglected by their colleagues in the discipline but are already studied in another field; they can adapt methods that are tried and tested in neighboring disciplines to their own work. Crossing the boundaries between disciplines also raises the awareness for specific ways of thinking and disciplinary reflexes, as »contacts between sciences, like contacts between civilizations, are occasions when implicit dispositions have to be made explicit« (Bourdieu 2004: 42). The dialogue with scientists from other disciplines forces scientists to explain what is specific about their »domestic« field (Kocka 1991).

But these are already some of the possible and positive effects of interdisciplinary work on individual scientists. What is more important here is the question why participants of autonomous fields enter interdisciplinary exchange in the first place, because it requires a considerable investment of time and work while it is far from clear whether there is any return in disciplinary reputation. Three conditions are to be mentioned: Firstly, the importance of intrinsic motivation deriving from individual habitus as a result of biographical trajectories should not be underestimated, as it never entirely surrenders to and can rarely be subsumed under the collective habitus of a discipline (cf. Bourdieu 2004: 42-44). For some scientists, some topics or questions are more engaging than others, and if the knowledge about a certain phenomenon is more advanced in another discipline, one might engage with that literature for quite some time. Secondly, opportunity structures are required. Scientists need money and time to be able to venture into other fields; they need institutions such as publications or conferences to have an exchange with like-minded scientists and communicate their research to peers outside the interdisciplinary circle. Thirdly and most importantly, the symbolic capital of a neighboring field has to be accepted in a domestic discipline. This points to the fact that disciplines, notwithstanding their autonomy, compete with each other for public attention and recognition of potential funding bodies, most importantly the state. The majority of scientists of one discipline are not familiar with current developments in other academic fields, but they do have a general idea about which disciplines are expanding, as they see new university departments being created, research institutes set up and certain scientific expertise circulating in the wider public. The association with this success can help interdisciplinarians to raise awareness among their fellows and convince them to take their interdisciplinary proposition seriously, even though they may have difficulties explaining to their more disciplinary-minded colleagues the merits of concepts and methods which are alien to the discipline. This makes fields that receive a lot of recognition among other scientists as well as the general public the best candidates for a successful interdisciplinary cooperation.

If intrinsic motivation, opportunity structures and convertible capital are given, scientists can engage in interdisciplinary exchange. It then depends on the responsiveness of the respective field whether or not the import of theories, methods and topics has an effect on this discipline. It would appear that this has got much to do with the timing of field saturation and interdisciplinary engagement. An interdisciplinary impulse for disciplinary change is more likely if a field is declining; such a challenge might be futile when a discipline is at a stage where there are still many possibilities within the field. If this is true, there is a dialectical relationship between disciplinary reproduction and interdisciplinary challenge: Stagnant disciplines fall in public recognition and produce discontents who then draw on the symbolic capital from other academic fields to challenge the status quo and ultimately reconfigure the field.

To illustrate these points we will sketch the development of social history from its ascent in the 1960s and 1970s to its stagnation around 1980, when it became the main target of oppositional interdisciplinarity itself. According to historians who played a prominent part in this episode (cf. Kocka 1996; Eley 2005; Sewell 2005), social history owed its success partly to the revisionist climate of the 1960s in which its proponents came of age. With historiography still focussing on the political history of the nation state and ›great men‹, social scientific literature in the broader sense – most notably the writings of Marx – nurtured an intrinsic motivation in understanding history, an interest that tedious course work in history seminars had rather dampened, as Geoff Eley remembers from his undergraduate days at Oxford University in the late 1960s (Eley 2005: 1-12). Works from the social sciences made aware and sometimes took the side of marginal groups – such as workers, criminals, women, slaves – and studied aspects of life – for example, work, deviance, popular protest and the economy – that the discipline had neglected or treated as less significant in the general course of history. On top of that, the claim that economic structures and class conflict shaped societies and drove change provided a theory to explain historical processes and understand not just the finer nuances, but the ›bigger picture.

At this stage, social history aspired to become a history of society (Hobsbawm 1971).

While the intellectual climate of the 1960s certainly fed the enthusiasm for social theory and an interest in the experiences of the marginalized, a strong intrinsic motivation to study the respective subject matters would not have been sufficient to make social history a highly influential scientific movement. A second condition was the symbolic capital that economics, political science and sociology had to offer to historians. Sociology in particular was growing in the 1960s and 1970s, in institutional terms as well as in public and scientific recognition (Lepsius 2008: 83ff.). From the perspective of historiography, the social sciences seemed to occupy a higher plane of scientific sophistication, theoretical rigor and methodological exactness. The important issue in this context is not whether these claims were justified, but that the superiority of social scientific approaches was widely believed, within and outside the respective fields. Historians who have found themselves at the margins could employ the esteem of the ascending social sciences to challenge the establishment of their own discipline, exposing the shortcomings of existing research and drawing up a new agenda with strong references to the interdisciplinary partner. At this level, interdisciplinarity offered resources for challengers within historiography to form a powerful opposition, independent of how intense their dialogue with social scientists really was.¹

The third precondition for the rise of social history besides intrinsic motivation and symbolic capital were opportunity structures that facilitated the risk-taking behavior of aspirational newcomers. The expansion of higher education meant that a number of younger historians, among them the interdisciplinary challengers, came into positions that were relatively secure and well funded. These positions gave the proponents of social or social science history time, money and visibility to publish programmatic texts, launch journals, organize conferences and teach gradu-

1 Thomas Welskopp (in this volume) assesses that the intensity of interdisciplinarity in German social science history was rather limited.

ate students, turning opportunities and resources into lasting institutions. There were efforts to make the relationship between historians and social scientists more binding in joint research projects. The main thrust of social history's interdisciplinarity, however, was directed at the historical discipline itself. This strategy was successful, as the field ultimately incorporated its critics, adopted its research agenda and methods. According to William Sewell (2005: 29), social history »briefly became hegemonic in the field in the United States«, and Jürgen Kocka (2003: 26), who speaks more cautiously of interdisciplinarity as an undertaking of a heterogeneous minority of historians, nevertheless states that »(s)ocial history has successfully penetrated its opponents.« Subjects, methods, questions and not least a sharpened sense of theoretical self-reflection entered into the disciplinary discourse and reconfigured the field of historiography.

The example of social history illustrates what oppositional interdisciplinarity can achieve, but it also shows how it may turn into a conservative force that subsequently becomes the target of an interdisciplinary challenge itself. Critics pointed out a materialist or structural determinism within social history which paid little to no attention to the experience and agency of historic actors and which was unaware of the importance of culture as a social category in its own right. This criticism was brought forward by the proponents of *Alltagsgeschichte* (history of everyday life) and the »cultural turn« who employed theories, topics and methods from anthropology and literary theory (Sewell 2005: 44-46). Again, we see a challenge that began at the periphery of the field – notably feminism (Tilly 2005: 21 f.) – and that was formulated as an interdisciplinary project, only this time as cooperation between disciplines locating themselves in the humanities. And as with social historians, who generally engaged with the social sciences only to a limited extent, the actual intensity of the interdisciplinary exchange between cultural historians and anthropologists seems to have been low, as history borrowed the concept of culture as a system of symbols and meanings from anthropology at a moment when the latter already became skeptical of the coherence of culture that this concept implies (Sewell 1999).

In the light of these past developments, what are the current prospects for oppositional interdisciplinarity between history and sociology (or the social sciences)? This is a question that we would like to see debated. To start off the discussion, we will present a few arguments that are partial and subjective but may serve our current purpose and stimulate response.

Looking at historiography, there are signs that the discipline has reached a point at which the preoccupation with culture that characterizes the central theoretical discourse of the discipline is ripe for challenge. »Turns« are announced in quick succession, with methodological and theoretical issues becoming ever more particular and harder to communicate. At the same time, even eminent proponents of the cultural turn argue that »big structures« and »large processes« have to be brought back onto the agenda, as they are obviously important and their negligence would render historiography irrelevant in current debates outside the discipline (Sewell 2005: 77; Eley 2005: 198). This would facilitate a renewed interdisciplinarity between historians and social scientists, a refocusing on »the social, which should not be mistaken for the social history of the 1970s. Furthermore, historical research that orients itself to sociology, political science and economics has actually been continued, even though somewhat removed from the mainstream of the discipline. This line of study may serve as a »tradition« that current interdisciplinarians can build on. Finally, there are also strands in sociology such as the New Institutionalism (Powell & DiMaggio 1991), the New Economic Sociology (Smelser & Swedberg 2005) and Bourdieu's relational sociology (Emirbayer & Johnson 2008) that in their sensitivity to contexts and their interest in empirical studies are compatible with what historians do and indeed have signalled interest in interdisciplinary collaboration (Beckert 2010).

However, there are also obstacles. One would have to mention limited opportunity structures that result from the precarious situation of younger scientists and their dependence on older peers within the discipline. Individuals intent on having a career still have to make the appropriate disciplinary connections and acquaintances. Disciplinary networks provide a great deal of »social gravitation« (Black 1998: 126f.) in disciplinary

fields, arresting researchers' trajectories and opportunities of involvement, at the start of their careers and beyond. While this is the norm, these forces are felt stronger the scarcer resources are. Besides, the social sciences are not the rising disciplines that would appear to be the powerful partner for an interdisciplinary cooperation, and, from the perspective of sociology, neither is history. The rise of rational-choice sociology since the 1980s illustrates that many sociologists consider economics as a more attractive partner, a trend that has also been visible in historical sociology (Goldthorpe 1991; Kieser & Hechter 1998). With respect to both history and sociology, the situation is different to the 1960s and 1970s, when the disciplines appeared as congenial in their scientific and intellectual missions. Finally, there seems to be a lack of shared intrinsic motivation that carried former scientific movements to some degree. During the ascent of social history, it was Marxism, which had this popular appeal that motivated history students to analyze the anonymous processes that generated social inequality and conflict. At the height of cultural history, Foucault fulfilled the same function when his books nurtured an excitement about understanding the power of discourses (Foucault 1989; 2001; 2003). While much of the actual historical work carried out in reference to these two thinkers contained only extracts of their ideas, they were highly important as they rallied scientists in a camp and pitted them against the other, older and established faction. As it seems necessary to have figures like Marx and Foucault to create something like a radical consensus to fuel intrinsic motivation, the question is: What is the work that may have a similar inspiring effect today?

Towards autonomous interdisciplinarity?

Our sketch of oppositional interdisciplinarity underlines the stability of disciplinary boundaries. These boundaries do not only compartmentalize research, they are also flexible enough to bring interdisciplinarians back into the fold and involve them in reproducing the structure of the discipline. Nevertheless, interdisciplinary fields in social and historical science do exist. Science and technology studies (STS) are the prime example of this (Jasanoff et al. 2002; Hackett et al. 2007). Behavioral genetics, or genocide studies are further cases in point. At the interface of

history and the social sciences, historical social science, social science history or historical sociology are denominations for an interdisciplinary project with a variety of life cycles dating back to the early days of both academic disciplines. There is an agile community with several associations and networks and at least one regular journal with considerable reputation among both historians and sociologists on a global level (*Social Science History*). Each of the reincarnations and life cycles of historical social science appears to have produced a set of researchers importing some extradisciplinary interest in sociology or history respectively back into their disciplinary departments. Research inter history and sociology has tended to be drawn back into disciplinary gravitation, and oppositional interdisciplinarity has remained the dominant mode. This, however, may change, if an interdisciplinary field between history and sociology becomes independent of the disciplines in the same sense that, for example, STS has over the last thirty years or so turned into a field in which researchers from different disciplinary backgrounds come together and stay for a large share if not the remainder of their academic career.

In assessing the possible emergence of autonomous interdisciplinarity inter history and sociology, we will present a few systematic ideas and discuss the potential for interdisciplinary engagements coalescing into an independent field in three steps. We will subsequently discuss problems of attracting and committing participants, of arresting their trajectories, and of producing field-specific symbolic capital.

Attracting and committing participants

Any field is a structure of interrelating positions, and therefore, the first step towards establishing a field is to rally participants. Participants need to be brought into reiterated interaction with one another in order for positions to emerge which in turn attract position-takings (Emirbayer & Johnson 2008: 14-17). With respect to interdisciplinary cooperation, participants need to be drawn into social exchange, which are often challenging, and may often turn out to be tiresome and frustrating. We may initially distinguish various strategies of recruiting them with respect to

the kind of capital that is being employed in making interdisciplinary engagement attractive.

One – and perhaps the initially most salient – strategy of attracting historians and sociologists to interdisciplinary communication is, of course, by providing them with access to funds. The easiest way to kick-start a potential interdisciplinary field would be to create several professorships, about ten tenure-track positions in reputable academic institutions, for example, and make interdisciplinary communication an enforceable part of their job descriptions. Historically, something along these lines has happened en miniature in the foundation of the Department of History in Bielefeld in the 1970s. Other institutions followed suit once historical social science had become a household name. Even though the autonomy of academic institutions (not to mention the economic conditions which affect these institutions quite selectively) makes it illusory to coordinate the allocation and assignment of positions, it may still be possible to reinforce interdisciplinary communication locally and wait for the migration of participants to diffuse interdisciplinary issues and resources later on across larger networks of scholars. Young academics may be a particularly valuable investment that is relatively inexpensive to assign and maintain. David Edge's memory of arriving in Edinburgh in 1966 to found the Science Studies Unit and to be »shown my bare office: no phone, no books, no bibliographical resources, no files, no staff – indeed, it was tempting to think, *no subject!*« (cf. Edge 2002: 3; emphasis by the author), is a reminder that little resources committed over a longer period of time may sometimes be a more rewarding investment in interdisciplinary cooperation than spending large sums on spectacular conferences.

Establishing a journal such as *InterDisciplines* may be considered a strategy of attracting scientists by offering scientific capital in the currency of citable publications. At this moment, there is still comparatively little bureaucratization in both history and sociology in attributing merits for publications and translating formal merits into public funding. In a setting in which the informal reputation of a journal rather than a carefully calculated impact factor determines the value of the articles published in

it, an upcoming journal still has a chance of offering publication opportunities which are deemed valuable as such. The value of journal articles as a form of symbolic capital is determined by the standing of the journal within collectives in which valuation takes place. A new journal cannot create these collectives; it has to find them. Tracking them down involves uncertainties about whether respective collectives of authors and audiences even exist, and, if they exist, whether they are willing to accept and support a new project which may interfere with competing runs of publications that have already been scheduled (e.g. the Social Science History journal). More generally, we have come to wonder to what extent symbolic capital can be offered at all by opportunities to invest into interdisciplinary communication if that manifestation of symbolic capital that is critical for a historian or sociologist to make or continue her or his career is ultimately accumulated and distributed within the disciplines.

If a nascent interdisciplinary field – and, as we have briefly shown in the last section, the one in question has been nascent for half a century at least – is unable to provide incentives in the form of its own field-specific scientific capital, it needs to borrow scientific capital from the academic disciplines. Its agents may, for example, try to motivate some »scientific stars« and »top producers« (Collins 1998: 42-44) to engage in interdisciplinary communication, and hope to draw other participants in. Mixed strategies of providing both economic and scientific capital in attracting participants are perhaps the most promising ones at the current stage of collaboration among historians and sociologists. Mixed strategies of attraction allow a gradual transformation of economic into scientific capital: keynote speakers are paid to give talks and contribute papers, projects are funded to commit research activities, students are given grants to engage in interdisciplinary contexts, conferences are held to put issues on the map (and provide opportunities for travelling and visiting, meeting colleagues and friends, and so on).

Especially in employing mixed strategies, it may seem self-evident to involve disciplinary »stars« in order to attract sufficient attention and justify the existence of an interdisciplinary initiative in the eyes of colleagues

within the disciplines: if ›stars‹ and ›top producers‹ engage in interdisciplinary communication, it has to be worthwhile. The problem is, of course, that ›stars‹ are stars by virtue of the stratification within their disciplines, and, just like ›top producers‹, they have a vested interest in defending their disciplinary capital, and this derives from the structure of their academic disciplines as they stand. Renegades from the established disciplines, on the other hand, may be more easily drawn in once they are presented with opportunities to compete with the high-status participants. One particular problem is that potential participants in interdisciplinary communication who are neither incumbents nor challengers in their disciplines but still have valuable input to offer to the interdisciplinary discourse may initially be all but invisible. Yet they may be the ones providing the critical mass for establishing an interdisciplinary field, and bring about processes of stratification, which do not merely duplicate the stratification of other fields.

Devaluating disciplinary resources, generating social capital

There is one grave problem with the funding of participants on a fixed-term basis: participants go back to where more permanent sources of income and opportunities are. How many of the graduate students at the BGHS (the institution supporting this journal) have actually committed themselves to interdisciplinary projects, and how many of these will extend their commitments beyond finishing their PhDs? The example of the Science Studies Unit in Edinburgh illustrates the value of longer-term institutional investments, but even this institution has lost its administrative independence at the University of Edinburgh in the new millennium. In the light of this, we had better take into account a world in which long-term investments are largely determined by the established structure of the academic disciplines, with interdisciplinary engagements largely confined to the peculiar life-cycle of ›projects‹ – organizational units which die by their own hand.

In a context such as this, participants' trajectories can only be arrested on a longer-term basis by other motivations than the quest for economic capital. As we acknowledged earlier, intrinsic motivation cannot be dis-

counted altogether, but the history of interdisciplinarity »inter« history and sociology has shown us that it is a somewhat unreliable ally, as it is based on individual habitus resulting from idiosyncratic trajectories. If we assume that there is as yet no interdisciplinary capital genuine to our nascent field, then there is little that can be done to prevent the exploitation of interdisciplinary opportunities by participants with little long-term interest in interdisciplinary cooperation, and little structural leverage to counter the exploitation of interdisciplinary funding by the established disciplines. Short of interdisciplinary capital *sui generis* there is, though, at least one strategy of committing participants in the medium term, and this is the strategy of »devaluing disciplinary capital« within the field, a strategy scientists rarely consider, and one which has, to our knowledge, never been systematically investigated in prior studies of interdisciplinarity. Far from attracting able sociologists and historians indiscriminately to the interdisciplinary field, devaluing disciplinary capital is a strategy economizing on the population of scientists drawn into interdisciplinary communication to start with, particularly by discouraging exploitive engagements. Participants who shy away from »How do you know?« questions, or those which are easily frustrated by repeatedly confronting skepticism towards their disciplinary wisdom may thus be kept away from congesting the interdisciplinary discourse. Those who are willing to engage in basic deliberations about the very substance matter of their disciplines and who are willing to lay bare (and often, to find out again for themselves) why and how they know what they know, may thus be reinforced by finding like-minded colleagues whom they will like to meet again.

Devaluation of disciplinary capital played an important part in the emergence of STS as a field in the late 1970s. The proclamation of the »strong programme« in the sociology of scientific knowledge (Bloor 1976) was, by the sociological standards of its time, a somewhat simplistic program of causally explaining scientific knowledge by reference to social structures and »interests« (cf. Woolgar 1981). The program was broadened to include the explanation of technology (MacKenzie & Wajcman 1985), and, following a »logic of outflanking« typical for the sociology of science

(Bourdieu 2004: 8), it was subsequently attacked quite fiercely by several parties (e.g. Slezak 1989; Latour 1999; Kemp 2005). The significance of the strong program was not that it would have articulated ground-breaking sociology, but that it cleared a space in which interaction between sociologists, philosophers and historians of science and technology, and, yes, scientists and engineers could evolve. It may take just a small group of radical sceptics to bring about a devaluation of disciplinary resources, if only in the sense that established knowledge is pressed to justify itself and make explicit that which within the discipline has been taken for granted. In sociology of the late 1970s, and, more specifically, in the sociology of science, this was the position of structural-functionalism (cf. Bourdieu 2004: 11-14), and to this day, the Mertonian approach representative of this position has remained marginal. The Mertonian approach represented a sociology of science that fit well with sociology's self-concept as a specialized academic discipline. Its devaluation in the »hybrid region where all sociologists are philosophers and all philosophers are sociologists« (Bourdieu 2004: 8) – or, for that matter, physicists, engineers, or biologists – might initially have been tentative, but within STS, it turned out to be final.²

In attracting participants selectively, devaluating disciplinary capital is a strategy of drawing in those who are willing to give up preaching to the converted and intrinsically motivated to discuss interdisciplinary without a disciplinary safety net. If a gradual remigration of these participants to their disciplines is to be averted though, the nascent interdisciplinary field needs to establish some initial gravity by accumulating and selectively distributing incentives before a form of symbolic capital genuine to its own discourse can be produced and distributed. Apart from economic capital, social capital – capital inherent in participants' social relations (Lin 2001: 19) – may be the initially most accessible resource. Devaluating disciplinary capital may provide a strategy of committing the

2 Steven Shapin's (1995: 297) remark that »the over-publicized »warfare« between SSK and the »Mertonians« was, in fact, but a brief early episode in the career of the field« illustrates the perception of the »old« sociology of science by STS protagonists.

attention of participants to articulating, discussing and negotiating each others' positions within interdisciplinary communication, and discourage appeals to disciplinary authority. It may help to refocus participants' attention not on what is authoritatively known, but on what their partners may understand and offer as an alternative interpretation of established disciplinary wisdom. In the same way as STS turned »opening the black boxes« of scientific knowledge and technological artefacts into a programmatic concern (cf. Pinch 1992; Hård 1994: 549-553; MacKenzie 2005), historians and sociologists could also learn from one another how to unpack the knowledge respectively stabilized within their disciplines. The critical resource able to commit participants to this kind of learning process is the social capital generated by repeatedly meeting like-minded colleagues with whom interacting is mutually rewarding. The devaluation of disciplinary resource allows the creation of social capital by:

- (a) Increasing the probability that participants interested in interdisciplinary engagement will find congenial partners: scientists who are unlikely to frustrate them by responding to inquiries by recourse to authorities they are unlikely to recognize, let alone would like to simply surrender to.
- (b) Increasing the probability that reputation will be gained and accumulated by participants in terms of successful engagements in interdisciplinary communication, which may be a first step toward generating a social gravity intrinsic to the field, and to creating symbolic capital genuine to it.

The main problem, of course, is to achieve devaluation. This might be easier in situations in which it can be assumed that participants have an interest in keeping conversations on a pleasant level (cf. Frost & Jean 2003: 137). This, however, is more difficult in scientific discourse in which the pacifying veil of mutual co-presence is lifted. Historians and sociologists tend to engage in scientific discourse fully armed, employing all types of symbolic capital at their disposal, while the use and reproduction of social capital is bracketed in the name of neutrality and truth. In contrast to this, interdisciplinarity can flourish in encounters where the professional stakes are lowered so that participants meet as equals, at

least for the duration of the meeting. Georg Simmel has labelled this mode of social exchange »sociability«, or the »play form of association« (Simmel 1910/1949). And just as sociability has the potential to anticipate social change as it leads people into encounters where differences in social standing are excluded, this temporary and non-binding form of interaction may serve as a laboratory for interdisciplinarity. Conversing with scientists from other fields in »free play« could inspire new ways of thinking and lead on to interdisciplinary commitments.

Generating symbolic capital

As suggested earlier, the autonomy of a field is represented in its strongest form by the existence of a particular form of symbolic capital that is genuine to and can only be generated within the field. A field built solely on social capital would turn out to be a network in which participants interact because they like each other, as in friendship ties and groups. In such a network, positions would inextricably be bound to the individual persons occupying them. But sustaining autonomous interdisciplinarity would require a field in which thematic interests could be reproduced through various cohorts of participants, and which could tolerate a considerable regular passage and fluctuation of participants. Positions and position-takings in such a field would need to be generally accessible to outsiders, while participation would simultaneously need to be restricted to those outsiders willing to respect the level of field-specific discourse. In generating a field-specific form of symbolic capital, social exchange within a field-specific discourse can gradually be calibrated toward a respective mixture of accessibility and selectiveness: outsiders are drawn into the field by their desire for a share of this symbolic capital, and in order to do so, they have to develop a »feel for the game« (Bourdieu 1990: 66f.), to read the literature, learn to recognize authors and positions, imagine position-takings and learn to perform them (Bourdieu 2004: 45-55).

Symbolic capital is a special form of cultural capital conferring upon its bearer specific chances of symbolic domination (cf. Bourdieu 1991b: 72-76). It is a »set of distinctive properties which exist in and through the

perception of agents endowed with the adequate categories of perception, categories which are acquired in particular through experience of the structure of the distribution of this capital within the social space or a particular social microcosm such as the scientific field« (Bourdieu 2004: 55). Thus the existence of symbolic capital genuine to a field is not represented by a specific type of truth, theory or paradigm able to integrate field-specific knowledge, but by an unequal distribution of chances of symbolic recognition resulting from exposure to field-specific discourse and interaction. This, again, is why arresting participants' trajectories is crucial for autonomous interdisciplinarity to gradually emerge. In the mode of oppositional interdisciplinarity, discourse among historians and sociologist continues to be dominated by symbolic capital imported from the disciplines, yet this very fact also establishes a discourse that is accessible to everybody with the respective kind of training, providing opportunities to anybody able to mobilize and employ symbolic capital effectively. Access can be universalized because the ability to realize access is regulated by the acquisition of a specifically trained academic habitus (cf. Bourdieu 2004: 51-53). The reproduction of symbolic capital cannot be separated from providing opportunities of training and acquisition, and the generation of a field-specific form requires the existence of field-specific discourse regulating the socialization of participants over years and decades, and across institutions, schools, and paradigms. Only the perpetuation of academic discourse is able to gradually turn the production of symbolic capital into a long-term collective enterprise transcending the individual investments and claims of specific scholars, institutions, or theories. Any scientific field needs to reassure the reproduction of a field-specific discourse that is indifferent to the comings and goings of theories, paradigms, institutions, and people. This speaks for establishing specialized peer-review journals – rather than the need for some representative theory or paradigm³ – as a primary requirement for

3 The idea that some paradigm in the sense of Kuhn (1962) or some general theory about a common object of interest to which the collective attention of researchers is directed within a field is often taken to represent the existence and autonomy of scientific fields, cf. for example, the study by Harty and Modell (1991) about what they consider has been

the emergence and reproduction of a scientific field. In STS, these are journals like *Social Studies of Science* and *Science, Technology, & Human Values*. In the field in question these are *The Journal of Historical Sociology* and *Social Science History*, *Social History*, the *Journal of Social History* and a few other journals with a more regional readership, like the German *Geschichte und Gesellschaft* and the *Historical Social Research* (HSR).

But the mere existence of journals does, of course, also not suffice to gain and hold the attention of participants, as there have to be issues considered interesting enough to sustain interdisciplinary communication, and deemed complex enough to require participants to read a lot of text and do a large amount of research in order to engage with them. All problems of manufacturing interdisciplinary capital can be addressed as particular expressions of the more general problem of motivating and sustaining interdisciplinary communication. The first and perhaps most difficult problem of generating interdisciplinary capital is finding issues worth engaging with on a more sustained basis during the initial stage at which the production of research problems tends to be monopolized by the disciplines. Again, scientific capital initially has to be borrowed from the disciplines, and issues deemed intrinsically interesting will be those valuable by disciplinary standards, with some spread of interests deriving from individual habitus and idiosyncratic trajectories across the fields.

The second problem of producing interdisciplinary capital is to transform these issues from disciplinary into interdisciplinary ones. The gradual devaluation of disciplinary capital is, again, crucial to bringing about such a transformation. An appreciation of skepticism and radical statements is necessary, and one may need to accept, and maybe even deliberately provoke respective conflicts in order to raise the interest in interdisciplinary communication. Interdisciplinary conflict may then help to solve the third problem in producing interdisciplinary capital, which is the stabilization of positions among which symbolic capital genuine to the interdisciplinary field can be distributed and continuously redistri-

an ultimately unsuccessful attempt at establishing conflict resolution research as an interdisciplinary field.

buted. An unequal distribution of symbolic capital is required in order to draw participants into efforts at position-taking. In other words, one cannot have a genuine form of symbolic capital without a genuine form of stratification. The first ›stars‹ of autonomous interdisciplinarity will probably be those lucky radicals whose positions can successfully be stabilized in stratification of positions independent of disciplinary reputation.

An indicator of a completed cycle of producing symbolic capital is the recognition of this capital as genuine to a field-specific discourse. Strategically speaking, one way of accelerating the cycle up to that point may be the early infusion of reflexivity into this discourse. STS had a sustained engagement with reflexivity issues in the 1980s (Woolgar 1988), but the question of the reflexivity, and more particularly the question of the possibility of a science of science, had already been an intrinsic aspect of the early articulation of the strong program by Bloor (1976).⁴ This first issue of *InterDisciplines* could be caught out for trying to present itself as part of an academic lineage and tradition, which it seeks to reflexively articulate as constituting a field in nucleus. This is neither an innocent demonstration of respect, nor a purely academic exercise in identifying an intellectual heritage. Establishing a journal is always a political act in the sense that it tries to affect the distribution of opportunities for mobilizing symbolic capital, and conjuring up a tradition is also a rally to form an interdisciplinary coalition. Participants can only be mobilized by claiming that symbolic capital is there for the taking, and talking reflexively about symbolic capital may be considered as a peculiar way of overstating its value. Talking reflexively about symbolic capital in the early stages of an interdisciplinary field is, in other words, an exercise in reification. Reflexive interdisciplinary communication reifies a yet uncertain value, a value that can only be realized once the other problems of generating gravitation towards autonomous interdisciplinarity – of

4 Bourdieu (2004: 18-21) is highly critical of the potential for reflexivity inherent in the strong programme, and in STS more generally, cf. Carroll (2006) for counter-criticism, and Kim (2009) for a defense of Bourdieu.

attracting participants and arresting their trajectories – have successfully been overcome.

Concluding remarks on levels of interdisciplinarity

Interdisciplinarity has had a history of being indiscriminately and in many cases, perhaps, prematurely celebrated by its advocates. Less often, if ever, have historians and sociologists interested in cooperation ›interdisciplines asked themselves what kind of interdisciplinary research in what kind of setting would generally be desirable to them, and how respective preferences would correspond to what they expect to gain from their interdisciplinary engagements. Our differentiation of oppositional and autonomous interdisciplinarity poses the question of which level of interdisciplinarity would be appropriate for historians and sociologists moving ›interdisciplines. The implications of this differentiation are not at all purely academic, they are political and institutional, and they refer to questions of organizational politics and power, of ›modifying the rules of profit distribution« (Bourdieu 2004: 9). Addressing questions of who can benefit in what respect from interdisciplinary collaboration should, we think, be a central concern for sociologists and historians considering long-term investments into cooperative efforts.

Contradictory sources of symbolic capital are particularly serviceable in challenging intellectual incumbents, forcing them to take sides. Both history and sociology appear to have internalized the associated mechanisms of intellectual dispute, perpetuating and institutionalizing the respective tensions – quantitative vs. qualitative research, functionalism vs. conflict sociology, systems theory vs. rational choice approaches, social vs. cultural history, and so on. The problem with internalizing disputes in this way is that chances of renegotiating – not to speak of resolving – the boundaries are given up by incorporating them into field-specific distributions. In oppositional interdisciplinarity, the respective intellectual coalitions are likely to be reproduced on an interdisciplinary basis with, for example, ›qualitative« sociologists cooperating exclusively with ›qualitative« historians. Autonomous interdisciplinarity may be more likely to generate issues and coalitions that the disciplines are unfamiliar

with. One might question whether sociology would have had a debate about hybrid identities and non-human kinds of agency without the works of Bruno Latour (1987, 1993, 2005) and their impact on STS and beyond, challenging sociological thinking from without. The example of »stars« in STS like David Bloor, Bruno Latour, or Donald MacKenzie also illustrates that autonomous interdisciplinarity neither prohibits the incidence of convergences nor the voluntary migration of issues and researchers back to the established disciplines. In the new millennium, a larger group of STS scholars has turned to exploring financial markets, easily transcending the state of the art in economic sociology in this field of research (e.g. Knorr Cetina & Bruegger 2002; MacKenzie & Millo 2003; Knorr Cetina & Preda 2005). »I have finally discovered in writing this book the conditions under which I could be proud of being called a sociologist«, Bruno Latour (2005) has written lately. As in the case of STS, autonomous interdisciplinarity may bring about long-term cycles of disciplinary change while oppositional interdisciplinarity is more likely to be associated with punctuating disciplinary equilibria which subsequently quickly normalize, as with social history in the 1970s.

The major obstacle in bringing about autonomous interdisciplinarity appears to be the devaluation of disciplinary capital. This devaluation will tend to be resisted by incumbents within the disciplines – not only because they will want to defend individual chances of symbolic domination and their prior investments into the »disciplinary stake« (Cambrosio & Keating 1983), but also because this devaluation involves a downgrading of what they have learned and habitualized (cf. Bauer 1990; Pollak & Harshav 1988). Criticisms of STS waged by representatives of the elder Mertonian paradigm in the sociology of science (e.g. Baber 1992; Shapin 1993) are good examples of such resistance. A devaluation of disciplinary capital within interdisciplinary cooperation ultimately results from establishing a form of symbolic capital genuine to autonomous interdisciplinarity, and we have argued earlier that a conscious effort at devaluation may be instrumental in bringing this form of interdisciplinarity about. But there is no proven social process of devaluation: Might interdisciplinary peer review of research articles – of sociological

papers by historians, of historiographic papers by sociologists – do the job? Or may other, more responsive types of contributions, for example within symposium-style exchanges, institutionalized forms of trading several rounds of replies and responses, be more effective than the traditional research article in producing an intrinsic social gravitation to discourses suspending disciplinary authorities? A journal positioned in the history and sociology offers a space to experiment with devaluation, and with academic discourse supporting it.

In this essay, we could do little more than present some very general ideas about modes of interdisciplinary engagement. Levels of interdisciplinarity as we have set out here remain to be explored empirically, most effectively perhaps in terms of a relational understanding of interdisciplinary cooperation (cf. Vandenberghe 1999; Kim 2009; Emirbayer 1997), but also with a view to the formation of disciplines and the institutionalization of academic boundaries. The differentiation of oppositional and autonomous interdisciplinarity is a differentiation of how historians and sociologists find partners in cooperation, how they relate to and interact with one another, how contacts are kept up or abandoned, how and by what means relationships are negotiated and cultivated, and how participants' access to symbolic capital is selectively affected (cf. Bourdieu 2004: 33f.; De Nooy 2003). The agents of autonomous interdisciplinarity, if indeed any are willing to come forward, will need social skill in Fligstein's (2001) sense, i.e. an ability to induce cooperation in others, especially those others with which they do not share a disciplinary background, and maybe not even a methodological orientation. The agents of oppositional interdisciplinarity, on the other hand, can basically focus on economizing their disciplinary habitus towards accommodating interdisciplinary issues episodically. We at least think that those interested in bringing about more regular and sustained forms of interdisciplinary cooperation among historians and sociologists deserve more support than they have been getting up until now. We sincerely hope this new journal will turn out to be a particular asset to them.

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