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Institutional Arrangements in the Absence of Disciplinary Definitions: Digital Humanities in Switzerland

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Abstract: The digitalization of research practices in the humanities has led to the emergence of the field of digital humanities (DH). DH has made significant progress in institutionalization, while remaining underdefined. Through a qualitative study of Swiss universities we explore how institutional structures and definitions of DH interact. We show that underdefinition enables flexibility in institutionalization, while the local contexts that lead to diverse institutional arrangements may necessitate the underdefinition of DH.

Keywords: Digital humanities, institutionalization, interdisciplinarity, academia, Switzerland

Institutionelle Arrangements in Abwesenheit disziplinärer Definitionen: Digital Humanities in der Schweiz

Zusammenfassung: Die Digitalisierung der Forschungspraktiken in den Geisteswissenschaften hat zur Entstehung der Digital Humanities (DH) geführt. Trotz erheblicher Fortschritte bei ihrer Institutionalisierung bleiben sie unterdefiniert. Unsere qualitative Studie an Schweizer Universitäten untersucht die Wechselwirkung zwischen institutionellen Strukturen und Definitionen und zeigt, dass Unterdefinition Flexibilität bei der Institutionalisierung ermöglicht, während lokale Kontexte, die zu vielfältigen Arrangements führen, diese möglicherweise erfordern.

Schlüsselwörter: Digital Humanities, Institutionalisierung, Interdisziplinarität, Universitäten, Schweiz

Arrangements institutionnels en l'absence de définitions disciplinaires : les humanités numériques en Suisse

Résumé: La numérisation des pratiques de recherche en sciences humaines a mené à l'émergence des humanités numériques (HN). Malgré le progrès significatif dans leur institutionnalisation, elles restent sous-définies. Notre étude qualitative des universités suisses explore l'interaction entre structures institutionnelles et définitions, montrant que la sous-définition permet une flexibilité dans l'institutionnalisation, tandis que les contextes locaux qui conduisent à la diversité des arrangements peuvent la nécessiter.

Mots-clés: Humanités numériques, institutionnalisation, interdisciplinarité, universités, Suisse

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1 Introduction¹

The digital transformation enables and requires new research practices in the humanities. For example, the Europeana newspapers thematic collection² gives researchers access to over 18 million newspaper pages, of which about 10 million pages are available as digital full texts (Oberbichler et al. 2021; Bunout et al. 2023). To make use of such resources for research in the humanities, and more specifically historical research, new methods and tools are required, which are often developed through cross-disciplinary collaborations between historians and computer scientists. The field resulting from the encounter of humanities disciplines with computational methods is known as *digital humanities* (DH).

Although we write about "a field known as DH," discussions about the definition and boundaries of this field are still ongoing. In fact, many DH scholars have argued that DH is simply "undefinable" and that, whatever its nature, it is certainly not a discipline and should not be one. Yet, since the term was introduced by Schreibman et al. (2004), DH has made rapid and significant progress in institutionalization (chairs, degree programs, learned societies, conferences, journals, etc.). Such institutionalization can be seen as ongoing professionalization and stabilization into a disciplinary form (Terras 2006; Jacobs 2013, 135–136; Klein 2013). These observations lead us to the following research question: *how do institutional structures and definitions of digital humanities interact?*

We explore this question by analyzing how digital humanities is realized in Swiss institutional structures. Switzerland provides a compelling case study for such an analysis: as of this writing, there are only five universities that have created professorships with the explicit denomination *digital humanities*. Each of them has different institutional structures that host these digital humanities professorships, but they are still sufficiently similar for mutual recognition. Our aim is to investigate how these professors of DH identify their own contributions as well as those of their peers, how they thereby identify (disciplinary) boundaries of digital humanities, and how identifications can possibly be explained by institutional structures.

This paper is organized as follows. We first discuss the problems underlying our research questions: we give an overview of discussions around definitions of DH (Section 2), how DH acts as a discipline as well as an interdiscipline (Section 3), followed by a discussion of institutionalization of interdisciplinarity in Section 4. We then move to our approach toward our research question. In Section 5 we discuss several studies conceptually related to ours. In Section 6 we discuss how we interviewed professors of DH in Switzerland and analyze these interviews through the lenses of boundary work and the emergence of research fields through local configurations.

¹ We thank the interviewees for their time and their willingness to share their thoughts with us and the anonymous reviewers for their helpful feedback.

² https://www.europeana.eu/collections/topic/18-newspapers, consulted 27.06.2023.

In Section 7 we provide brief descriptions of the local organizations of DH at each of the research universities we have investigated. In Section 8 we analyze how our interviewees identified contributions to DH and how they understand DH. Finally, in Section 9 we reflect on our findings, present our conclusions and how these relate to the scope of this special issue.

2 Debates on Digital Humanities

When discussing institutional arrangements for digital humanities (DH), the first question to address is: what is DH? DH has gained a reputation of struggling to define itself, and articles trying to define DH have become something of a genre. The assessment of Kirsch (2014) still appears accurate today:

Despite all this enthusiasm, the question of what the digital humanities is has yet to be given a satisfactory answer. Indeed, no one asks it more often than the digital humanists themselves. The recent proliferation of books on the subject – from sourcebooks and anthologies to critical manifestos – is a sign of a field suffering an identity crisis, trying to determine what, if anything, unites the disparate activities carried on under its banner. (Kirsch 2014)

The volume *Defining Digital Humanities* (Terras et al. 2013) collects over twenty essays on this topic and can be regarded as the standard reference on the question. The editors clearly state in their introduction to the volume the practical need for a definition:

Why would one define an academic field? From one perspective such definitions have an obvious practical and utilitarian purpose: we must be able to define and describe what it is that we are doing not only to colleagues and students but to university management, funding agencies and the general public. (Terras et al. 2013, 1)

Nevertheless, most contributors – and the editors themselves – seem to come more or less to the same conclusion as Kirschenbaum (2014, 15): "we will never know what digital humanities 'is' because we don't want to know nor is it useful for us to know." Yet even though many in the field do not seem to mind or may even celebrate the alleged undefinability as a feature of an all-inclusive "big tent," "[d]efining digital humanities is an activity that shows no signs of slowing down" (Callaway et al. 2020, 11).

In the context of this article, we do not aim to contribute to the debate on the definition of DH. For a more extensive and critical analysis of this debate, as well as a proposed definition, see Piotrowski (2018; Piotrowski and Fafinski 2020). In this paper, it is taken as a background to explore how underdefinition of a field of

research may interact with its institutionalization. In the next section we, therefore, consider traits of disciplines and the extent to which these may be applied to digital humanities.

3 Characteristics of Disciplinarity

Can DH – or one of its manifestations – be considered a discipline? To answer this question, we first need to clarify what we mean by *discipline*. In their review of attempts to define what disciplines are, Sugimoto and Weingart (2015) find that despite not finding a single authoritative definition, several characteristics are common to the various definitions. First, the way research is communicated using disciplinary jargon and in recognized journals. Second, the existence of a social group that collaborate and recognize one another. Third, the *aboutness* of a discipline, in the sense that there are certain topics or problems that are commonly recognized as interesting. Finally, they note that institutions remain of importance, mainly as part of the training and hiring market. Krishnan (2009) stresses that only through institutionalization disciplines can endure from one generation to the next. A discipline is therefore typically founded by the creation of a professorial chair dedicated to it in an established university.

We can see that certain orientations of DH satisfy many, if not most of these requirements. There is undeniably a body of knowledge accumulated in specialized journals such as *Digital Scholarship in the Humanities* (DSH), *Digital Humanities Quarterly*, or *Digital Studies/Le champ numérique*. Monographs such as McCarty (2014), anthologies such as *Debates in the Digital Humanities*, or textbooks such as Van Hooland et al. (2016) or Jannidis et al. (2017) document the research methods specific to the field. There are associations (ADHO, EADH, Humanistica, DHd, AIUCD, ACH, etc.)³ and national and international congresses. And finally, there are no longer just "centers" – service rather than research units – but also departments, institutes, professors, degree programs, and students.

Yet what DH may lack is a commonly recognized intellectual agenda; its aboutness or specific object of research and specialist knowledge. Liu (2012) notes that DH has failed to develop its own cultural criticism to thrive as a humanities discipline. McCarty (2012) worries that DH may have adopted too much of a service role towards the humanities, providing digital tools and methods for scholars of the humanities to conduct their disciplinary research. Yet other authors have argued that the success of DH is exactly because of its tight connection and relevance to

³ ADHO: Association of Digital Humanities Organizations; EADH: European Association for Digital Humanities; Humanistica: the francophone DH association; DHd: Digital Humanities im deutschsprachigen Raum (the germanophone DH association); AIUCD: Associazione italiana per l'informatica umanistica e la cultura digitale (the Italian DH association); ACH: Association for Computing in the Humanities (the US DH association).

the humanities. Edmond (2016) attributes the success of DH to implemented research infrastructures that have reached large audiences. Eve (2020) even argues *against* institutionalization of DH; he warns that "the banishment of DH to its own departmental area is a problematic move," worrying that DH will lose its relevance if it no longer serves the humanities. Likewise, Lässig (2021) argues that digital history can only be successful when useful to history at large.

Perhaps the closest identification of a disciplinary aboutness comes from Svensson (2011, 53) when he argues that the "digital" constitutes the shared "boundary object" of DH. Yet in confronting the digital as an object of interest to the humanities, DH necessarily depends on methods, concepts, and tools from outside the humanities. Luhmann and Burghardt (2021) conclude that "DH is simultaneously a discipline in its own right and a highly interdisciplinary field, with many connecting factors to neighboring disciplines – first and foremost, computational linguistics, and information science."

As such, we find that DH exemplifies institutional traits commonly associated with disciplines, as well as traits associated with interdisciplinary spaces. In the next section, we, therefore, shift our focus on the institutionalization of interdisciplinarity.

4 Institutionalization of Interdisciplinarity

While universities have traditionally been organized into distinct faculties or departments that reflect disciplinary boundaries, this is not to deny that these structures allow some flexibility for interdisciplinary practices on the individual level. What occurs when interdisciplinarity becomes institutionalized is that those practices become visible in the organization and social sphere of the university (Klein 2013). Likewise, digital humanities can be traced back further than its institutionalization. Yet a question is whether these practices should be institutionalized as a new disciplinary unit or into an interdisciplinary space.

Small (1999) compellingly shows that this question cannot be settled *a priori* of the process of institutionalization. How interdisciplinary practices become institutionalized is not an inherent aspect of those practices, but instead dependent on local contexts. Using the example of African-American studies, Small (1999) demonstrates that institutionalization is, at least to some extent, path-dependent. Path dependency entails that phenomena can at least partially be explained by historical and contextual factors. How research is organized and even the making of scientific discoveries are in part path-dependent (Hollingsworth 2006). As such, Small (1999) finds that how African-American studies were institutionalized is partially dependent on which scholars were present at the university, what structures already existed for institutionalization, and how the university operates in the larger institutional and societal context.

In his study of the Luxembourg Centre for Contemporary and Digital History (C²DH), Kemman (2021) demonstrates the path dependency of institutionalization of digital humanities: After debates on whether to embed this center in the Institute for History or to establish a new structure that is entirely independent from the university, it was ultimately decided to establish an *interdisciplinary center*, a type of institutional structure that already existed at the university and which could serve as a reusable model. Lässig (2021) more generally notes the path dependency of DH institutes as dependent on whether the university holds sufficient (financial) resources and personnel for large collaborative digital projects. It is thus very likely that institutionalization of digital humanities is partially path-dependent, and thereby contingent on local contexts of universities.

Small (1999) furthermore shows that an advantage of interdisciplinary institutionalization is that scholars need not choose between their original discipline and the new emerging (inter)discipline. It provides an interesting opportunity for scholars to engage with this new research field, while remaining footed in the safe havens of their disciplinary home. This aligns with the findings of Bensaude-Vincent (2016), who found that scholars did not give up their disciplinary identities, but instead configured and aligned their intellectual agendas in order to maintain their disciplinary identities. She calls this the "resilience of disciplinary identity," (Bensaude-Vincent 2016, 54–56) and subsequently argues that disciplines by themselves never stabilize, but that they are continuously shifted and reconfigured. As such, she finds that scholars often prefer not to become institutionalized into a new (inter)discipline, as it is not strictly necessary for pursuing their research interests.

Likewise, disciplinary identities have proven resilient in DH. Svensson (2011) has characterized DH as "a humanities project," suggesting that DH practices are conducted from disciplinary identities. Most historians in digital history identify as historians, with only a small minority identifying as *digital* historians (Kemman 2021; Lässig 2021). Kemman argues that historians participating in digital history may actively try to prevent the formation of a new discipline, as they emphasize the need for digital history to ultimately contribute to historiography (2021, 144). Because digital humanities aims to provide value to the wider humanities, Pidd (2022, 306) moreover argues that institutionalization "always requires digital humanities to transform into a broader subject domain in order to increase its relevance to its institutional stakeholders: management, colleagues, and of course students."

The institutional structures most often associated with DH are probably the *center* and the *lab*, rather than the typical academic department. Correspondingly, most publications concerned with institutionalization of DH focus on these types of structures. Fraistat (2012, 281) notes that "[t]he emergence of the digital humanities as a coherent field was accompanied by and partially a result of the evolution of the Humanities Computing Center as an institution." However, the term "center" covers a multitude of very different types of structures, which have very little in

common: "some are primarily service units, some primarily research, some a mixture of both" (Fraistat 2012, pp. 282–283). Warwick (2012, 194) identifies two main origins of DH centers: most older centers have "emerged from a background of service computing, in other words, providing IT support to academics." Newer DH centers, on the other hand, have "emerged because different research projects had come together and formed a centre." Here we thus have a different aspect of path dependency, which is related to, among others, dichotomies such as "research vs. service." Warwick (2012, 194) mentions issues with tenure and promotion and warns that "without a strong teaching presence, or, ideally, a full Masters programme, it may be difficult for digital humanities to establish itself fully as a 'proper' academic discipline" (Warwick 2012, 213).

5 Related Work

We have outlined the debates on the definition in Section 2; in Sections 3 and 4 we have given an overview of work on the institutionalization of interdisciplinary fields, DH in particular. In this section, we look at related work in a narrower sense, i. e., work that studies research questions that are in some respect similar.

To the best of our knowledge, there is no work on our specific research question; definitions of DH and institutional structures for DH are usually discussed separately. The closest is perhaps the book by Klein (2015), which dedicates a chapter each to the definition and the institutionalization of DH (again, the center is taken as the prototypical form of institutionalization). She also discusses the tension between teaching, research, and service, as well as issues of recognition and prestige that arise when an emerging field becomes "professionalized." However, her description of "patterns of affiliation" (Klein 2015, 10) is effectively an outside view on the status quo. With respect to institutional structures, her focus is on DH as an example of an interdisciplinary field. However, in this paper we aim to explore the interaction between how digital humanities are identified through the institutions in which they are enacted.

If we look beyond DH, Small's study of the emergence of African-American studies at the universities of Harvard and Temple is conceptually closer, as it explores how interdisciplinary practices *become* institutionalized (Small 1999). He shows that local configurations – including the definition of the field – may lead to very different results. Whether African-American studies ought then to be understood as a discipline or as an interdiscipline can thus not be answered independently from its local contexts.

Another inspiring study outside of DH is Li Vigni's analysis of *complexity science* (2021). The author examines self-perception and context of complexity scientists and, like we do, employs semi-structured interviews; though much larger in scope with 170 interviewees. As an interdisciplinary field struggling to define itself, the field of

complexity science shows some parallels to DH, albeit its institutionalization appears to be even weaker than that of DH. Complexity science is primarily institutionalized outside of universities; the prime example (and origin) being the Santa Fe Institute.

In contrast, Saner (2019) studies the rather successful implementation of *data science* as a new field in higher education in Switzerland. We thus share the same institutional landscape. As an academic field, like DH, data science is also "digital," interdisciplinary, and only vaguely defined. As a consequence, he finds that "[a] ccording to their traditions and profiles, universities have opted for different strategies when implementing new degree programmes" (Saner 2019, 373), and that they are located in different departments (typically either computer science or business and economics); institutional choices thus reflect local conditions, as well as disciplinary and departmental affiliations of initiators. However, Saner's analysis also demonstrates a stark difference between data science and DH on the political and institutional level: he notes that the introduction of data science in Swiss universities can be seen "as an example of close and interconnected relations between industry, science policy and universities in the digital age" (Saner 2019, 375), which is strongly driven by business lobbies, motivated by a discourse of urgency, and involving significant financial incentives to universities.

6 Materials and Methods

We explore the institutionalization of DH by analyzing the Swiss landscape as a case study. We do so through a qualitative research design. Researchers of five different research universities who hold a professorship explicitly designated as digital humanities were included in this study. We interviewed four professors (1 female, 3 male); the fifth professor is the lead author of this paper. While he is part of this population of DH professors in Switzerland, our analysis of the interviews focuses on the responses from the other four professors to ensure the described responses reflect our qualitative research design. It is the nature of things that a large portion of research in emerging interdisciplinary fields is done by people who have a wide variety of official affiliations, appointments, and positions. In this paper we are specifically interested in the institutionalization of one such field, i.e., how informal arrangements are stabilized, adapted, or displaced. Our selection of interviewees is thus not to devalue the contributions of scholars who do not hold explicit DH positions; rather, is necessary to observe how *explicit* positions – as perhaps the most manifest expression of institutionalization – reflect and contribute to discursive understandings of DH.⁴ In these interviews, we have focused on three broad topics:

Examples of research groups in Switzerland that arguably contribute to DH without being explicitly labeled as such include the Chair of Computational Linguistics at the University of Neuchâtel (UNINE), the Institute of Computational Linguistics at the University of Zurich (UZH) or, also at UZH, the Department of History's Digital History Lab.

- 1. the local organization of DH,
- the interviewees' individual understanding of DH and its relation to the local structures, and
- 3. how their research is recognized and evaluated and how they recognize and evaluate the works of others.

We analyze these interviews through two conceptual lenses. First, the concept of boundary work (Gieryn 1983), which describes the discursive work of scholarly communities to establish boundaries of what does and what does not contribute to their scholarly enterprise. Through such discursive work, communities not only identify their scholarly enterprise, but simultaneously aim to legitimize the existence of their community as separate from other communities. We would thus expect professors of DH to establish discursive boundaries that legitimize the existence of DH institutions. Even with DH being underdefined, as we showed in Section 2, we might expect professors to discuss the question of "who's in and who's out" (Ramsay 2013).

Second, we consider the idea that new research fields emerge through *local configurations* (Merz and Sormani 2016). In their volume, Merz and Sormani (2016) argue that new fields of research compete with existing disciplines for resources, personnel, and space in research institutions. Therefore, they suggest exploring "how policy, place, and organization are made to matter for new research fields to emerge" (Merz and Sormani 2016, 2). As DH emerges in Switzerland through local configurations, we would thus expect this, as noted in Section 4, to be at least partly path dependent.

7 Digital Humanities in Switzerland

As explained above, we are only looking at institutionalized DH. Our main criterion is the existence of *professors of digital humanities*, as their appointment represents a significant long-term commitment in both research and teaching.

Switzerland has 12 publicly funded universities: 10 cantonal universities and 2 federal institutes of technology. In the above sense, DH is currently institutionalized at (in alphabetical order) the universities of Basel (UNIBAS), Bern (UNIBE), Geneva (UNIGE), and Lausanne (UNIL), as well as at EPFL, the Swiss Federal Institute of Technology in Lausanne.

As outlined above, we focus on the *current* situation rather than its historical development. A historical study of the institutional establishment of DH in Switzerland would be valuable, in particular with respect to its path dependency. Yet at this point it would be difficult to access the necessary information, such as minutes of faculty meetings, as it is still too recent. We mention only a few publicly available key dates here to enable readers to temporally situate the development.

The first appointment of a professor of DH was made by EPFL in 2012 (tenure-track assistant professor). In the same year, UNIBE advertised a position (assistant professor without tenure track), which was filled in 2013. UNIBAS advertised an open-rank professorship in 2014, but an appointment (on the level of full professor) was only made in 2017. Meanwhile EPFL advertised an unspecified number of "faculty positions" in DH, and UNIL advertised two professorships; all these positions were filled at the end of 2016 (EPFL appointed two professors, in digital musicology and in experimental museology). Finally, UNIGE advertised a professorship in 2018, which was filled in 2019.

The professorship at UNIBE was advertised (and filled) again in 2019, this time as a tenure-track assistant professorship, after the original hire left for a full professorship at the University of Vienna. The professorship at UNIBAS was advertised again in 2022, after the previous holder of the position had accepted a professorship at the University of Mainz.

As of this writing, degree programs in digital humanities are offered at UNIL, EPFL, and UNIBAS (in the order of their establishment).

In the rest of this section, we describe the institutional structures for DH at the five universities. The descriptions are based on the interviewees' responses to the question "How is DH institutionalized at your university?" and on publicly available information, in particular the universities' Web sites.

Table 1 Overview of Organizational Structures

University	Faculty-level	Department-level
EPFL	College of Humanities	DH Institute
UNIBAS	Faculty of Humanities and Soc. Sciences	DHLab
UNIBE	Faculty of Humanities	Walter Benjamin Kolleg
UNIGE	Faculty of Arts	Chair of DH
UNIL	Faculty of Arts	Department of Language and Information Sciences
	Faculty of Social and Political Sciences	Institute of Social Sciences, STSLab

Source: Authors' research.

Table 1 attempts to give a high-level overview. The terminology used by universities to describe their institutional structures differs widely; we use "faculty-level" and "department-level" to refer to the two organizational levels below that of the university as a whole. Table 1 thus makes the institutionalization appear more regular than it really is; in particular, the department-level structures differ substantially in their organization and tasks, which should become clear from the following descriptions.

EPFL

As an institute of technology, EPFL in principle does not offer humanities programs and does not do research in the humanities. However, engineering students are required to take courses from the Social and Human Sciences (SHS) Program, which are primarily taught by instructors from UNIL. In 2002, the College of Humanities (CDH) was created to coordinate this program. The CDH is now also host to two institutes, one of which is the *Digital Humanities Institute* (DHI),⁵ which was established in 2015 (i. e., three years after hiring the first professor in DH and the creation of the Digital Humanities Laboratory). The DHI consists of five laboratories: the Digital Humanities Laboratory, the Digital Musicology Laboratory, the Laboratory of Experimental Museology, the Social Computing Group, and the Laboratory of the History of Science and Technology. Since 2017, the DHI offers the EPFL's MSc program in digital humanities. Apart from the fact that the CDH is not a regular "school" (i. e., faculty) and its relatively small size, the organization of the DHI corresponds to the normal organization of disciplines at EPFL.

University of Basel

At the University of Basel (UNIBAS), digital humanities is institutionalized in the Digital Humanities Laboratory (DHLab) of the Faculty of Humanities and Social Sciences. It comprises two professorships, one of which is currently vacant (see above).6 The DHLab has its roots in scientific photography and was founded in 1924 as "Abteilung für wissenschaftliche Photographie" (Laboratory for Scientific Photography) of the Department of Chemistry in the Faculty of Science. Around 1981, the head of this unit became interested in digital photography. One of the current DH professors joined in 1985 during his PhD in physics and developed an image processing facility in the department of Physics. At one point, the lab started working on the digital preservation of cultural objects, which started its engagement with museums and archives, and thus with humanities research. Around 1996 the Faculty of Humanities and Social Sciences approached the lab, realizing that digital sources were the future for humanities research. After three years of negotiation, the photography lab was moved from the sciences to the humanities, so 2001 can be seen as the start of DH at Basel. The DH Lab is part of the faculty, but outside of the other departments, answering directly to the dean. Since 2019, the DH Lab offers an MA program in digital humanities.

University of Bern

At the University of Bern (UNIBE), the DH professorship is part of the Walter Benjamin Kolleg (WBKolleg), an inter- and transdisciplinary research and teaching institution of the Faculty of Humanities. Originally, the primary mission of the

The other is the Institute for Area and Global Studies (IAGS).

⁶ The other professor, whom we interviewed, was not appointed but promoted and is therefore not mentioned above.

WBKolleg, founded in 2015, was to provide the infrastructure for the promotion of networking among young scholars through the Interdisciplinary Research and Graduate Network and the Graduate School of the Arts and Humanities. It also hosts two research centers, the Center for Global Studies and the Center for the Study of Language and Society. Furthermore, it provides support for cooperation with other faculties and universities. DH is not organized as a center, as centers are always interfaculty, but as a professorship. The professorship in DH was originally part of a cluster hire in 2012 in view of a proposal for a National Center of Competence in Research (NCCR), the largest type of collaborative research project available in Switzerland, which also requires structural investments by the applicant institutions. Since the proposal was unsuccessful, the position was moved to the WBKolleg. While the WBKolleg is part of the Faculty of Humanities, it is largely independent and has its own administration, board, and president.

University of Geneva

At UNIGE, the Chair of Digital Humanities is part of the Faculty of Arts. It was created in the fall of 2019 and is attached directly to the dean's office of the Faculty of Arts, i. e., it does not depend on any department, highlighting its interdisciplinary outlook. UNIGE currently does not offer an MA program in DH, but the Chair offers modules on the BA and MA level and a *Certificat de spécialisation en humanités numériques*, a post-master's specialization worth 30 ECTS.

University of Lausanne

The creation of the two DH professorships at UNIL was in the context of an NCCR proposal (ultimately unsuccessful). A joint commission recruited two tenure-track assistant professors in digital humanities in 2016: one in the Faculty of Arts and one in the Faculty of Social and Political Sciences (SSP). At the same time, an MA program in digital humanities was instated, which also started in Fall 2016. In contrast to the situations at the other universities discussed above, these professors are integrated into the regular institutional structures of the respective faculties. In the Faculty of Arts, the attachment is to the Department of Language and Information Sciences, which has been offering a program in computer science for the humanities since 1992. In the Faculty of SSP, the professor of DH is attached to the Science and Technology Studies Laboratory (STS Lab) in the Institute of Social Sciences. The MA program in digital humanities is jointly offered by the Faculties of Arts, SSP, and Theology and Sciences of Religion; it is directed by a scientific committee composed of two members from each of the faculties. Unlike regular programs, it is not attached to any department or institute. Between 2018 and the end of 2022, UNIL and EPFL shared the UNIL-EPFL dhCenter, a "research platform" with the mission "to facilitate, support, and promote digital humanities research, education, and innovation." (https://dhcenter-unil-epfl.ch/en/about/, consulted 15.09.2023.)

We do not discuss this impermanent structure here, as researchers were only affiliated with it through membership, not employment.

From the descriptions above, it is clear that the five universities have chosen to institutionalize DH in quite different ways. Depending on the point of view, different groupings can be identified. For example, EPFL can be said to stand out, not only because it is an institute of technology, but if one discounts the fact that the College of Humanities is not a faculty of humanities, it has probably the most conventional institutional structure for DH: an institute of digital humanities can be understood as an affirmation of DH as a discipline. On the other end of the spectrum is UNIL, which has not created any institutional structures: the two professors of DH are even housed in two different faculties.

UNIBAS, UNIBE, and UNIGE can be seen as lying between these two extremes: digital humanities is housed in an institutional unit that is either dedicated to digital humanities (the UNIBAS DHLab and the Chair of Digital Humanities at UNIGE) or – in the case of UNIBE – is dedicated to interdisciplinary research. However, these institutional structures are clearly marked as interdisciplinary by being outside the regular institutional structures associated with the established disciplines.

This could ultimately also be said of the institutionalization at EPFL: the Digital Humanities Institute (or its labs individually) could theoretically also be part of the School of Computer and Communication Sciences. Why this is *not* the case is possibly another example of the path dependency of institutionalization and can probably only be understood historically.

In this view, the case of UNIL is perhaps exceptional in a different sense. Unlike the other universities, with the Department of Language and Information Sciences and the STS Lab, the two faculties at UNIL had already host units that were clearly interdisciplinary, related to DH, and fully integrated into the regular institutional structures. With respect to the Computer Science for the Humanities part of the Department of Language and Information Sciences one may even argue that DH had already existed in a fully institutionalized form, albeit under the older name of "humanities computing."

8 Analysis of the Interviews

This section reviews the interview regarding the relationship between local institutional structures and interviewees' personal understanding of DH (see Section 6 for the methodology used). We were specifically interested to what extent the professors of DH felt that the local institutional structures (which had been largely created by others), their perception of DH, and their personal conception of DH.

Given the small number of interviewees (4), our analysis is on the one hand necessarily anecdotal; on the other hand, the interviewees actually represent a large

part of the total population of professors of DH as defined in Section 6. The small number of interviewees has also prompted us to partly summarize and anonymize the responses, especially since many of our questions concerned issues of (scholarly) identity. Some of the questions we asked were:

- > What would you say is your disciplinary identity?
- How well does your institutional affiliation match your disciplinary identity?
- Does your local organization match your idea of DH?
- > Do you consider DH a discipline?
- Would you say that *all* your research contributes to digital humanities, or does it depend on the project or research question?

The last point concerns both the understanding of DH and the recognition and evaluation of DH, an issue which we also addressed explicitly:

Has DH been a problem or an opportunity in evaluation, recognition, and funding?

All but one of the interviewees identified as DH scholars; the one who did not noted that they "had identity problems even before becoming a professor in DH," remarking: "I still don't feel comfortable going to DH conferences or publishing in DH journals." Those who did identify as DH scholars stressed that they are no longer a physicist, historian, or computer scientist. One interviewee remarked:

It would also be quite hard to go back to being a historian. All my work contributes to DH, so I am not hireable to a position as a historian. I'm too far away from that, at least for the moment. I have left the safe historian haven some years back.

Despite the different institutional structures, to our surprise all interviewees considered their institutional structure suiting them personally *and* fitting their understanding of DH. They thus did not see reasons to change the institutional structures.

However, regarding the definition of DH and the question of whether it is a discipline, three of the four interviewees struggled. Only one respondent outright answered that "it is a new field" and gave both a definition and a rationale for why a definition is needed:

This openness has had a negative aspect on its definition as a structured field and in the long run can be problematic for a solid academic anchoring. I believe it makes sense to define Digital Humanities as a new field focusing on large or dense cultural datasets, which call for new processing, interpretation, and visualization methods. [...] By focusing on these large datasets of cultural data, digital humanities is becoming a well-structured field with specific objects of study.

One interviewee said that "from the outside, it is a discipline with chairs, conferences, journals, etc. But from the inside it is concerned with interdisciplinary questions." According to this scholar, the interdisciplinarity is due to the fact that, in order for DH to remain relevant to humanities disciplines, DH scholars must participate in disciplinary debates:

If we don't participate in disciplinary debates, our colleagues will no longer take us seriously. In short, it is a discipline, but we have to work much more than the others since we have to stay active in another discipline (or more) as well.

"Interdisciplinarity" was also mentioned very frequently by the other two respondents. One said that DH was "a high-level auxiliary science" with an "interdisciplinary core, but that core is not a discipline." This professor stressed their work "does not contribute to history or literature, but to DH," and that they "just collaborate with these other disciplines." They stressed that "DH does not have standalone problems", but that it "always has to contribute to a humanities discipline, otherwise it is just computer science."

Despite having a background as a historian, the other professor's response was surprisingly similar, stating that there are certain questions "at the heart of DH," and other questions that must be addressed in interaction with other disciplines. Both also agreed that DH is "a connecting hub," bringing different disciplines together. While they admitted that "DH has its own core that is outside of the humanities disciplines," they were very clear regarding its non-disciplinary status. The rationale given was:

It is interdisciplinary by nature, which makes DH not really a discipline. But it is difficult to say what it truly is then. It is complex, but the institutional structure allows that we keep it complex and don't resolve the question of what DH is. [...] DH is not just applied computer science for the humanities.

The inclusivity of the field is often stressed in DH. This notion relates to the question of whether or not DH is a discipline in its own right; some authors reject the status of discipline on the grounds that it would exclude some people. We, therefore, asked our interviewees to what extent they see others contributing to DH without being explicitly organized as such and whether they are in DH or doing DH research.

All interviewees agreed in principle on the openness of the field and that also scholars outside of institutionalized DH can contribute to it. For example, one interviewee commented: "So someone can identify instead as a computational linguist, but they might still contribute to DH and appear in DH conferences." Another remarked that "Many researchers do DH without knowing it."

But two interviewees also stressed the ambivalence of many humanities scholars vis-à-vis DH and "the digital:" "Some colleagues say the digital is evil, they fear

it, don't understand it, and don't see it as humanities. That still exists and is very loud. But more and more researchers are interested in digital methods." The other noted with respect to a Swiss university without institutionalized DH that "you see a variety of scholars interested in DH questions who can be brought into DH discussions. DH is sometimes very appealing to some people, but others want to distance themselves from the term."

Despite the declared openness of the field, interviewees also noted a certain opportunism; thus, there is also some ambivalence on the side of DH professors:

Some scholars only call themselves DH when it is beneficial, e.g., for funding, and otherwise call themselves historians. But they still contribute to DH with their research.

Interestingly, the one professor who did not identify as DH scholar, here expressed a very clear idea of discipline:

When you realize there is a real discipline, you realize there are standards of what is understood as relevant. When colleagues are not aware of the standards, their work cannot become part of the discipline. Standards such as TEI, authority files, how to do work, etc.: that ensures that it talks with the discipline and is reusable.

Unlike some funding bodies in other countries, the Swiss National Science Foundation (SNSF) does not recognize DH as a field, i. e., it is neither on the list of disciplines, nor is there targeted funding. The interviewees generally see this as a problem:

Funding is still a problem because we are in-between. I cannot just select a discipline in the SNSF. There is no DH in the SNSF, so I have to select a humanities discipline. This is still a problem in funding; the funding agencies don't understand what DH is.

Another concurred:

This is one of the main challenges. When I apply for funding from the SNSF, I have to apply as a historian, even though I don't identify as a historian anymore.

This professor found it easier to obtain funding through cooperation with GLAM (galleries, libraries, archives, museums) institutions:

Most of my funding comes from the GLAM sector, mostly in the form of cooperations where we develop something for them or together with them. Then usually that is used for some research question. This work leads to DH papers proper, with questions on how to structure the data etc., rather than humanities questions. Our partners then also really see it as DH research, not just as an instrument toward humanistic research.

The same interviewee also observed:

If you are looking for money for infrastructures, then the DH aspect is very helpful. There is no problem to attract funding for infrastructures for the humanities under the label of DH.

The difficulties in obtaining funding for DH also apply when DH is understood as being closer to informatics:

Most of our SNSF projects are either Division II [mathematics, natural and engineering sciences] or interdisciplinary. Direct DH funding is still very rare.

What is specifically meant here by "interdisciplinary" is the SNSF's Sinergia funding scheme for "interdisciplinary, collaborative and breakthrough" research. This scheme requires a collaboration of two to four research groups from different disciplines and is thus not an alternative to regular (i. e., disciplinary) project funding, as it imposes additional requirements. For Sinergia, the SNSF defines interdisciplinary research as "research across disciplinary boundaries," whereas, as discussed above, DH is an inherently inter- or multidisciplinary field in itself – as Moles (1995, 159) remarked, "la multidisciplinarité n'existe réellement qu'à l'intérieur du cerveau d'un même individu."

The tenured professors did not comment on personal evaluation. One tenure-track professor reported that they will be able to obtain their *habilitation* - as a prerequisite for tenure - in DH:

The university has accepted that I represent the DH field and that I can get tenure as such, rather than as a historian with a specialization in digital methods. There is also already a colleague with a habilitation in musicology and DH, so this has already been recognized.

We thus observe that professors of DH in Switzerland find their institutional structures to be in line with their understanding of DH and do not want to change them. Instead, they appreciate the unorthodox institutional structures and the vague denotation of DH because it gives the freedom to make of DH what they want and collaborate with whomever they want. Therefore, they generally avoid defining DH and agree with one another that anyone can contribute to DH regardless of their discipline. Downsides of this approach to DH are, however, that our interviewees struggled with their disciplinary identities and experienced difficulty in obtaining funding from SNSF, as DH is not recognized as a discipline or area of research. Nevertheless, none of the interviewees linked this lack of recognition to a lack of definition on the part of DH. In the next section, we review these findings to discuss our research question.

⁷ https://www.snf.ch/en/HzVMPWm96mz69ZJ8/funding/programmes/sinergia, consulted 27.06.2023.

9 Conclusions

To conclude, we return to our research question: how do institutional structures and definitions of digital humanities interact?

From our case study of Swiss DH institutions, it appears that institutionalization of DH is at least partly path dependent. Existing structures for DH emerge through historical reasons such as past decisions and existing (interdisciplinary) structures which could embed DH institutes or professorships. Our interviewees moreover held no desire to change or revolutionize these structures, but instead opted to work within the given boundaries to the best of their abilities. This has led to a diverse landscape of institutional structures for DH in Switzerland, underscoring the dependence of emerging research fields on *local configurations* and contingencies (Merz and Sormani 2016).

These findings provide a compelling ground for comparing DH to the institutionalization of African-American studies as described by Small (1999). Based on his analysis, we anticipated that the diversity of structures would be reflected in a diversity of definitions of DH. More specifically, we anticipated that visibly institutionalized forms of DH in independent, department-like research units – offering legible career trajectories - would lead to stronger notions of DH as disciplinary compared to less clearly institutionalized forms. Yet we cannot distinguish such a clear dependence of disciplinary understanding on institutional structures in our interviews. Instead, interviewees from different universities largely agreed that they preferred not to strictly define what DH is. They agreed that scholars from outside DH may still contribute to DH - and may even do so unknowingly. In contrast to the concept of boundary work, where legitimization of a scholarly enterprise is conducted through *separating* it as exclusive from other communities, in this case, legitimization of DH occurs through the *inclusive* notion that various communities may contribute to its enterprise indirectly and even unknowingly. Interviewees perhaps purposefully kept DH "undefinable," for which we see two (pragmatic) reasons.

First, coming up with a strict definition of DH may necessitate questioning and eventually changing institutional structures to align with that definition (i. e., the definition shaping the structure, rather than vice versa). When there are clear boundaries to DH, this may require changes to how other researchers become part of DH institutes through training and hiring and how they are evaluated as providing relevant expertise. Yet as noted, none of our interviewees desired to change their institutional structures.

Second, strict definition of DH may necessitate strict boundaries of which research problems are of interest and which scholars provide relevant opportunities for collaboration. Aligning with the freedom valued by our interviewees, an inclusive notion of interdisciplinary DH enabled them to collaborate with whomever they wanted: within the university, with scholars at other universities, or with organizations

outside of academia (notably, GLAM institutions). Furthermore, several interviewees noted they desire to make meaningful contributions to research in the humanities, which requires collaboration with scholars from the established humanities disciplines. Renouncing disciplinary aspirations of DH could thus be seen primarily as a "goodwill message" to the established humanities disciplines, signaling that DH does not intend to compete with them. We can, therefore, conclude that the continuing professionalization and institutionalization of DH in Switzerland as well as on an international level is unlikely to lead to a clearer shaping of DH definitions.

In short, in relation to our research question we conclude that the underdefinition of DH enables flexibility in institutional structures, while the diversity of institutional structures (resulting from the diversity of local contexts) may necessitate underdefinition of DH.

One topic that we did not discuss in our interviews was scholarly societies. One of the traditional ways of gaining official recognition for a field of research is for interested researchers to found a learned society, which can then lobby on behalf of the community. In the Swiss context, the Swiss Academy of Humanities and Social Sciences (SAGW/ASSH) brings together 62 societies and foundations in the humanities and social sciences and also represents them at the State Secretariat for Education, Research and Innovation (SERI).8 There is currently no Swiss DH society, and Swiss DH researchers are active in DHd (the German language society), Humanistica (the French language society), or AIUCD (the Italian society). Given the small percentage of Swiss members, Swiss research politics are of little interest to these societies. Nevertheless, the underdefinition of DH (at least in part to allow for cooperation with traditional humanities disciplines) and the multilingualism of Switzerland (and the willingness to continue to participate in societies in neighboring countries and language communities) are likely to be important obstacles to the formation of a Swiss DH society, despite its potential political benefits. In addition, SAGW is organized in seven disciplinary sections (such as history and archeology, art history, linguistics and literature, etc.), which is at odds with both the interdisciplinary nature and the intentional underdefinition of DH.

Finally, this brings us to the research questions of this special issue, in particular: through which processes do new research fields emerge and how do they affect the established system of disciplines?

It is safe to say that that digitalization of research practices in the humanities has led to the emergence of an identifiable field and community of digital humanities. Nearly all Swiss universities have seen opportunities to engage with digital methods in the humanities, and five have opted to visibly institutionalize DH. Yet we conclude that, at least for DH, digitalization does not lead to a singly identifiable emergence of a new research field, let alone a new discipline. We show that practitioners of DH

⁸ SAGW is not a funding body as such, although it is mandated by SERI to administer and coordinate funding for certain types of long-term projects (e.g., certain scholarly editions).

hesitate to close off DH from the established system of humanities disciplines. We furthermore show that professionalization and institutionalization occur through local contexts, leading to various institutional arrangements. We, therefore, conclude that the emergence of new research fields, such as DH, is at least partially path dependent. Yet how to understand a new research field as a discipline or an interdiscipline cannot adequately be predicted neither from research practices, nor from institutional arrangements, nor from macro-phenomena such as digitalization of society and scholarship.

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