

Interdisciplinary: To Be or Not to Be? Working Across Disciplinary Boundaries in the Humanities (and Beyond)

Míša Hejná, Sune Borkfelt, Mark Ø. Eaton, Ken Ramshøj Christensen, Mathias Clasen, Antoinette Fage-Butler, Anna Bothe Jespersen, Ushma Chauhan Jacobsen, Jens Kjeldgaard-Christiansen, Anne Schjoldager, Matthias Stephan, Mette Hjortshøj Sørensen 

Defining interdisciplinarity

“Open your mind to interdisciplinary research,” O’Neill (2011) urges us in his contribution to *New Scientist*. You may also have some experience with your own teachers encouraging you to think beyond the confines of the course or subject you are taking. What’s so cool about being interdisciplinary? And what does it even mean to be interdisciplinary? Should *you* aim to be interdisciplinary as well?

First of all, let us consider some examples of specific fields and disciplines. You may for instance be interested in Australian history, English phonetics, or Victorian literature. You could consider these three specialisations as three distinct fields or disciplines. However, if you start thinking about the sorts of questions and methods that are of interest to these areas, you will soon realize that these overlap with those that are also of interest to other disciplines. Let’s consider English phonetics. You could say that this discipline is really about English and sounds, and you’d be correct. But once we start thinking of specific research questions, overlaps with other fields begin to emerge. Are there phonetic correlates of feminine speech in English accent X? Yes, sounds are involved, but this question is also clearly related to gender studies and potentially also to the field(s) of psychology and evolutionary biology. Let’s have another example. When we measure the duration of the aspiration of /p/, /t/, and /k/, we frequently find that the post-aspiration of /p/ has the shortest duration. Why should this be the case? Could this be due to the way the human vocal tract is shaped? Posing these questions requires that we engage with phenomena and factors that are also of interest to the fields of human physiology and fluid dynamics (=physics). The take-home message from these two examples is this: more often

than not, we can't successfully answer a research question by limiting ourselves to a single discipline, and individual disciplines often overlap anyway.

To Repko (2012, 4), interdisciplinarity is about integration whereby “ideas, data and information, methods, tools, concepts, and/or theories from two or more disciplines are synthesized, connected, or blended.” Just how tight this interconnectedness has to be depends on your definition of interdisciplinarity (We refer you to Repko 2012, chapter 1, and Repko et al. 2017 for more details.). Some disciplines and fields of study are interdisciplinary by nature. We might therefore call them interdisciplines (e.g. gender studies, environmental studies, translation studies, human-animal studies). Closer to home, you may have attended courses where different lecturers came to interact with you on different topics. In the courses titled “Current topics in X,” for example, different lecturers may each use their own approach to engage with you on a number of different topics. If the course as a whole did not bring multiple disciplinary perspectives to bear on the same research question(s), then it would not be an interdisciplinary course. It might instead be described as a multidisciplinary course—a course that incorporates multiple distinct disciplines, but does not integrate them. You may sometimes find that different people use or understand terms like interdisciplinarity and multidisciplinary in slightly different ways, and there are even more related terms used to describe work that somehow draws on more than one discipline. For instance, you may come across ‘cross-disciplinarity’ (typically understood as a way of viewing the research or subject matter of one discipline from the perspective of another discipline), or ‘transdisciplinarity’ (often supposed to point to an even deeper integration of disciplines than interdisciplinarity; one where researchers create a kind of unified framework that is somehow above or beyond the perspectives of the single disciplines). However, in practice, you rarely need to worry about which of these labels best fits your approach. What is ultimately most important is drawing on different disciplines in ways that are meaningful to your research - not whether people use one word or another to describe your approach.

Concrete examples should put some flesh on these abstract definitions. In what follows, we discuss nine interdisciplinary projects carried out by members of the Department of English at Aarhus University. We'll see that different research questions require theoretical and/or methodological aspects of a range of disciplines, and that this range is also dependent on the nature of the research question. We conclude with an overall discussion of the specific examples and discuss whether it's a useful thing to aim to be interdisciplinary.

Examples of projects

Are we European or not?

In researching the language and communication of Brexit-related discourses, Mark has been particularly interested in exploring the following question: how is the globality of Britain and its people articulated by politicians and public intellectuals in ways that contribute to the imagination of ‘new’ ways of belonging in the world following the UK’s departure from the EU? In other words, Mark’s research focuses on the language used by political actors to describe Britain’s proper international orientation and identity. To explore this question, he applies an interdisciplinary approach drawing on the disciplines of politics, history and linguistics, and more specifically, focuses on the interplay between political myth (the stories political communicators tell), historical analogy and references (the politicized use of the past), and metaphor (figures of speech that simplify, and thus contribute to the persuasion of, politically-driven mythical narratives). The methodological approach combines a qualitative discourse analysis with supporting quantitative analyses, both aided by computer assisted qualitative data analysis software (CAQDAS), inspired by recent initiatives in the rapidly growing field of Digital Humanities.

The core of this research project is a political myth called ‘Global Britain’, a narrative deeply rooted in the past and infused with metaphorical and historical content that reflects a particularly English Conservative understanding of the UK’s relationship to Europe (past and present), as well as to the societies and peoples in its former empire. An important part of this narrative involves explanations for how the past can guide the UK as it navigates out of Europe. Among many rhetorical tools used in the articulation of Global Britain is a Commonwealth ‘family of nations’ metaphorical slogan, which contributes to the main objective of its advocates - promoting the imagination of a positive future when Britain and the British will range out in the world alongside their closest ‘kith and kin’, rather than being tied down in what is portrayed as an inefficient, undemocratic, sclerotic, and therefore un-British, European Union.

While the central finding of this research project is that perspectives of Britain’s past and future orientation and identity as ‘Global’ are held by mainly English Conservatives, the adoption of this specific interdisciplinary approach has been motivated by a desire to gain a deeper understanding of how influential political myths are constructed and communicated. In this sense, studying metaphorical and historical content embedded in the Global Britain political myth is leading to interesting insights into how these features of language act as drivers of Eurosceptic as well as English nationalist thought in the contemporary UK.

Do you recognise my voice?

Are people able to remember the voices of people they have just encountered and recognise them after a week? Also, are people aware of how good or bad they are at recognizing voices? Mette wanted to explore this, so she set up a study where the participants listened to a voice and then returned a week later to see whether they could pick out the correct voice in a so-called line-up.

In general, it turns out that people really are not very good at recognising voices – or many are at least not convincing enough to let them act as e.g. earwitnesses in proper trials. A few other correlations emerged from the study, namely that some voices are easier to remember than other voices and that some participants are better at recognizing voices than others – just like with many other skills (Sørensen 2012). Some people are just not very good. There was no correlation, however, between how well people *actually performed* at the task and how well they *believed* they performed. Essentially, people cannot be asked whether they are completely sure as this is a completely unreliable measure – at least in this study.

In dealing with these questions, knowledge of linguistics (as dealing with language), and more specifically phonetics, is important, as are biology (essential to know something about voices), acoustics (how to interpret sound waves), sociology (for knowledge of perception) and psychology (for perception as well as long and short term memory). When interpreting the results, there is a need to employ statistical analysis as well to find out how or whether the results are significant. All in all, this study would not have been possible without an interdisciplinary approach!

Fans from a distance

Sports fans have, historically, been theorized based on their connection to a local club, with space and distance as important factors in maintaining a sports fandom. Yet, in the digital age, we can see that fandom has gone global, which is true not only for large global brands but smaller franchises as well. Matthias's current fan studies research project revolves around asking why people retain an attachment to a sports franchise despite dislocation from the geographical context, and why they pursue this attachment in online forums?

US Sports, due to the fixed nature of the professional leagues (without the relegation system typical of European sport, for example) creates a brand loyalty that is only partially connected to the geographical location – especially in franchises that have moved often. Yet, fans of US sports, once so attached, seem to stay attached and participate in their fandom from a distance. While this sometimes manifests by attending games when they 'return home' or when their franchise visits, other fans use

online communities to function as a space in which their fandom can thrive. In franchise-specific blogs (globalized through the internet), fans contribute to the maintenance of the fan community, by commenting and producing original content (articles, fan art, games, etc) related to the fan product.

This project will ultimately look at a variety of aspects: discussing types of fans, the use of fan labor, the role of discussions of fandom, and comparing the world of online sports fandom to the much-theorized media fandom. It will further discuss the organization of some of these fan-run blogs, their migration to larger corporate owned sites (SB Nation, FanSided), and how the role that such a profit-making venture affects fandom. The project takes its methodological stance in ethnographic and autoethnographic models (including participant-observation), but necessarily does so with a netnographic approach (Kozinets), which combines traditional (social science) methodologies with the realities of online life and social media research. The larger project will include both quantitative data (collected through surveys of fans that participate in online forums), and qualitative interviews with participants, contributors, and operators of these online spaces. The project also draws on a variety of disciplines – all of which contribute to the interdisciplinary nature of fan studies itself, including psychology, sociology, anthropology, media studies, cultural studies, as well as aesthetic related-disciplines (in considering the aesthetic contribution of fan-produced content).

How is cultural translation translated in museum exhibitions?

Museum exhibitions that narrate stories, people or ideas are prime sites of cultural translations (Sturge 2007). Ushma and Anne have recently initiated an interdisciplinary project that explores cultural translation as the flows and exchanges between cultural knowledge and languages. The project emphasises the fluidity of translation processes (Pym 2014, 138) that characterises the exhibition as it assembles, juxtaposes and explains diverse artefacts, texts, images and sounds to different people.

We draw on sensitizing concepts embedded in diverse academic disciplines such as anthropology, cultural studies, translation studies, museum studies, and the scholarship on language and globalization. We use different interpretive methods such as observations, expository cartography (Monmonier 1993), comparative textual analyses and expert interviews to approach how objects are described, the types of stories that are told, the ideas which are privileged and the reasons and ways by which this occurs.

Our inquiry begins with artefacts, images and curatorial texts present at *Frihedens Værksted*, a themed museum exhibition at the Aarhus Natural History Museum, portraying and celebrating the life and works of the late Troels Kløvedal, a prolific Danish sailor, explorer, TV presenter and writer.

Viewing this exhibition as a site of cultural translation, we explore, map, analyse and question a variety of translation practices, which include linguistic (that is, interlingual) translations from Danish into English.

Our guiding research questions about *Frihedens Værksted* include (1) What are the (overlapping) moments of cultural translations (as defined by Pym 2014) in this specific exhibition and how may these be conceptualised? (2) What is the role and what are the achievements of linguistic translation? (3) What other forms of multimodal texts play a crucial part in cultural translation in the museum exhibition?

Based on some preliminary analyses, the moments of cultural translation representing Kløvedal's life and works may be divided into multimodal assemblages of artefacts (objects and models), images (photographs, paintings and videos), curatorial texts (labels, artistic posters and captions in videos) and linguistic translations (of curatorial texts) that attempt to represent a complicated life. In addition, we see clear signs of a parallel language policy as all curatorial texts are systematically translated into English. Although this may appear unsurprising considering the status of English as an international language, what is more surprising is that the linguistic translations throughout the exhibition appear documentary, as opposed to being instrumental (using Nord's 2018 terms from within functional translation studies; see also Schjoldager et al. 2010). Instrumental translations might have been more useful and richer explanatory devices to serve the purposes of cultural translation in the Kløvedal exhibition, but this and other claims will need to be explored and discussed in more detail in the course of our project.

Reading slaughter

Researching and writing his latest research project, Sune posed the following twin questions: what do depictions of modern slaughterhouses mean in literature, and what effects might such depictions have, especially given that readers in contemporary western societies are unlikely to encounter the slaughter of nonhuman animals in their daily lives? In other words, how may slaughterhouse fictions have affected, and continue to affect, thinking about what happens in modern slaughterhouses, since the increasing centralization and industrialization of slaughter in the latter part of the nineteenth century? Exploring such questions necessarily meant drawing on a number of different disciplines: history (e.g. looking at analyses of slaughterhouse history, including their gradual disappearance from view, in order to see how literary texts reflect this); anthropology, sociology and human-animal geography (the roles and ideas of slaughterhouses and slaughterers in contemporary societies are obviously relevant to

readings of slaughterhouse fictions); psychology (psychological theories of avoidance and denial of what happens behind slaughterhouse walls are relevant, but in addition theories about readers' potential empathy or sympathy often draw heavily on psychological theory and research); and philosophy (how might slaughterhouse fictions reflect or incorporate philosophical or ethical ideas about human-animal relations? But also, the question of whether literature can or should have an ethical role to play is arguably a philosophical one). In addition, but perhaps less obviously, the work of linguists who have researched the language of slaughter turned out to be relevant as well, as this identified how language is often used in particular ways when it comes to killing (for example, a greater use of the passive voice to avoid assigning agency, or a greater distance between subject and verb to distance the human from the slaughter), and there's interesting linguistic work on metaphors and symbolism as well. The results of research like that can be useful to look at how writers of fiction may approach their language differently to, for instance, make their narratives of slaughter more dramatic and emotive - or, in some cases, the opposite.

To vaccinate or not?

Antoinette has started a new project that focuses on representations of HPV vaccination in the online setting. Despite public health institutional recommendations and scientific proof of its safety and efficacy, some parents are still concerned about its safety and unsure about the need for the vaccine, and so turn to each other for advice online. The project focuses on the following question: how are knowledge and knowledge identities discursively represented in online forums that debate the pros and cons of the HPV vaccine? In tackling this question, Antoinette draws on public health research (this is a public health issue), cultural studies (to understand the unfolding debate as indicative and productive of cultural concerns), media research (to understand the mediatized nature of the debate) and discourse analysis (the main methodology). Beyond this, sociological theories of risk and trust are relevant to understand the phenomenon of vaccine delay and refusal, and it is also necessary to engage with the ethics of conducting online research. Antoinette's research output is often situated at the interface between public health and cultural studies; some investigations such as the one just described call for high levels of interdisciplinarity.

What do the Danes believe?

Everybody knows that Americans believe weird things: the moon-landing was a hoax, vaccines cause autism, angels walk among us, and homeopathy is a legitimate form of medical treatment. But what

about the Danes? What do they believe? Are they more likely to believe in aliens than in angels, and are they less superstitious than the Americans? Ken and Mathias wanted to find answers to these questions, so they constructed an online survey and recruited more than 2,200 Danes who responded to a battery of questions having to do with different beliefs. As it turned out (Christensen & Clasen 2018), Danes do believe in weird things, but less so than Americans—and there were systematic patterns in the beliefs of Danes. Females were more likely than males to believe in the supernatural, and different kinds of supernatural items clustered together, so that somebody who believes in angels, for example, is also likely to believe in an immortal soul. Ken and Mathias used a quantitative approach and statistical methods for data analysis, but in making sense of their data, they needed to draw on a range of disciplines, including cognitive psychology and evolutionary science. Such fields can help shed light on the prevalence of belief in the supernatural, that is, why people believe in gods and spirits and angels in the first place. People are equipped with cognitive mechanisms that make them prone to seeing patterns and systems and to believing in supernatural agents. However, those mechanisms—deep-seated as they are—can be counteracted by reflective and critical thinking. So in this research project, an interdisciplinary approach was absolutely essential.

Who roots for the villain?

Many fictional villains, such as Darth Vader and Patrick Bateman, are immensely popular. But why would someone like a clearly immoral character? To answer this vexing question, researchers in the humanities have tended to focus on the attractive but non-moral characteristics of popular villains: their good looks, charisma, confidence, wit, and so on, as well as their overall narrative framing. Jens and Mathias, together with Anne Fiskaali, John A. Johnson, Henrik Høgh-Olesen, and Murray Smith, wondered whether people might not also come to like villainous characters because they share these characters' immoral outlook to some degree. To test this hypothesis, we constructed a survey that tapped into media users' immoral tendencies (measured in terms of Machiavellianism, narcissism, psychopathy), on the one hand, and their liking of popular villains, on the other hand. The items used to assess participants' morality came from personality psychology, whereas our conceptualization of "villainous liking," which could mean anything from an empathetic reflex to a high appreciation of the character's ideological imprint, came primarily from the humanistic field of cognitive film theory.

Preliminary results indicated that, indeed, people with a conventionally immoral outlook were more likely to enjoy villainous characters in all sorts of ways. To name but a few, conventionally immoral traits were positively associated with sharing villains' goals, enjoying their presence, understanding their

plight, rooting for them, and identifying with them. These results may explain some, though certainly not all, of the allure of fictional villainy.

Our study highlights the benefits of approaching research questions at different levels of analysis. Many media scholars focus almost exclusively on media products rather than on the people who use them. They ask what effect some particular media product has on “people,” “consumers,” or “audiences,” that is, an abstraction of typical responding. Such research is valuable but limited because it does not tell us about the impact of individual differences. By contrast, our approach asked specifically about how and why individuals differ in their responses to media products. Interdisciplinarity enabled this approach.

Young at heart?

Anna and Míša have started a new project focusing on the following question: is chronological age a good proxy for establishing language change? In other words, when comparing how speakers of different generations produce speech, should we establish their age through their date of birth (=chronological age), or is it more appropriate to establish how old they feel and/or how fast their body ages instead? In order to tackle this question, we need to draw on the following disciplines: linguistics (we’re discussing *language* change, after all); biology (we’re interested in establishing how fast the speakers’ bodies may be ageing physically); anthropology, sociology, psychology, and gerontology (does age *identity* matter for linguistic variation in any way?). Importantly, we also need to employ skills pertaining to the areas of statistics (which also involves some programming skills), and in our case also acoustic physics - that’s because we’ll be approaching the question by looking at how speakers produce sounds through digital recordings. Finally, gathering the data involves human subjects, so there are ethical issues to consider too. It is simply not possible to approach our research question without being interdisciplinary.

To be, or not to be, interdisciplinary

What message, or messages, should we take from the nine examples discussed above? Should you always go for interdisciplinarity? Is it worthwhile to be interdisciplinary? Is it necessary? When might it not be worthwhile or necessary?

First of all, before you embark on your interdisciplinary journey, ask yourself what your starting point is. This will be determined by your research question. It is very likely that the “home” of this research question will lie in a single discipline. This is reassuring, as your home discipline should be

within your comfort zone (or at least nearest to that). Depending on what needs to be done in order to shed light on your research question, you can then branch out to other, ancillary disciplines. For example, when Anna and Miša embarked on their ageing project, they had to start learning about how biologists establish biological age. Getting in touch with actual biologists was a big help.

Next, being interdisciplinary is not necessarily limited to combining theoretical knowledge from a range of disciplines. As we saw in the nine examples above, various research questions call for different types of methods. Different researchers use different tools. For instance, Mark has had to acquire digital competences, including learning how to use qualitative data analysis software to determine whether opponents in political dialogues use contrasting language when communicating the same metaphorical slogan.

Because all the research steps are determined by your research question, it is also your research question that should dictate the degree of interdisciplinarity to be employed. For instance, we could start with the following question: do Americans produce linguistic feature X? This research question does not seem to call for interdisciplinarity. It seems wholly within the purview of phonetics. However, the moment we start posing follow-up questions, such as Why do Americans produce less of feature X and what other factors interact with the production of this feature (such as ethnicity and gender), we also start getting into deeper waters as we widen our perspective on the research object, which may be more likely to necessitate interdisciplinary engagement. The nine examples mentioned above all present fairly complex questions, and so it is not surprising that they prompt the use of a range of disciplines.

Another take-home message we can draw from the nine examples is this: some disciplines live closer to each other than others. You may therefore often think of immediate links between, say, history and literature, but not necessarily literature and linguistics. This is perfectly natural, although of course it is not impossible to combine literature and linguistics in meaningful ways. For instance, linguistic research into how people use their language to distance themselves from acts of killing found obvious relevance in Sune's project as he analyzed literary slaughter narratives.

And one last thing to bear in mind: engaging in academic pursuits is a never-ending learning process. This is equally true for students and seasoned academics. The more interdisciplinary you have to be, the more time and effort it takes to conduct your research. The very first thing we find out is just how much there is to know - and learn - before we can set out for our destination. This being the case, it is very common for interdisciplinary projects to involve a high degree of collaboration. But collaboration also takes time and effort. You need to find relevant collaborators who are interested in

the same project, and you need to get along with them (at times a serious challenge!). As undergraduate and (post)graduate students, it is very likely that your quest will be a solitary one. You will nevertheless be inspired by authors who will most likely work with other academics and employ a range of disciplines.

To conclude, then, interdisciplinary research is exciting, but we should not be interdisciplinary just for the sake of being interdisciplinary - there has to be a research-related purpose. Always think carefully about your research question/goal first.

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