Introduction

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Spring Reading

In a 2021 essay about her personal intellectual development, Lorraine Daston recalls how one day in spring 1975, she chose a thin book from a stack of new publications in Harvard University's Widener Library. She was a first-year graduate student in the history of science program at the time and opted for a short book because she was babysitting that evening and did not expect to have much time to read. However, the boy she took care of went to sleep early, so she was able to read the book—Ian Hacking's *The Emergence of Probability: A Philosophical Study of Early Ideas about*

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Probability, Induction and Statistical Inference (1975)—from cover to cover. Daston found it fascinating that Hacking used history to ask a genuinely new philosophical question: why had it taken so long to develop probability theories even though games of chance had been around for ages? Rather than attempt to unravel the conceptual chaos of probability theories, as earlier philosophers had done, Hacking's starting point was a research puzzle.

Reading Hacking's book showed Daston how one could pursue philosophy in a historical manner and history with a philosophical twist. Hacking's example of conceptually informed, yet radically empirical research also influenced Daston's own work in the history of science. It granted her the intellectual freedom to leave the trodden path of known methods for less clearly delineated ones and helped her to understand that the definition of the historical phenomena under study also requires explanation. There was an additional event, however, that was just as formative. Not long after finishing her PhD, she joined a research group cofounded by Hacking at the Centre for Interdisciplinary Research in Bielefeld, Germany. As the introductory meeting concluded, it was suggested that someone take notes. Rather than ask a junior scholar, Hacking offered to do it himself. This set an important precedent: his act embodied the "egalitarian tone" vital to "the coherence of the group" (Daston, 2021, p. 73), showing that it was possible for researchers, even in the humanities, to work collectively.

Although we came across Daston's narrative long after conceptualizing this book, we feel that her story eloquently captures what we would like the book to convey. That is, that interesting interdisciplinary research is not just about bringing together the practices of two or more disciplines to produce a redefinition of topics, questions, and their answers. Its quality also depends on the right attitude of researchers, such as the courage to try something new or an openness to unexpected findings, and on a permissive environment that not only allows for finding inspiration but also allows for doing seemingly mundane work or taking a potentially wrong turn. Daston's story illustrates the lasting effects of inspiring examples on a scholarly trajectory of exhilarating interdisciplinary collaboration and writing.

The Kid That Transformed the Block

In academic research and teaching, interdisciplinarity is no longer the new kid on the block—it is widely preached and practiced. Definitions of multidisciplinarity, interdisciplinarity, and transdisciplinarity abound (Evers et al., 2015). We know of great introductions to the logics behind and modes and implications of interdisciplinarity (Barry et al., 2008; Barry & Born, 2013), as well as overviews of the history and theory of the concept's use and knowledge ecology (Moran, 2010; Frodeman, 2017). Other publications critically assess interdisciplinarity as a form of scientific imperialism (Mäki et al., 2019), draw lessons from failures in interdisciplinary research (Fam & O'Rourke, 2020), delve into its epistemic pitfalls (Hvidtfeldt, 2018), or focus on the reasons for and problems of a particular interdisciplinary matrix, such as the intersection of social science and neuroscience (Callard & Fitzgerald, 2015).

Recently published handbooks instruct readers in depth on how to develop interdisciplinary research—their chapters interspersed with brief examples in tables and boxes (Repko, 2012)—or discuss the ins and outs of interdisciplinary careers (Lyall, 2019). Highly reflexive is a recent book by Celia Lury et al. (2020) on the process of pursuing interdisciplinary work, which distinguishes, for instance, between the practices of making and assembling, and valuing and validating in interdisciplinarity. We will return to some of the literature on interdisciplinarity when we discuss the most significant themes that run through the three parts of this book. But first, it is necessary to elaborate on what we would like to achieve with this publication.

Interdisciplinarity in the Scholarly Life Cycle

This collection of essays aims to show how interdisciplinary research develops *over time* in the lives of scholars, not in a single project, but as an attitude that gradually trickles down or spirals up during our practice as researchers. It documents how interdisciplinary work has inspired shifts in how we read, value concepts, critically combine methods, cope

with knowledge hierarchies, adopt writing styles, and collaborate. We do so by starting from examples, hence the book's subtitle. These examples have the humanities and social sciences at their core, but they also showcase connections and collaborations with the arts, the medical field, the natural sciences, and computer science. The authors show how they began, attempted to open up, dealt with inconsistences, had to adapt, and learned so much that their approach to research was altered with lasting effects. They also show how they could have developed their work even further had they known what they do now. Our book is thus not *about* interdisciplinarity, but shows *how* it can be practiced by offering a behind-the-scenes approach.

Our show-rather-than-tell approach implies that it is not our goal to propose our own definitions of inter-, multi-, and transdisciplinarity. Most of our authors implicitly or explicitly follow the "modes of interdisciplinarity" conceived by Barry et al. (2008). In this typology, research in the "subordination-service mode" combines methods and concepts from two or more disciplines without aiming to achieve symmetry in the original disciplines' assessment of what is good research. In those cases, the expertise from some disciplines functions as heuristic tool in relation to others. For example, dendrology has this kind of subordinate service relationship to archeology. Most scholars consider this type of research to be multidisciplinary (Evers et al., 2015, p. 13). In contrast, research in what Barry and his colleagues label the "integrative-synthesis mode" *does* judge the integrative work according to the criteria of the disciplines that feed into it. Research in the "agonistic-antagonistic mode," finally, aims at contesting or transcending "the epistemological and/or ontological assumptions of specific historical disciplines" (Barry & Born, 2013, p. 12), thus potentially shattering the ground on which these disciplines stand.

In a typology suggested in the 1990s, science and technology studies (STS) scholar Geoffrey Bowden considered such forms of critical reflexivity "transdisciplinary" in character, often permeating a wide range of domains within the humanities and social sciences. His example was postmodernism and its interest in reflecting on assumptions about knowledge production through the use of new literary forms (1995, p. 69). Other authors, however, reserve the notion of transdisciplinarity

for collaborations between academics and nonacademics such as artists (Fam & O'Rourke, 2020, p. 2). When seriously considered, such collaborations may, in fact, imply the epistemological and ontological shifts Barry and his colleagues (2008) had in mind when identifying the agonistic-antagonistic mode.

We hope that opening up our experiences with interdisciplinarity by providing extensive examples and their lasting effects on research is helpful not only for other researchers but also for teaching the next generation of scholars. We have noticed that students seem to understand the concept of interdisciplinarity quite well in theory. In one of our own courses on research skills, for instance, we play a game in which students connect research questions to these questions' disciplinary backgrounds. Most students do well in this exercise, often insightfully reflecting on their choices. Yet they tend to forget these insights as soon as they have to formulate their own research questions. In addition to referring students to some of the how-to-do-interdisciplinary research manuals already mentioned, we hope that educators can refer them to one of the chapters in this book as well. By offering examples across a wide range of topics in the humanities and social sciences, and with a clear indication of the disciplines combined in most of the chapter titles, students may focus on the chapters that best match their own research undertakings. In this way, the research examples offer entries into specific ways of conducting interdisciplinary research that may inspire students and support their own scholarly work. This could then be the start of the student's own scholarly life cycle, within or beyond academia.

All the authors included in this collection are affiliated or collaborate with scholars in the Faculty of Arts and Social Sciences (FASoS) at Maastricht University. This faculty then functions as an institutional hub for the book's examples. Established in the 1990s, FASoS has pursued its research and teaching by drawing on an organizational matrix intended to foster interdisciplinarity. Interdisciplinary research and teaching programs, rather than individual departments, form the faculty's core. Although most departments still have disciplinary names, they often host scholars from a wide range of disciplines. The faculty's spatial organization is also significant: rather than clustered into departments, research groups, or teaching programs, offices are randomly assigned. The rationale behind

this was a frequently employed argument to justify interdisciplinarity—that is, that problems in modern society are so complex that they can only be properly dealt with by traversing the borders dividing traditional disciplines. The need for border crossing should then also be visible in the faculty's structure and spatial organization.

This specific goal and organizational structure have attracted academic staff and students from all over the world, making FASoS the most international humanities and social sciences faculty in the Netherlands. Newcomers are often pleasantly surprised to find that scholars really do work in an interdisciplinary manner here and that this approach is supported and assessed accordingly. What is key to this spirit is the way that FASoS manages its teaching. All courses are designed by small groups of teachers with backgrounds in different disciplines. As their courses often remain on offer—be it in modified versions—for many years, the teachers engage in prolonged interdisciplinary collaboration. In this way, they mutually and positively "infect" each other in ways that go beyond the more conventional project-based interdisciplinarity, which is, as Fam and O'Rourke (2020) have explained, more prone to failure.

This does not imply that FASoS teachers, researchers, and their collaborators never encounter the disadvantages of pursuing interdisciplinary careers. Prior to requesting abstracts for this publication, we spoke extensively with all the scholars potentially interested in contributing essays about their experiences with interdisciplinarity. Some of them noted that colleagues had warned them to avoid solely publishing in interdisciplinary venues because that might thwart their future career possibilities in monodisciplinary institutes. Nonetheless, most colleagues gradually adapted and began to embody a scholarly life marked by interdisciplinary teaching and research. As Felicity Callard and Des Fitzgerald underline, the career risks of interdisciplinarity "aren't what they used to be," and staying where you are when "the plate tectonics of the human sciences are shifting" is risky as well (2015, pp. 12–13).

Finding Your Way in This Book

What becoming an interdisciplinarian means and implies in practice is the subject of this book, which is not unlike the ideal of recovering "detailed actions and reasoning" in the practice-oriented approach that Guelfo Carbone et al. (2019, p. 5) adhered to when discussing experiments of art and science collaborations. By illustrating how our working-in-interdisciplinary-ways *developed over time,* we aim to achieve three additional goals. The first is to inspire both students—at the undergraduate, graduate, and postgraduate levels—and colleagues to perform interdisciplinary research without underestimating the potential challenges of such work. No matter how much we love what we do, we should articulate, rather than suppress, the complexities we attempt to resolve, whether we are successful or not. The second is to show under what conditions interdisciplinarity is able to thrive in academic settings; we have already partially indicated above what supports such sustainability. The third is to illustrate what insights may result from performing interdisciplinarity, be it anthropology in history, philosophy in innovation studies, history in development studies, or arts in sciences, to mention just a few possibilities. Even though we fully acknowledge that such disciplinary labels are subject to historical change, we have used them in our chapter titles to help readers find work intervening in the disciplinary intersections of their interest.

We have divided the book into three sections. The first section, entitled "Moving Concepts: What Theory Can Do*,*" includes contributions that illustrate how and for what reasons theoretical concepts can be made to traverse disciplinary boundaries, from philosophy to science and technology studies, sociology and law to history, sociology and the history of ideas to European studies, and history to development studies. In so doing, these concepts help generate insights that would not have emerged within the confines of a specific discipline.

In the first two chapters, by Harro van Lente and Jo Wachelder, respectively, the authors look back at transformative moments of the early stages of their careers, when the discovery of particular frameworks outside of their disciplinary homes proved fundamental to their research. Van Lente

shows how the philosopher José Ortega y Gasset's notion of "life as drama" altered his research on expectations in technological innovation. This philosophical detour afforded him a better understanding of the direction of innovation, paving the way for what is now called the "sociology of expectations." Wachelder's chapter demonstrates how Niklas Luhmann's sociological theories, especially those pertaining to self-organizing social systems, helped refine his examination of educational debates about the modernization of higher education in the nineteenth-century Netherlands. The application of a discursive analytical approach based on Luhmann's theory allowed him to reconsider the presumed influence of Wilhelm von Humboldt's educational philosophy in the Netherlands.

Karin van Leeuwen's contribution also relates to a historical interest, namely the author's study of constitutional reform in the postwar Netherlands. Van Leeuwen describes how she drew on critical legal studies and Bourdieusian legal sociology to arrive at a more comprehensive narrative of constitutional reform. She argues that law follows but also shapes political negotiation. Writing about the political history of constitutional reform therefore requires more than just mapping out content-related details of the development of the law or reducing debates to clashes between political parties. Ferenc Laczó's chapter shows how a historical-critical approach toward the idea of Eastern Europe helps frame and understand the challenges facing Europe today, while also prompting European studies to rethink the hierarchies of power and knowledge embedded in the field. Employing an idea-historical perspective, Laczó builds on insights from history, geography, linguistics, religious studies, economics, and politics. For Van Leeuwen and Laczó, both trained as historians, translating and implementing theories and concepts from other fields have given new directions to their scholarship and professional trajectories.

In his chapter, Paul Stephenson applies sociologist Marcel Mauss's theory of gift and reciprocity to an analysis of a public policy experiment in France: the establishment of the annual Solidarity Day in the aftermath of the 2003 heat wave that killed numerous older people. Stephenson recounts how early in his career, before he was fully trained in political science, he was excited to discover Mauss's theory and its application to

social anthropology and aimed to make it relevant to the study of public policy and crisis management in a modern Western European state. Finally, in her chapter Elsje Fourie shows how the historical concept of low modernism enabled her to develop new perspectives on recent Japanese-Ethiopian development cooperation—specifically regarding attempts by Japanese aid agencies to transfer Japanese management techniques (kaizen) to Ethiopian factory floors. This historical exploration prompted Fourie to reconsider the identity and purpose of development studies as an interdisciplinary field.

The second section of this book, "Refolding Methods: How Twists Require Tweaks," contains essays about how the discovery of methods from fields outside of one's comfort zone prompted these authors to work with different ways of collecting, eliciting, and analyzing data. Interestingly, ethnographic approaches are crucial to the interdisciplinary development of three humanities scholars. This section also includes a chapter that reveals how the development of an interdisciplinary conceptual framework can result in methodological innovation.

The chapters by Aagje Swinnen and Emilie Sitzia demonstrate how two literary scholars with a focus on narrative were inspired by the ethnographic approaches that characterized the fields of gerontology and museum studies. Swinnen describes how she moved away from close readings of representations of aging to experimenting with a reading and writing club for people over sixty that discussed diverse novels about aging. This approach allowed her to both gain insights into older people's attitudes toward and experiences of aging and deepen her understanding of the cultural work performed by novels that address aging. Sitzia, in turn, details the amalgam of methodological approaches from different disciplines that the author developed to study multimodal storytelling in the exhibition "Connectivities" at Mucem (The Museum of European and Mediterranean Civilizations) in Marseille. The piece demonstrates the necessity of such a mix to fully understand the dynamics between the creation, materialization, and reception of the exhibition's narrative, which museums can also learn from in order to optimize the visitor experience.

In Karin Bijsterveld's chapter on her early research of postwar elderly Dutch homes, she demonstrates how she was inspired by the ethnographic

work of the Indian anthropologist Sanjib Datta Chowdhury in the same context. This prompted her to more closely study the architectural plans and photographs that were part of the policy documents under study, which eventually transformed her own research premises. The final chapter in this section, by Kathleen Gregory, Paul Groth, Andrea Scharnhorst, and Sally Wyatt, presents the project Re-SEARCH, which brought commercial and academic partners together to investigate and develop search solutions for research data. The authors explain how they consolidated an innovative conceptual framework by synthesizing different notions of users to facilitate interdisciplinary collaboration between STS researchers and computer scientists, and between designers of data search systems and their users.

The third section of the volume, entitled "Cascading Collaborations: With Artists, Style, and Skill," focuses on the so-called collaborative turn in humanities and social sciences scholarship. This turn is indicative of the collaborations across disciplines that interdisciplinary scholarship requires. The chapters in this section examine the different challenges and rewards of diverse strands of collaborative work. They also discuss how earlier experiences with collaboration inform later ones, hence the notion of "cascading."

The first three chapters look at what collaborations between partners from the arts, humanities, and sciences entail. The chapter by Flora Lysen starts from the author's observation of the collaboration between the neuroscientist Alexander Sack and the artist Antye Guenther in the Maastricht Brain Stimulation and Cognition Lab. She explains the tacit affective dispositions characteristic of what she calls the "imaginary of the inter," a shared sense of collaboration that enables diverging objectives and expectations to productively coexist. Patricia de Vries examines "Reprodutopia," a 2019 exhibition with a prototype of an artificial womb and the scenarios it engenders for the future of reproduction, developed by speculative designers from Next Nature Network in collaboration with scholars from the Máxima Medical Center and the Eindhoven University of Technology. De Vries demonstrates the necessary interdisciplinary work to reveal how imminent technologies build on specific sociotechnical and medical histories as well as its consequences and limitations. In the chapter that follows, Peter F. Peters, Ties van der

Werff, Imogen Eve, and Jos Roeden reflect on a collaboration between the South Netherlands Philharmonic, the Conservatorium Maastricht (a higher arts education institute), and Maastricht University that aimed to show how symphonic orchestras can shape new futures by innovating their music practices. Inspired by the work of Richard Sennett, the authors address the role of dialogic versus dialectical conversations in collaborative research on new concert formats and audience participation.

Jessica Mesman's contribution also focuses on practice optimization, albeit in two healthcare settings: the emergency department of an Australian hospital and a Dutch maternity ward. Mesman demonstrates how the implementation of video-reflexive ethnography (VRE) in the study of daily healthcare routines transforms practitioners into co-researchers. She argues that VRE, as a tool for exnovation—bringing out what the practitioners already know—rather than innovation, both articulates and overcomes disciplinary and paradigmatic differences. To exemplify these processes, she discusses issues of professional credibility and reputation that are at stake in collaborative work.

The final chapter of the publication departs from the format of other chapters by taking the form of a conversational piece. Valentina Mazzucato, Bilisuma Dito, and Karlijn Haagsman have pursued a longstanding interdisciplinary collaboration on the topic of how transnational immigrants "do family" when their relatives are separated by great geographical distances. They use the metaphor of "doing family" to reflect on the practice of teamwork along the themes of open communication, trust, and friction. This chapter elucidates the emotional work and soft skills regarding attitudes and predispositions toward people and disciplines that collaboration inherently demands.

Traversing all three sections are affinities between the chapters in relation to the substance of the research examples discussed. Such affinities concerning the topics presented are aging (Bijsterveld and Swinnen), the visual arts and design (Lysen and De Vries), issues of development and migration (Fourie and Mazzucato c.s.), innovation and exnovation (Van Lente, Gregory et al., and Mesman), nation-state politics and ideas (Stephenson and Laczó), the logic of law (Van Leeuwen and Wachelder), and institutes of heritage conservation (Peters et al. and Sitzia).

Finally, all three sections include a few illustrations crafted by chapter authors who dared to go beyond their writing skills and tried out drawing or making a collage to capture what their interdisciplinary work was about. They did so in the inspiring companionship and with expert advice of art teacher Marte Hameleers and photography teacher Maaike Faas-Schauer. The creative exercise helped the authors to capture a key message of their chapter while enacting transdisciplinarity, which in turn often re-informed their writing. The same happened when we asked Eric Bleize, who is both a scheduler at Maastricht University and a photographer, whether he would allow us to use one of his art photos for the book's cover. With his permission, for which we are grateful, we chose one of his multi-exposure photos. It shows both the gate to an academic building and the movements of those entering and passing it. To us, the port stands for the entrance into scholarly life at large, while the movements around it signify the many shifts that interdisciplinarity brings to academic research and learning.

Recurring Themes

We would like to conclude our introduction by elaborating upon three themes that recur throughout the sections: redefinition as a key goal or result of interdisciplinary research, curated curiosity as an important tool for getting there, and sustained collaboration as its necessary condition. These themes support some of the claims in the secondary literature mentioned in our opening paragraph but also occasionally depart from arguments made in this literature. In making such comparisons, we do not claim to exhaustively cover the by now extensive body of secondary literature on interdisciplinarity. However, we do seek to highlight the key characteristics of how contributing authors have conducted interdisciplinary work against the background of how other scholarly literature represents such work.

First, nearly all authors are out for or end up with a *redefinition* of a topic, a key concept, an established hierarchy, a method, or even an entire field's objective—by engaging in some sort of interdisciplinary integration. Mesman's embodiment of STS in medicine through VRE leads to

studying exnovation rather than innovation. Laczó re-centers Eastern Europe while also broadening what belongs to the study of politics. Fourie's use of the low modernization concept reveals development studies' blind eye for the Western roots of the Japanese imposition of kaizen on Ethiopian shop floors and, thus, the definition of what counts as East and West, North and South. Implicitly or explicitly, such redefinitions function as the main marker of the authors' interdisciplinary success, while their ability to explicate the integration work behind it serves as its secondary marker.

In this way, contributors try to avoid the "interdisciplinary Halloween" outlined by Jonathan Sterne in a 2007 blog entry that critically responded to interdisciplinarity as a management ideal. What Sterne argued against was a form of quasi-interdisciplinarity, in which the intellectual reasons for integration are lost or in which scholars just import the work of other disciplines into their own without acknowledging these other disciplines' traditions. What was not that relevant for our authors, however, was the distance in terms of approach between the disciplines involved. While Rolf Hvidtfeldt finds it "unimpressive" to talk about interdisciplinarity when two approaches share too many "paradigmatic examples of good practice" (p. 22), our authors consider interdisciplinary integration *within* the humanities and social sciences as no less adventurous than integration between, for instance, the humanities and the sciences. This is even true for work in which they combine several interpretative traditions. Their sensitivity for differences in "narrow" interdisciplinarity (Klein, 1990, as cited in Hvidtfeldt, 2018, p. 22) is nevertheless instructive in two ways. It helps to articulate the ways in which seemingly similar approaches still differ in their disciplinary take on the subjects under examination, and it is educational in unraveling the type of issues at stake when doing interdisciplinary research.

We need to add two caveats though. One is that in our discussion with the authors prior to the chapter writing, some argued that they never considered themselves monodisciplinary scholars to begin with but as "interdisciplinarians" right from the start. The other is that several of the authors do not see achieving interdisciplinary integration and strengthening their disciplinary identity as mutually exclusive. In their view, the two go hand in hand. For example, taking up the work of a

philosopher only intensified Van Lente's devotion to innovation sciences. By acknowledging future-oriented imaginaries, Van Lente succeeded in altering his field in such a way that he actually felt *more* at home there. Bijsterveld's engagement with an anthropological interpretation of architectural design made her attentive to what architectural plans perform. In hindsight, it clarified what "acts of notation" do, as one of the skills that may laterally move between disciplines and thus contribute to interdisciplinarity (Wedell, 2020, p. 117). It also allowed her, however, to reconfirm her practice as a historian of tracing phenomena over time, now with an intensified attentiveness to changing conceptions of such phenomena. The next interactions would never be the same, but future interdisciplinary partners would definitely still be engaging with a historian. These are hopefully examples of what Thomas Osborne has called "trespassing" on "one's own" or "interdisciplinarity in one person" (2013, p. 88).

But how do we keep from becoming overwhelmed by the potentially dizzying exercise of an interdisciplinary practice? Recent literature that guides students through interdisciplinary research suggests a step-by-step approach to identifying an object of investigation, formulating interdisciplinary research questions, justifying their usefulness, and selecting relevant disciplines for one's literature search (Repko, 2012, pp. xxviii–xxxi, pp. 84–89). No matter how useful such advice is, especially when cast in the deep recognition of the iterative character and reflexivity of research, several of our authors underline the importance of an interdisciplinary culture that offers curatorial guidance as well as the freedom to explore literature beyond an already established canon. A theoretical physicist by training, Wachelder was new to the world of history, philosophy, and sociology when he initiated his research. The welcoming attitude of his peers and their generosity in sharing their expertise inspired him to write his system-theory informed history of the university.

Such experiences should not be read as a suggestion to simply skip a solid literature search as a formative phase of the research process—if only to prevent reinventing the wheel in a particular domain of scholarship. However, the idea that the search should *begin* with a phenomenon tends to neglect three important points. First, genuinely

original questions usually intervene in the boundaries of what the phenomenon "is," in what is supposed to be inside and outside the object of study, as Daston's reading of Hacking's work already illustrated. Second, compelling questions often result from literacy in pockets of loosely connected literature that require years to become familiar with. And finally, it is often the perceived ethos of the academic curators of those literatures that make both junior and senior scholars take the offered interdisciplinary threads seriously or not. While Repko highlights that interdisciplinarity requires a deep understanding of the relevant disciplines' epistemologies, theories, concepts, and histories, acquiring familiarity with the interstices of the fields in question takes much more than just one project.

Collectively stimulating a *curated curiosity* for continuous reading—our second recurrent theme—is, therefore, a highly relevant tool for doing solid interdisciplinary research. It is an inconspicuous dimension of interdisciplinary work, but the stories told in our book flag its relevance. It is no coincidence that several of the authors embarked on their interdisciplinary journey with a classic and, therefore, ubiquitous study from a field they had just discovered—sometimes only later recognizing the work's defining role in that field. To scholars from these other fields, this kind of first encounter with a canon they are so familiar with may seem unoriginal. However, observing such excitement may also entail something akin to mild jealousy—just as one may envy a novice reader of Leo Tolstoy's work. More importantly, a proper contextualization and compelling re-embedding of canonical works may offer novel insights, such as Stephenson's uptake of Mauss's *The Gift* (1954) for policy studies or Fourie's enthusiasm about Jess Gilbert's notion of low modernism (2003) for development studies show.

Finding such resources may often result from the casual browsing through library stacks that Van Lente recounts in his chapter. It can also result from the "library brachiation" that sociologist Andrew Abbott describes in his book *Digital Paper* (2014, p. 22). There, he recalls his early visits to libraries, where the call numbers assigned by librarians, as old-school curators, indicated which books were stacked together. Abbott deliberately departed from such curatorship by perusing the footnotes of crucial books for references to other relevant publications, checking their

(often unexpected) call numbers, and then adding these to his search—hence the idea of brachiating. As he notes, brachiating requires other techniques in the digital era, which only underlines the need for an institutional culture that fosters interdisciplinary curating while stimulating an open attitude about what might turn out to be important for interpreting one's primary materials.

This is all the more important for the humanities and qualitative social sciences—most notably cultural studies and literary scholarship—which often make use of what Hermann von Helmholtz termed "aesthetic induction" in 1862. He defined aesthetic induction as the opposite of logical induction and a manner of argumentation that embodied the specific usefulness of the humanities. While logical induction is a systematic process drawing on assumptions and rules, aesthetic induction leaves such rules behind, pioneering beyond them. In the words of philosopher Rein de Wilde, aesthetic induction is all about association, about "ideas that occur to you as in 'Ah, this reminds me of …'" (De Wilde, 2012, p. 288). This way of working is visible in De Vries's contribution, which describes an arts-science collaboration that led to the exhibition design of an experimental artificial womb. To elucidate the performative effects of such an exhibition, De Vries shows how its representation of the artificial womb drew upon age-old imaginings of the womb, while also broadening conceptions about parent-child relationships, which seemed inconceivable until this event. The extent to which such an exercise results in a convincing or original argument depends on the richness of the associations and alignments that authors convey as well as their erudition. This is why interdisciplinarity cannot be effectively pursued without consistently reading a wide range of sources and developing ways to recall or retrieve all that information—the latter perhaps the least transparent and commented upon aspect of a long academic trajectory.

Third, the necessity of *sustained collaboration* is a message emanating from the pages of many a chapter. This holds true both for the essays that illustrate interdisciplinarity in one person, or as Hvidtfeldt has it, the "polymath-mode" of interdisciplinarity and for the "entirely social modes" (2015, p. 24). Even where individuals bring fields together, their narratives show how colleagues informed them. Interdisciplinarity that

draws on collaboration between individuals from different disciplines and backgrounds, however, requires even stronger versions of prolonged institutional support, as well as intellectual investment, interpersonal trust, and a sense of equality among the participants.

In practice, however, interdisciplinarity not always sides with equality of some form. Pleas for interdisciplinarity may actually accompany disguised forms of scholarly imperialism, as Uskali Mäki et al. (2019) have argued. Their case in point is the rise of neuroscience in the social sciences and humanities that have quickly seemed to make it the standard for good research. The application of artificial intelligence to a wide range of subjects once considered to be solely within the purview of the humanities—such as identifying the authenticity of art works (Berezhnoy et al., 2007)—might serve as another example. According to Clarke and Walsh (2009), such forms of interdisciplinarity only deserve to be called imperialistic if the result is that the methods once predominant in the humanities or social sciences are considered invalid. Anything else is just innovation and scientific progress. We would like to add, however, that although one should not use the notion of imperialism too loosely, one must remain alert to what happens during interdisciplinary grant evaluation panels, for example. The validation of the latest and most novel techniques is characteristic of the sciences, a tendency that often clashes with the humanities' valorization of the scholarly past.

Quite a few of the authors encountered issues of epistemic authority when practicing interdisciplinarity—a possibility that Fam and O'Rourke (2020) have warned about. Although Mesman has a medical background in nursing and is often invited by medical experts and health scientists to do VRE in hospital settings, she shows how even something as seemingly mundane as writing a literature review by (not) appropriating the style of the health scientists with whom she collaborates may potentially negate the ethnographer's authority and legitimacy. Mazzucato, Dito, and Haagsman demonstrate that even teams that fully embrace interdisciplinary collaboration as a credo may have to cope with the effect of established hierarchies and encounter mutual mistrust if, in the intensity of creating, for instance, questionnaires together, views are dismissed too readily as irrelevant. As Regina Bendix, Kilian Bizer, and Dorothy Noyes have noted, this may not be surprising in an academic context, as academia is

also about suspicion, "suspicion of received knowledge, suspicion of other colleagues' arguments, suspicion of oneself and one's own representations" (2017, p. 57).

What is certain is that interdisciplinarity needs time to develop. When Peters and his team designed a theater setup that reflected a collaboration between humanities' scholars, musicians, and audiences, the routines of technicians and musicians resulted in unanticipated pushbacks. While these scholars have usually managed to resolve most issues along the way, Wachelder very openly recounts how an article he submitted to a history journal was rejected by the editors because they felt that the sources he used did not count as archival materials—something he had to take into account in future submissions.

A prolonged immersion in disciplines beyond one's home discipline also invites new interdisciplinary initiatives. Several authors did not so much suggest mixed methods in response to issues that transgress the boundaries of traditional disciplines but, rather, to their research subjects' *own* reflexive tendency to broaden their scope. Sitzia, for instance, notes how museums today reflect on globalization or history making itself rather than merely represent their heritage within a particular epoch. Analyzing how they accomplish this requires a wider palette of methods. Swinnen identified a social trend—reading groups for older people—that responded to the belief (influenced by literary studies) that representations of diversity in fiction have the performative effect of denaturalizing stereotypes and valuing alternative ways of life. Critically examining this claim required integrating social science and humanities methods.

The recognition of and sophisticated response to differences in writing styles is once again dependent on sustained collaboration, and somewhat underrepresented in the literature on interdisciplinarity. A handbook by Allen F. Repko (2012), for example, does not mention this issue in what is otherwise a very comprehensive introduction. When Bijsterveld entered the field of STS as a historian, she noticed that STS practitioners often used italics to highlight analytical distinctions between concepts. A paper without many italicized words, then, seemed to not conform to the field, although none of Bijsterveld's STS colleagues explicitly instructed her about this. Such conventions could only be learned through practice. The same is true for the essayistic, narrative style of the humanities versus the

descriptive, empirical style of the social and natural sciences, as Mesman experienced extensively.

Self-confidence in the offerings as well as writing styles of the humanities and qualitative social sciences is a key virtue of our interdisciplinary encounters. Lysen demonstrated this when thinking about what she, as an interdisciplinarian, could offer in her analysis of a collaboration between an artist and a group of neuroscience scholars. First and foremost, she used her abilities and courage as a scholarly writer to make the moments of discomfort in this collaboration transparent while situating those moments in the wider net of encounters between art and science. Finally, Gregory et al. show how elegantly hammering down the message that the user of information and computer science research data should never be an implied user but a user whose meaning-making processes are key to research data employment can entice the world of science to accept a patchwork of quantitative and qualitative methods.

Conclusion

Similar to how Gregory and colleagues redefine what it is to examine the user of technology, other authors redefine their object of research and more. If redefinition is what they are after in their interdisciplinary endeavors, many of them see forms of curated curiosity and sustained collaboration as ways to reach that goal. Their rich examples, however, show what this means in practice.

It has long been acknowledged that scholars have limited control over how their academic work is cited and utilized by others, no matter how well their rhetorical skills are developed. This is even truer for interdisciplinary work, as scholars and nonacademics from many other domains and fields may align and connect to it in unexpected ways.

This is exactly how it should be. Most biographies that scholars submit to conferences and publications are rather conventional and formulaic, whereas scholarly life cycles are full of dead ends, surprising turns, and unexpected uptakes. This was also one of Daston's messages when writing about her intellectual past. Careers are usually not as coherent as résumés suggest (2021, p. 80). Collaborations are among the possible contingencies.

With this in mind, the contributors to our book who worked in teams have written prosopographies, or group bios, instead of individual bios of their collaborative histories. Daston added to her remark about résumés that distractions are key to academic work. It is our hope that this book may offer readers a worthy distraction.

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