CHAPTER 11

Wilhelm Wundt's Critical Loyalty: Balancing Gendered Virtues Among Early Experimental Psychologists

Christiaan Engberts

Introduction

The philosopher and experimental psychologist Wilhelm Wundt taught a lot of young men who would subsequently have highly successful academic careers.[1] One of his most celebrated former students was Oswald Külpe, who would become famous as the founder of the so-called Würzburg School of psychology.[2] His work was so influential that he is sometimes referred to as "the second founder of experimental psychology on German soil"—the first one, of course, being his former teacher.[3] Wundt, however, was critical of his accomplishments. Shortly after his Würzburg appointment he made this very clear both in their private correspondence and in a polemical article in his own journal, the *Philosophische Studien*.[4] Even though their strong disagreements would last until Külpe's death in 1915, their personal relation hardly suffered.

C. Engberts (✉)
Utrecht University, Utrecht, The Netherlands
e-mail: c.a.engberts@uu.nl

© The Author(s) 2021

K. Niskanen and M. J. Barany (eds.), *Gender, Embodiment, and the History of the Scholarly Persona*,
https://doi.org/10.1007/978-3-030-49606-7_11

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Wundt emphasized that he hoped that "the inevitable critical debates will never ever tarnish our amicable personal relation!"[5] Külpe cherished his words: "Your final wish for an untarnished preservation of the personal relations [...] joyfully greets my warm and thankful heart". He also gratefully remembered how his former teacher always used to encourage an independent attitude among his students.[6]

The ambiguity of the relationship between Wundt and Külpe was typical of the former's relations with his peers, which were shaped by, among other things, friendship, respect, professional disagreement, and a drive for independent success. It is exactly this complexity that provides insight in the commitments and ideals that have shaped scholarship in the past as well as in the present. Especially when these ideals are in danger of coming into conflict with one another, we can get a sense of the virtues that learned men considered to be essential to good scholarship. In this chapter, I will look at late-nineteenth-century conceptions of scholarly virtue from two complementary perspectives. First, I will argue that scholarly personae are best understood as dynamic constellations of virtues. Next, I will reflect on the way in which these personae tend to draw on older, gendered catalogues of middle-class and aristocratic virtue. The case studies I will subsequently present serve to illustrate that the resultant constellation of virtues contains the seed for potential conflict. Even if such conflict is likely to take place between individual scholars, I will emphasize how it plays out within single personae, in which the balance between the gendered virtues of loyalty and independence is continuously redefined and recalibrated. I will elucidate the dynamics of this moral economy with case studies of the complex relations between Wundt and his peers, specifically his senior colleague Gustav Theodor Fechner, his tragically unsuccessful student Ludwig Lange, and his controversial but successful student Hugo Münsterberg.

Scholarly Personae and Gendered Virtues

There are no simple answers to questions about the characteristics of good scholarship. Academics are widely expected to excel in a myriad of ways. They are expected to stand out as—among other things—innovative researchers, inspiring teachers, supportive colleagues, merciless critics, public intellectuals, and selfless pursuers of a noble quest for knowledge. Any convincing template for good scholarship, or scholarly persona, has to account for this wide variety of roles and ideals. Herman Paul has

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

drawn attention to this complexity by describing scholarly personae as "constellations of commitments".[7] This definition is particularly attractive because it encourages the examination of different ways in which templates of scholarship can accommodate internal tension. Scholars who value the same commitments can be at odds with each other when they make different assessments of the relative weight of commitments. Individual scholars can experience tensions when they realize that their ideas about the relative weight of commitments can be susceptible to change through time.

Promising as this approach may be, historians of scholarship rarely explicitly discuss the tensions existing within these constellations of commitments. There is a growing body of literature, however, that examines questions of good scholarship through the lens of virtue and vice. Steven Shapin has discussed the importance of assessments of virtue in settling questions of trustworthiness in early-modern experimental science.[8] More recent works on scholarly virtue and vice include Sari Kivistö's in-depth study of the vices of learning in early-modern Europe and an edited volume by Jeroen van Dongen and Herman Paul that provides a cross-disciplinary overview of epistemic virtues in the sciences and the humanities.[9] These studies draw attention to a wide variety of scholarly virtues, such as love of truth, accuracy, impartiality, loyalty, and curiosity. The resulting repertoire of scholarly virtues is a *prima facie* attractive starting point for further investigations, not least because these commitments are orientated towards virtues that are still very recognizable to twenty-first-century researchers.

Of course, the familiarity of most (or even all) of these virtues to twenty-first-century scholars does not help us in determining the desirability of any specific assessment of weight of any of the various commitments. In fact, I would argue that it is not even feasible to draw up an exhaustive overview of the many ways in which these different virtues, with their different and potentially ever-changing relative weights, relate to each other. In this chapter, I aim to add to the discussion of scholarly virtue by shedding light on the complex interplay between virtues rather than by elaborating on the manifold assessments and performances of any specific virtue. This interplay will be illustrated by a close look at two widely recognized virtues of scholarship: critical independence and loyal collegiality. Even if the relation between these two virtues might not be fully representative for all possible relations between all virtues of scholarship that modern-day researchers have come up with, the selection of

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

exactly these virtues has certain advantages. In the first place, it will allow me to illustrate how the same virtues can alternately support and hinder each other. Secondly, both virtues tend to be highly valued by virtually all scholars and therefore offer a glimpse into the potential for conflict within personae. Finally, these particular virtues allow me to illustrate the way in which the understanding and performance of scholarly virtues are often shaped by the values and discourses existing in wider society.

After all, virtues do not emerge in a vacuum. Those discussed in this chapter can be traced back to older catalogues of middle-class and bourgeois virtue. Deirdre McCloskey, for example, lists both "loyalty" and "autonomy" in her overview of the Western bourgeois virtues.[10] In Wilhelmine Germany independence was widely recognized as a virtue of the middle-classes. Lothar Gall has pointed out that the "idea of autonomy, the spiritual and moral, but also the entirely practical independence" was central to the self-perception of the nineteenth-century German bourgeoisie.[11] More recently, Manfred Hettling has argued that from the eighteenth century onward members of the middle-class were expected to lead independent lives: "Everyone can – and has to – determine by himself, which social position he wants to pursue".[12] Even though loyalty is not as ubiquitous as independence in the historiography of the German middle-classes, Ute Frevert and Ulrich Schreiterer have argued that it acquired a "specifically bourgeois colouring" in the nineteenth century.[13] Herman Paul has argued along similar lines that loyalty was a cardinal virtue in the universe of bourgeois norms and values of Wilhelmine Germany.[14]

These bourgeois virtues typically had a highly gendered character. McCloskey has drawn up a diagram in which autonomy and freedom are presented as part of a masculine conception of virtue, while connection and solidarity are characterized as feminine.[15] The association between such desirable qualities as autonomy, independence, and freedom on the one hand and masculinity on the other is rather common. Matthew McCormack, for example, has emphasized that "personal freedom was a prominent aspect of a Georgian man's sense of his gender" that was "commonly articulated in terms of 'manly independence'".[16] McCloskey's characterization of solidarity as a feminine virtue, however, is not self-evident. A number of authors have pointed at widely-shared ideals of male comradery and friendship. For example, in W. C. Lubenow's study of the "Cambridge Apostles", an intellectual society founded in Cambridge in the early nineteenth century, the first chapter exclusively

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

deals with the importance that its middle- and upper-class members attached to male companionship and solidarity.[17]

As this Cambridge example already suggests, the gendered character of virtues like loyalty and independence was not only clearly observable in the private sector and administrative circles, but in academia as well. Shapin explains that in early-modern times women were not seen as trustworthy scientific witnesses because of a supposed lack of independent intellectual qualities: their wills were assumed to be "so circumstanced that they could only act through men's".[18] Paul Deslandes has described British universities as "highly gendered little worlds characterized by intense institutional loyalty [...] and carefully articulated visions of male solidarity".[19] Bonnie Smith has demonstrated how scholarly activity, ideals of personal loyalty, and conceptions of gender were strongly intertwined. She has pointed out how novel nineteenth-century practices of scientific history, especially seminar training and archival research, went hand in hand with the all-pervasive emergence of historians imagining themselves as part of a male brotherhood.[20]

Other authors have also emphasized that independence was widely regarded as a gendered virtue in academic circles. Hannah and John Gay list hard work and independence among the ideals of manliness that shaped the ideal of the good scientist in the nineteenth century.[21] In a recent study, Heather Ellis draws attention to a considerable number of British scholars who emphasize the importance of independence during this period.[22] Robert Nye therefore makes a convincing argument when he emphasizes the highly assertive masculinity that created a nineteenth-century culture of scholarship characterized by a strong emphasis on both "personal independence" and "intense bonds of personal loyalty".[23] His observations certainly apply to nineteenth-century Germany as well. Laura Otis' discussion of the personal relations in the laboratory of the physiologist Johannes Müller, a place that was not unlike Wundt's laboratory, repeatedly underlines the importance of both virtues. She describes Müller as a scholar looking for "soul-mates who would help him discover life's plan" but also draws explicit attention to his students' aspirations to independence.[24]

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Gender in German Academia

The gendered character of independence and loyalty in late-nineteenth-century academia is made very clear in an 1897 collection of assessments of the desirability of the increased accessibility of German universities for women. This collection was assembled by the publicist Arthur Kirchhoff after the Berlin professors Heinrich von Treitschke and Erich Schmidt had expelled the few female attendees from their lectures.[25] The story goes, that Treitschke subsequently asked the beadle to guard the entrance of the lecture hall, to make sure that this would never happen again![26] In the wake of this incident, Kirchhoff asked a small number of Berlin professors for their thoughts on women in academia: Would they be capable to successfully finish an academic study, and if so, should the state actively promote their university admission?[27]

When his correspondents answered in too much detail to summarize their accounts in a short article, Kirchhoff contacted even more scholars in order to collect enough material for a comprehensive overview of the common opinions about women in higher education. He eventually brought together more than a hundred evaluations of scholars, physicians, and public intellectuals. The tenor of most contributions was that at least some women were obviously capable of completing an academic education. The correspondents disagreed, however, about a myriad of additional issues, such as the appropriateness of co-education, the necessity of special women's colleges, and the desirability of female academic employment after the completion of their university studies. Even in the late-nineteenth century, readers noticed that Kirchhoff's collection provided more insight into the gender conceptions prevalent among the—entirely male—professoriate of German universities than into the talents and ambitions of women. The feminist publicist Helene Lange characterized Kirchhoff's book as a "useful benchmark – not of the assessment of the abilities of women of our time […] but of 'the gentlemen's own thoughts' (*Geist*)".[28]

These gentlemen's gendered conceptions of loyalty found their most explicit expression in warnings against the influence of the presence of women on male student sociability. Arthur König, a Berlin philosopher who was relatively sympathetic to admitting women to his lectures, emphasized that the tone of student conversations would change and that professors and *Privatdozenten* would be forced to refrain from their habit

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

to spice up their lectures with occasional inappropriate jokes.[29] A pathologist from Würzburg argued that male students often saw their few female peers as intruders, which could lead to frictions and distraction during the lectures.[30] Another medical professional from Leipzig added that it might be awkward to teach certain practical courses in front of a mixed audience.[31] A Berlin legal scholar simply stated that "our universities are universities for men" and underlined that they were strictly "tailored to the male spirit (*Geist*)".[32]

Kirchhoff's correspondents used two different lines of reasoning to emphasize women's lack of the masculine virtue of independence. One argument drew attention to their supposed intellectual reliance on men. A legal scholar from Strasbourg stressed that women tended to ask for the input of their male colleagues when dealing with challenging legal questions.[33] The anatomist Gustav Fritsch also recognized an ineradicable tendency among even the most talented women to ask their male colleagues for guidance.[34] A second line of criticism of the independence of female students dealt with their supposed inability to make original contributions to a growing body of scholarship. This point was made by a striking number of Kirchhoff's informants.[35] The judgement of the Strasbourg gynaecologist Wilhelm Alex Freund is quite representative in this respect: "Usually the scientific accomplishments [of women] do not rise above the level of mediocrity. Never has a woman set herself a grand, scientific task; never has she succeeded in solving even an easy task in a ground-breaking way".[36]

Wilhelm Wundt was also approached by Kirchhoff. The gist of his concise reply was broadly the same as most of the assessments by his peers. On the one hand, he thought that there was no reason to block access to a university education for women. At the same time, however, he argued that there were certain physical, psychological, and moral differences between men and women, which made women unfit for—among other things—political and medical professions.[37] His former student Münsterberg lived in the United States and contributed to the volume with an essay about women's higher education in that nation. He had serious doubts about the usefulness of America's example for Germany. Even though a university education for women was more common across the Atlantic than in Europe, Münsterberg emphasized that his stay in the United States had "not shattered his conviction, that women, except for a few brilliant exceptions, are not suited for scholarly research; in scholarship they cannot produce but only reproduce".[38] He remained

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

in the camp of those German academics who doubted women's ability to independently contribute to the advancement of scholarship.

The Loyal Criticism of Gustav Theodor Fechner

In 1875, Wundt was appointed as Professor of Philosophy in Leipzig. He was expected to direct his attention to the intersection of philosophy and the natural sciences, which suited his interest in the meeting point between the physiology of perception and the philosophy of mind. When he arrived two older scholars with partially overlapping interest already lived and worked in the city: the physiologist Ernst Heinrich Weber and the founder of psychophysics Gustav Theodor Fechner. Both men taught their last courses in the academic year 1874–1875.[39] Though Weber already passed away in 1878, Fechner would live until 1887 and he would develop a very amiable relationship with Wundt. Their friendly relationship was characterized, however, by strong disagreements on a number of scholarly questions, which they discussed in long letters. One of Fechner's letters even counted more than 120 sides and contained extensive, but constructive, criticism of the work of Emil Max Mehner, who had finished his doctorate under Wundt's supervision one year earlier.[40]

The first of their disagreements occurred in the wake of the 1877 Leipzig visit of the medium Henry Slade. His claims to be able to move objects by channelling forces from a fourth dimension had already been debunked by suspicious audiences in New York and London, but had nonetheless caught the attention of the Leipzig astrophysicist Friedrich Zöllner.[41] He organized séances at his house to which he invited small groups of colleagues to witness Slade's performance. Wundt and Fechner both attended one of these events apart from each other. Slade did not disappoint: a compass needle moved spontaneously, knots untied themselves, and a slate pencil wrote an encouraging message without being touched: "We feel to bless all those that try (?) to envestigate a subject so unpopular as the subject of Spiritualism".[42] While Zöllner was delighted and Fechner was cautiously enthusiastic, Wundt was not in the least convinced of Slade's trustworthiness.

In the subsequent years, Zöllner passionately defended his views about his experiences with Slade in books and journal articles.[43] Other believers in the veracity of Slade's performances, such as Hermann Ulrici and Immanuel Hermann von Fichte, also contributed raving reports.[44] Against this backdrop Wundt decided to publish a critique under the

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

title *Spiritism: a so-called scientific question*.[45] In this booklet, he emphasized the profound untrustworthiness of all the witnesses, including himself. Because natural scientists are not trained to study supernatural phenomena, he argued, they have no special authority to judge their veracity. He also wryly noted that the spirits that Slade channelled almost exclusively communicated in English. Only one of their messages was in German, but it was "a defective German, like a fumbling American or Englishman would have written".[46]

Fechner was one of the first to receive a copy of Wundt's critique. Even if his criticisms were not primarily directed towards him, he felt the need to defend himself. Wundt's doubts about the trustworthiness of the witnesses must have felt particularly relevant to Fechner, because his eyesight had been limited as the result of an incipient cataract.[47] He wrote to Wundt that he preferred to discuss the issue "in private rather than in public".[48] He defended the ability of the witnesses to reach a well-informed judgement: even if they were not specifically trained to judge supernatural phenomena, nobody could be better equipped to evaluate Slade's performance. He also accused his younger colleague of intellectual insincerity. Because Wundt obviously presumed that Spiritism could not be real, Fechner argued, he unfairly supposed that its defenders had to be dishonest. He concluded his letter with the assurance that he hoped that their disagreement would not hurt their friendship. Even though Wundt amiably but critically answered to his objections, Fechner suggested in his next letter that they should now drop the subject: "Why would we keep on arguing [...] I would rather not quarrel with you about this issue, now that we have convinced each other that we cannot lecture each other about those things about which we disagree".[49]

Subsequent discussions between Wundt and Fechner would primarily deal with the correct interpretation and application of Ernst Heinrich Weber's most famous legacy, which was already known as "Weber's law" in the late-nineteenth century. It states that "the increase in any stimulus necessary to make a noticeable difference is a constant proportion of that stimulus".[50] Fechner was a recognized authority on the principle. Because of his contributions to its articulation and dissemination it is nowadays often referred to as the "Weber-Fechner law" or even simply as "Fechner's law".[51] The principle provided ample grounds for discussion because it was used as the interpretative framework for most of the experiments on perception carried out in Wundt's Leipzig laboratory.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

The research by Wundt's students and collaborators usually provided the starting point for these discussions. Because their findings often touched on his long-standing interest in Weber's law, Fechner carefully followed the activity in Wundt's laboratory. He even discussed the research results with various of Wundt's associates, such as Gustav Lorenz and Max Mehner.[52] Wundt's students were unlikely to act on Fechner's suggestions without consulting their teacher. Therefore, Fechner often brought up these issues in his correspondence with Wundt as well. Even though the latter tended to defend his students' work vigorously, Fechner valued these discussions for at least two reasons. In the first place, he thought it was important to privately share his criticism before he would eventually make it public. By providing this polite service he would give Wundt and his associates the chance to correct mistakes or to prepare an appropriate response.[53] Secondly, he realized that Wundt's objections could help him to improve his own arguments. Occasionally he even explicitly asked Wundt for critical comments on draft papers in which he criticized findings from his laboratory.[54]

In their personal relationship, Wundt and Fechner were able to combine loyal collegiality and critical independence almost effortlessly. Their mutual loyalty is most apparent in their reluctance to criticize each other in public. Even though Fechner may have been the least trustworthy witness of Slade's performance, Wundt did not call him out by name in his critique of the 1877 séances at Zöllner's. Fechner's dismissal of Wundt's characterization of these events was carefully confined to private letters. Likewise, his critique of the work carried under Wundt's supervision was also largely shared in private rather than in public. Both men felt free to criticize each other strongly, because the private character of their personal correspondence created a safe space in which fundamental critique could be shared without any kind of repercussion. In such a safe environment, the willingness to be almost brutally honest could even be understood as the most appropriate and valuable proof of loyalty.

The Unfortunate Career of Ludwig Lange

Ludwig Lange may have had the most disappointing career of Wundt's doctoral students. He was the son of the classical philologist Christian Conrad Ludwig Lange, who taught in Leipzig from 1871 onwards.[55] In 1885, when Lange was only twenty-two years old, his father passed away, which left him in a financially precarious situation. Wundt, however, had

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

noticed his student's mathematical prowess and hired him as an assistant. He must have realized that this decision was not entirely risk-free, because earlier that year Lange had already informed him about his troubled state of mind. He had explicitly pointed out that he had "reason to doubt the health of his mental state" and added that he regularly suffered from "agonizing passive fantasies [and] obsessive thoughts".[56] In the following two years, however, he proved to be a promising and hard-working young researcher. In these years, he published both his dissertation and an additional set of papers in the *Philosophische Studien*.[57] In 1887, however, his promising career came to a standstill.

In this year, he would suffer his first bout of mania. In the following years, such bouts would alternate with long periods of depression. His former physician recounted how he would be very talkative during his manic periods. What was more alarming, however, was the fact that he would then also be inclined to violence and prone to leave the house dressed in nothing but a top hat and a waistcoat. During his depressive periods he could stay in bed for months without talking to anyone.[58] It is likely that Lange was the anonymous distinguished member of the Leipzig institute that Friedrich Kiesow, another former student of Wundt, would later refer to as "mentally deranged".[59] In the face of these setbacks Lange felt that he had no choice but to quit academia. In December 1887, he admitted to Wundt that his "chronic suffering of several years" had made it impossible to fulfil his scholarly duties any longer.[60]

This was not the end of the relationship between Wundt and Lange. The former student kept his former supervisor meticulously updated about his life. In 1889, he repeated his conviction that he should quit academia and "leave it to those who are better suited for it". He would instead work on less-demanding pursuits, such as photography and learning the local language during a leisurely trip through Italy.[61] During his most troubled periods he would retreat to a sanatorium. Recognizing this as an intriguing environment for an educated psychologist, he wryly pointed out to Wundt that he spent his time making "highly interesting psycho-pathological observations of others".[62] Even though these early letters after Lange's retirement mostly mention details from his personal life, their later correspondence would also be dedicated to his repeated attempts to take up his scholarly career again.

The first sign of Lange's renewed interest in scholarship was his contribution to the issues of Wundt's *Studien* that were compiled as a *Festschrift* for his 70th birthday in 1902. Lange's contribution was his first published

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

paper in many years.[63] This was no immediate inducement to consider a return to academia. By the end of the First World War, however, Wundt and Lange explicitly and frequently discussed the latter's return to academia. When he mentioned his aspiration to continue his work from three decades earlier, Wundt advised Lange to get in touch with Felix Krüger, who had recently succeeded him as the director of the Leipzig laboratory.[64] One year later Wundt would also write a letter of recommendation for Lange for a position at the Leipzig university library.[65] He did not, however, get the job, because the management preferred to hire someone with actual working experience as a librarian.[66] When Wundt passed away in 1920 he had not been able to find a job for his unfortunate former student.

The relationship between Wundt and Lange was very unequal. During the years immediately after the death of his father, Lange was financially dependent on his *Doktorvater*. Throughout the following decades Wundt would be his main connection to the world of scholarship. His mental health struggles had severely damaged most of his other ties to academia. Some of his peers even resented him for his troubles, because they feared that these would reflect unfavourably on the new Wundtian methods of psychological observation.[67] In the light of this highly unequal relation, it is understandable that the relation between Wundt and Lange does not provide a schoolbook example of critical independence. Wundt's continuous loyal attachment to his former student, however, is remarkable. Without his financial assistance Lange would not have been able to finish his doctorate. And even though the ensuing mental breakdown of his pupil must have upset Wundt, he would stay in touch with him for more than three decades, until own his death in 1920. He would demonstrate his unwavering trust in the scholarly prowess of his student by allowing a long paper by him in his 1902 *Festschrift*. He would further express his faith in Lange during the final months of the World War. Not only did he encourage him to return to academia, he also put his own credibility on the line by referring him to Felix Krüger and recommending him for a Leipzig librarianship.

Criticizing the Loyal Hugo Münsterberg

Wundt's relationships with Fechner and Lange were quite straightforward. Fechner was a trusted older colleague and Lange was a highly appreciated but troubled former student. His relationship with Hugo

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Münsterberg, however, was more complicated. Münsterberg was born in Danzig in 1863. In 1882, he arrived in Leipzig with the intention to study medicine. Soon after attending a series of lectures by Wundt in the summer of 1883, however, he decided to study experimental psychology instead.[68] He already finished his dissertation with Wundt in 1885.[69] In 1887, he would receive his doctorate in medicine in Heidelberg and only one year later he would publish the *Habilitationsschrift* that allowed him to teach as a *Privatdozent* at the philosophical faculty of the University of Freiburg.[70] Münsterberg's work soon drew the attention of William James at Harvard. On his instigation Münsterberg was appointed as the director of Harvard's psychological laboratory in 1892. Except for some short stays in Germany in 1895–1897 and 1910, Münsterberg would remain at Harvard until he passed away in 1916.[71]

Wundt and Münsterberg would stay in touch until the latter's death. In their correspondence they repeatedly emphasized their willingness to engage critically with each other's work. After he had received a copy of Wundt's *System der Philosophie* in 1889, Münsterberg asked a rhetorical question in his letter of thanks: "Should I, because the author is my teacher whom I owe much, leave the words that burn in my throat unspoken?" He answered this question in the negative and added that he had "admitted often enough without reserve […], often enough to be free of any suspicion of flattery" that he did not always agree with his *Doktorvater*.[72] In some of his letters, Wundt displayed an appreciation of Münsterberg's honest criticism: "You can be assured that […] I can truly appreciate how much I owe not only to those who stood beside me as like-minded collaborators, but also to those who forced me through a rigorous criticism of my views […]. Amongst those, […] you […] are placed far in the front ranks".[73] On the surface Wundt's encouragement of Münsterberg's critical independence seems to be in line with his attitude towards Külpe described in the opening paragraph of this chapter. It also resembles Laura Otis' description of the physiologist Johannes Müller, who aimed to make "his favourite students scientists by respecting their own scientific thinking".[74] A closer look at the correspondence between Wundt and Münsterberg, however, suggests that their relation was not characterized by such profound mutual respect.

A significant part of this correspondence consisted of Münsterberg's recurring appeals for recognition. This topic surfaced in a number of ways. One of its most awkward manifestations was in Münsterberg's repeatedly expressed suspicions that Wundt deliberately tried to damage his scholarly

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

reputation and career opportunities. In 1890, one of Wundt's students, George Dwelshauvers, published a study in which he accused Münsterberg of plagiarizing Wundt's work.[75] Assuming that Dwelshauvers would not have published this without Wundt's prior approval, Münsterberg discussed the topic with his former teacher: "I confess that the accusation to steal pocket watches would have been less hurtful; but I stayed silent in public [...]. I kept hoping [...] that you would take the opportunity to vindicate me, because only you are in the position to know how preposterous Dwelshauvers' accusation is".[76] Wundt, however, hardly showed any empathy. He testily pointed out that Münsterberg's assertion that he had not plagiarized him amounted to the accusation that he, Wundt, had actually plagiarized his own student instead! He claimed to remember exactly when he had come up with the supposedly plagiarized sections and indignantly refused to exonerate Münsterberg.[77]

Six years later they had another, similarly awkward, exchange. This time Münsterberg accused Wundt of "hampering his career at every turn" after a colleague in Bern had told him that he would have been appointed there some years earlier if the faculty would not have received a "devastating evaluation" from his former teacher.[78] Wundt's reply has not survived, but Münsterberg's next letter suggests that his *Doktorvater* simply sidestepped the accusations and instead complained about an American newspaper article in which Münsterberg had argued that Berlin was the only German university with the same facilities for the study of psychology as Harvard: of course Wundt would have preferred him to have heaped some praise on his Leipzig laboratory as well.

Münsterberg also asked for recognition in a more straightforward way: again and again he underlined that he was his teacher's most loyal and admiring follower. When he congratulated Wundt for his sixtieth birthday he added that "among your many students there is not a single one that can be considered to surpass me in personal adoration for you".[79] Four years later he emphasized that his colleague Heinrich Rickert had called him "the only true *Wundtianer*".[80] Almost a full decade later he still reminded Wundt of the fact that he had "held on to the spirit of [his] laboratory more faithfully than any other experimental psychologist in the Reich", and added that outside of Leipzig Wundtian experimental psychology was "practiced by men, who are not able to inspire and who are increasingly willing to abandon it".[81] The perceived necessity of such constant reassurances of admiring loyalty suggests that Münsterberg did not experience his relation with former teacher as a very affectionate one.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

The awkwardness of their relation is further illustrated by their discussion of gratitude. In 1890, Münsterberg wrote Wundt to complain that he had heard rumours that Wundt had accused him of ungratefulness. He argued that he could live without his *Doktorvater*'s appreciation of his scholarly accomplishments, but claimed that he "would lose [his] self-respect, when [Wundt's] accusation of ungratefulness would be warranted".[82] His former teacher denied that he had ever made such accusations, but hardly tried to reassure his worried student. Instead he pointed out that when "somebody wants to show his gratitude by his own will", this could only be done by working "reliably, diligently, and meticulously without caring about authorities or [his] career".[83] In this way, he indirectly accused Münsterberg of the ungratefulness of which he had just exonerated him, because in the same letter he also asserted that his former student's recent work had been "rushed and not sufficiently matured". To add insult to injury Wundt also mentioned that he had indeed shared this particular unfavourable judgement with mutual acquaintances, which suggests that the worrying reports that Münsterberg had received were most likely quite accurate.

In the relationship between Wundt and Münsterberg, the balance between collegial loyalty and critical independence was precious. On the one hand, they both explicitly acknowledged the importance of honest mutual criticism. Because Münsterberg had been able to secure a successful career in the United States without Wundt's support, he could take a more independent attitude towards his former teacher than his former co-student Lange. As illustrated by the example of Külpe in the opening paragraphs of this chapter, Wundt was perfectly well-able to make a distinction between scholarly criticism and the friendship between himself and his former pupils. His relationship with Münsterberg, however, never reached the same level of amiable confidentiality. The fact that Münsterberg was by far his most famous and successful student who was not invited to contribute to the 1902 *Festschrift* further illustrates that he kept him at arm's length. This continued to baffle and unsettle Münsterberg, who craved for some respect from his teacher. Through the years he unsuccessfully tried to show his loyalty and gratitude, but he only experienced rejection and accusations in return. He would try to win his *Doktorvater*'s approval until the end of his life: in 1915, he wrote to Wundt that he had not only recommended him for the Nobel Prize, he had also urged other colleagues to plead for him as well![84]

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

A Moral Economy of Scholarship

Personal relationships between scholars often shape their everyday working lives as well as their career opportunities. These relations are moulded by more or less shared conceptions of virtue. In this chapter, I specifically looked into the interconnected ideals of collegial—sometimes even amicable—loyalty and the aspiration to critical independence. These ideals were lifted from already existing catalogues of middle-class, masculine virtue. In the first section of this chapter, I have drawn attention to the way in which both independence and loyalty were recognized as virtues among the nineteenth-century Western-European bourgeoisie. In the following section, I have provided a short overview of how these virtues were interpreted by some of the leading men of German scholarship specifically. They took pride in the ideal of the university as a space for male solidarity between different generations and favourably compared their own independent research endeavours with the supposedly docile intelligence of most academically-inclined women.

The subsequent case studies have illustrated the complex ways in which loyalty and independence were intertwined in a moral universe of masculine virtue. Critical independence quite obviously belongs in such a universe. After all, the desire to present oneself as a critical or even polemical evaluator of one's peers does not at all comply with older catalogues of feminine virtue that centred around such ideals as modesty, docility, and unqualified supportiveness. On first sight, the virtue of loyalty does not self-evidently belong in a moral universe of masculine virtue in the same way. Even though authors like Nye and Paul recognize it as part of the moral landscape of the predominantly male scholarly community of the late-nineteenth century, McCloskey's account of the bourgeois virtues subsumes it under the feminine virtue of faith.[85] The masculine character of loyalty becomes more clearly recognizable, however, when we take a closer look at the collegial and amiable relations between Wundt, Fechner, Lange, and Münsterberg.

A first example of this loyalty is provided in Wundt's correspondence with Fechner. Even though the latter repeatedly criticized the research carried out in the former's laboratory, Wundt defended his students' and collaborators' work without exception. In standing up for his everyday colleagues, he displayed the sort of group loyalty that is often highly valued within another stronghold of masculine morality: the army. Peter Olsthoorn, for example, mentions loyalty, alongside honour and

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

courage, as one of the traditional military virtues.[86] Of course Wundt had the ultimate responsibility for all the research done in his laboratory. Following one recent study of military ethics, we could therefore say that he did not primarily display the virtue of loyalty—which in his understanding is a "virtue of the weak"—but the "comparable virtue from superiors to subordinates" which he describes as "something closer to benevolence".[87]

The loyalty that Lange and Münsterberg show towards Wundt resembles loyalty as a virtue of the subordinate more closely. Because Wundt was by far Lange's strongest connection to the world of scholarship after 1887, he loyally informed his former employer about his troubled condition while he was careful not to criticize him or overburden him with his requests. Münsterberg, who made his career without any significant support from Wundt, did not show the same restraint. In his eyes, the freedom to criticize each other's work was the inescapable outcome of indubitable loyalty. In his letters to his former student Wundt, however, gave the impression that he disapproved of Münsterberg's criticism and doubted his loyalty. In his responses Münsterberg therefore continued to place himself in a subordinate position in the way he emphasized his loyalty year after year. He even went so far as to present himself as his *Doktorvater*'s most faithful follower!

Münsterberg was not completely mistaken in his conception of loyal collegiality and critical independence as two sides of the same coin: he was only misguided in the assumption that this applied to his relationship with Wundt. His characterization did apply, however, to the relation between Wundt and Fechner. When they discussed the veracity of Slade's performance, both men felt free to criticize each other's points of view. They were able to agree to disagree without any hard feelings. When they debated the work carried out in Wundt's laboratory they also often disagreed about its exact merits. At the same time, they both realized that the other's criticism was a valuable asset. Fechner could polish his arguments on the basis of Wundt's defence of the work of his associates. Wundt and his collaborators could either make some adjustments in the reports of their work or think of a convincing defence against Fechner's criticism, if he would eventually choose to publish it. Well-intentioned strong critiques could, of course, only be valuable assets if none of the parties involved felt that they had to hold back. This was only possible when all participants considered each other to be equals. This presumption of equality took the shape of a presumption of shared masculinity,

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

or—in other words—a shared ability to dish out as well as to take some blows.

These different interrelated expressions of loyalty and independence hark back to my earlier comments about scholarly personae as constellations of commitments. Different scholars with different relations strike different balances between their commitments to the virtues of loyal collegiality and critical independence. This variety of balances is well-captured by the conception of scholarly personae as representations of moral economies of scholarship. The idea of a moral economy can be traced back to E. P. Thompson's 1971 article on the English crowd in the eighteenth century.[88] Its emphasis on the shaping role of the delicate balance between social norms and values was only adapted in the history of science from the late nineteen-eighties onward. Steven Shapin's work on the "tacit system of recognitions, rights, and expectations" that shaped the early-modern culture of English experimentalism is one of the first examples of a history of scholarship borrowing Thompson's approach.[89] More recent notable examples of the explicit utilization of the concept of moral economy are Robert Kohler's description of the "moral ethos of cooperation and communality" among fruit fly geneticists in the United States in the early twentieth century and Lorraine Daston's more theoretical reflections on the usefulness of the term.[90]

Kohler's work is primarily inspiring because his meticulous analysis of a community of scholars encourages the same sort of close look at everyday practices as I have adopted in this chapter. Daston's work is of interest because she provides a definition of moral economies that fits this approach. She describes a moral economy as a web of values that "stand and function in well-defined relation to one another" and that constitute "a balanced system of emotional forces, with equilibrium points and constraints".[91] The continuous attempts to reach a balance between collegial loyalty and critical independence as well as the many different manifestations of both virtues described in this chapter illustrate the complexity of this system. Even if Wundt, Fechner, Lange, and Münsterberg would all agree that loyalty and independence are both highly appreciated virtues, they would, also without exception, acknowledge that their articulation and relative importance can be perceived in a myriad of ways.

The conception of a moral economy of scholarship as a balanced system which requires continuous efforts to maintain a precious balance suggests

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

that we take Donna Haraway's pressing suggestion to investigate "gender-in-the-making" in the history of scholarship very seriously.[92] Haraway distances herself from earlier attempts to reduce gender to nothing more than one of the many background conditions that might be relevant to our understanding of relations between scholars without paying attention to the ways in which scholarly environments foster the continuous renegotiation of conceptions and performances of gender. She contrasts her understanding of the gendered history of scholarship with that of Shapin and Schaffer, whose analyses she describes as characterized by a tendency to see gender as about "women instead of as a relationship" in which "nothing very interesting happened to gender".[93]

One reason to refrain from seeing the masculine environment of Fechner, Wundt, Lange, and Münsterberg exclusively as a world of men in which no trace of women and femininity can be found, is the fact that a small number of women did actually work in Wundt's laboratory. In the early nineteen-tens, Anna Berliner carried out research for her dissertation at exactly this place.[94] Immediately after the First World War, Wundt also supervised the dissertation of Bertha Paulssen. The unwitting reader would not be able, however, to figure out that she was a woman: both the independently published version of her dissertation and the version printed in the *Archiv für die gesamte Psychologie* were attributed to "B. Paulssen".[95] The fact that this work by women was hidden, doesn't make it less real. The ambiguous, half-forgotten, status of these contributions raises questions about the complexity of the gendered nature of the relation between men and women in this specific scholarly environment and what Haraway calls "gender-in-the-making".

Haraway also draws attention to the ambiguity of the gender connotations that go with certain virtues. One of the most interesting questions raised by Shapin's work on early-modern scholarship, she argues, is how early-modern scholars were able to claim modesty as a masculine virtue.[96] Similar questions can be asked about the virtue of loyalty. As I have stated, some authors consider this to be a feminine rather than a masculine virtue. The late-nineteenth-century scholars described in the paper, however, were able to come up with a masculine conception and performance of loyalty. The long-term amiable but professionally fruitless correspondence between Wundt and Lange provides a clear example of how a relationship grounded in a shared scholarly past remained viable through the continuous performance of ideals of masculine reciprocity grounded in

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

a conception of the mutual obligations arising from the unequal relation between a *Doktorvater* and his doctoral student.

Finally, I would like to emphasize once more that the virtues of collegial loyalty and critical independence were not the only virtues to which nineteenth-century experimental psychologists felt a commitment. The case of Münsterberg further illustrates this observation. In his correspondence with Wundt, the assessments of the relative weight of loyalty and independence are explicitly related to Münsterberg's performance of other virtuous qualities, namely gratitude, reliability, diligence, and willingness to work without regard to career opportunities. Future research into the ways in which these (and other) virtues shape—and are being shaped—by conceptions and performances of gender could shed a further light on the intricate balances of the moral economy at these places that were more often than not seen as "universities for men [and therefore] tailored to the male spirit".[97]

Notes

1. Funding for this research has generously been provided by the Netherlands Organisation for Scientific Research (NWO).
2. On Külpe and the Würzburg School, see: Horst Gundlach, "Oswald Külpe und die Würzburger Schule," in *Hundert Jahre Institut für Psychologie und Würzburger Schule der Denkpsychologie*, ed. Wilhelm Janke and Wolfgang Schneider (Göttingen: Hogrefe Verlag für Psychologie, 1999), 107–124; Robert M. Ogden, "Oswald Külpe and the Würzburg School," *The American Journal of Psychology* 64, no. 1 (1951): 4–19; David Lindenfeld, "Oswald Külpe and the Würzburg School," *Journal of the History of the Behavioral Sciences* 14 (1978): 132–141.
3. Ogden, "Oswald Külpe," 5.
4. Wilhelm Wundt to Oswald Külpe, 18 September 1895, Universitätsarchiv Leipzig (hereafter UAL): NA Wundt/III/301-400/387/255-258; Wilhelm Wundt to Oswald Küllpe, 20 September 1895, UAL: NA Wundt/III/301-400/389/265-276; Wilhelm Wundt, "Ueber die Definition der Psychologie," *Philosophische Studien* 12 (1896): 1–66.
5. Wilhelm Wundt to Oswald Külpe, 20 September 1895, UAL: NA Wundt/III/301-400/389/265-276. Wundt's emphasis.
6. Oswald Külpe to Wilhelm Wundt, 22 September 1895, UAL: NA Wundt/III/301-400/390/283-290.
7. Herman Paul, "What Is a Scholarly Persona? Ten Theses on Virtues, Skills and Desires," *History and Theory* 53, no. 3 (2014): 364.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

8. Steven Shapin, "The House of Experiment in Seventeenth-Century England," *Isis* 79, no. 3 (1988): 373–404.
9. Sari Kivistö, *The Vices of Learning: Morality and Knowledge at Early Modern Universities* (Leiden: Brill, 2014); Jeroen van Dongen and Herman Paul (eds.), *Epistemic Virtues in the Sciences and the Humanities* (Cham: Springer, 2017).
10. Deirdre N. McCloskey, *The Bourgeois Virtues: Ethics for an Age of Commerce* (Chicago, IL: University of Chicago Press, 2006), 66.
11. Lothar Gall, *Bürgertum, liberale Bewegung und Nation: Ausgewählte Aufsätze*, edited by Dieter Hein, Andreas Schulz and Eckhardt Treichel (Munich: Oldenbourg, 1996), 12.
12. Manfred Hettling, "Die persönliche Selbständigkeit: Der archimedischer Punkt bürgerlicher Lebensführung," in *Der bürgerliche Wertehimmel: Innenansichten des 19. Jahrhunderts*, ed. Manfred Hettling and Stefan-Ludwig Hoffmann (Göttingen: Vandenhoeck & Ruprecht, 2000), 57.
13. Ute Frevert and Ulrich Schreiterer, "Treue: Ansichten des 19. Jahrhunderts," in *Der bürgerliche Wertehimmel: Innenansichten des 19. Jahrhunderts*, ed. Manfred Hettling and Stefan-Ludwig Hoffmann (Göttingen: Vandenhoeck & Ruprecht, 2000), 219–220.
14. Herman Paul, "Germanic Loyalty in Nineteenth-Century Historical Studies: A Multi-Layered Virtue," *História da Historiografia* 12, no. 30 (2019).
15. McCloskey, *The Bourgeois Virtues*, 304.
16. Matthew McCormack, *The Independent Man: Citizenship and Gender Politics in Georgian England* (Manchester: Manchester University Press, 2005), 2.
17. W. C. Lubenow, *The Cambridge Apostles, 1820–1914: Liberalism, Imagination, and Friendship in British Intellectual and Professional Life* (Cambridge: Cambridge University Press, 1998).
18. Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago, IL: University of Chicago Press, 1994), 89.
19. Paul R. Deslandes, *British Masculinity and the Undergraduate Experience, 1850–1920* (Bloomington, IN: Indiana University Press, 2005), 18.
20. Bonnie G. Smith, "Gender and the Practices of Scientific History: The Seminar and Archival Research in the Nineteenth Century," *The American Historical Review* 100, no. 4 (1995): 1150–1176.
21. Hannah Gay and John W. Gay, "Brothers in Science: Science and Fraternal Culture in Nineteenth-Century Britain," *History of Science* 35, no. 4 (1997): 427.
22. Heather Ellis, *Masculinity and Science in Britain, 1831–1918* (London: Palgrave Macmillan, 2017). See, for example, pages 40, 58, 117, and 138.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

23. Robert A. Nye, "Medicine and Science as Masculine 'Fields of Honor,'" *Osiris* 12 (1997): 61.
24. Laura Otis, *Müller's Lab* (Oxford: Oxford University Press, 2007), 43.
25. Arthur Kirchhoff (ed.), *Die Akademische Frau. Gutachten hervorragender Universitätsprofessoren, Frauenlehrer und Schriftsteller über die Befähigung der Frau zum wissenschaftlichen Studium und Berufe* (Berlin: Hugo Steinitz, 1897).
26. Patricia Mazón, "Das akademische Bürgerrecht und die Zulassung von Frauen zu den deutschen Universitäten 1865–1914," *Zentrum für transdisciplinäre Geschlechterstudien, Bulletin 23: Zur Geschichte des Frauenstudiums und Wissenschaftlerinnenkarrieren an deutschen Universitäten* (2001): 1.
27. Kirchhoff, *Die Akademische Frau*, VII.
28. Helene Lange, "Die akademische Frau," *Die Frau: Monatsschrift für das gesamte Frauenleben unserer Zeit* 4, no. 4 (1897): 194.
29. Arthur König in Kirchhoff, *Die Akademische Frau*, 158.
30. Eduard von Rindfleisch in: Kirchhoff, *Die Akademische Frau*, 71.
31. Victor Birch-Hirschfeld in: Kirchhoff, *Die Akademische Frau*, 61.
32. Otto Gierke in: Kirchhoff, *Die Akademische Frau*, 23.
33. Paul Laband in: Kirchhoff, *Die Akademische Frau*, 30.
34. Gustav Fritsch in: Kirchhoff, *Die Akademische Frau*, 45.
35. See, for example, the comments of Georg Runze, Victor Birch-Hirschfeld, Emanuel Mendel and Adolf Lasson in: Kirchhoff, *Die Akademische Frau*, 10–11, 61, 132 and 164.
36. Wilhelm Alex Freund in: Kirchhoff, *Die Akademische Frau*, 106
37. Wilhelm Wundt in: Kirchhoff, *Die Akademische Frau*, 181.
38. Münsterberg, Hugo, "Das Frauenstudium in Amerika," in: Kirchoff, *Die Akademische Frau*, 349.
39. Historische Vorlesungsverzeichnisse der Universität Leipzig: https://histvv.uni-leipzig.de/dozenten/weber_eh.html and https://histvv.uni-leipzig.de/dozenten/fechner_gt.html (last accessed at 25 November 2019).
40. Gustav Theodor Fechner to Wilhelm Wundt, no date, Universitätsarchiv Leipzig (hereafter UAL): Signatur: NA Wundt/III/1701-1723/1712/20.
41. Klaus B. Staubermann, "Tying the Knot: Skill, Judgement and Authority in the 1870's Leipzig Spiritistic Experiments," *The British Journal for the History of Science* 34, no. 1 (2001): 73–74.
42. Hermann Ulrici, "Der sogenannte Spiritismus eine wissenschaftliche Frage," *Zeitschrift für Philosophie und philosophische Kritik* 74 (1879): 244. The question mark and language mistakes were part of the message.
43. For example: J. C. Friedrich Zöllner, "On Space of Four Dimensions," *Quarterly Journal of Science* 8 (1878): 227–237; Friedrich Zöllner, *Wissenschaftliche Abhandlungen*, 4 volumes (Leipzig: L. Staackmann, 1878–1881).

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

44. Ulrici, "Der sogenannte Spiritismus" and Immanuel Hermann von Fichte, *Der neuere Spiritualismus, sein Werth und seine Täuschungen. Eine anthropologische Studie* (Leipzig: F.A. Brockhaus, 1878).
45. Wilhelm Wundt, *Der Spiritismus: eine sogenannte wissenschaftliche Frage: offener Brief an Herrn Prof. Dr. Hermann Ulrici in Halle* (Leipzig: Wilhelm Engelmann, 1879).
46. Ibid., 15.
47. *Preliminary report of the commission appointed by the university of Pennsylvania to investigate modern spiritualism in accordance with the request of the late Henry Seybert with a foreword by H. H. Furness Jr.* (Philadelphia and London: J.B. Lippincott Company, 1920), 106 (first published in 1887).
48. Gustav Theodor Fechner to Wilhelm Wundt, 18 June 1879, UAB: NA Wundt/III/1701-1723/1712/1b/17-44.
49. Gustav Theodor Fechner to Wilhelm Wundt, 25 June 1879, UAB: NA Wundt/III/1701-1723/1712/1c/45-48.
50. Arthur L. Blumenthal, "Shaping a Tradition: Experimentalism Begins," in *Points of View in the Modern History of Psychology*, ed. Claude E. Buxton (Orlando: Academic Press, 1985), 55.
51. Though the term 'Weber-Fechner law' is often used often, Weber's law and Fechner's law are two distinct principles. The latter is generally seen as an elaboration on or a special case of the former. See: Stephen F. Davis and William Buskist (eds.), *21st Century Psychology: A Reference Handbook*, vol. 1 (Los Angeles, CA: Sage, 2008), 183 and Neil Salkind (ed.), *Encyclopedia of Research Design*, vol. 3 (Los Angeles, CA: Sage, 2010), 1613.
52. Gustav Theodor Fechner to Wilhelm Wundt, 12 July 1885 and 13 April 1886, UAL: NA Wundt/III/1701-1723/1712/18/265-270 and UAL: NA Wundt/III/1701-1723/1712/20/301-446.
53. See, for example, Gustav Theodor Fechner to Wilhelm Wundt, 24 March 1885, UAL: NA Wundt/III/1701-1723/1712/12/187-224.
54. Gustav Theodor Fechner to Wilhelm Wundt, 7 April 1885, UAL: NA Wundt/III/1701-1723/1712/13/225-232.
55. M. v. Laue, "Dr. Ludwig Lange (Ein zu Unrecht Vergessener)," *Die Naturwissenschaften* 35, no. 7 (1948): 194. For more details on C.C.L. Lange's career, see also: https://research.uni-leipzig.de/catalogus-professorum-lipsiensium/leipzig/Lange_892/markiere:Lange/ (last accessed, 25 November 2019).
56. Ludwig Lange to Wilhelm Wundt, 9 June 1885, UAL: NA Wundt/III/401-500/433a/171-182.
57. Ludwig Lange, *Die geschichtliche Entwickelung des Bewegungsbegriffes und ihr voraussichtliches Endergebnis*s (Leipzig: Wilhelm Engelmann, 1886). The dissertation was also printed in two parts in the 1886 volume of the

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Philosophische Studien. Other articles were printed in the volumes for 1885 and 1888.

58. Quoted in: Laue, "Dr. Ludwig Lange," 194–195.
59. F. Kiesow, "F. Kiesow," in *A History of Psychology in Autobiography*, volume I, ed. Cark Murchison (New York, NY: Russell & Russell, 1961), 172.
60. Ludwig Lange to Wilhelm Wundt, 30 December 1887, UAL: NA Wundt/III/401-500/433c/187-190.
61. Ludwig Lange to Wilhelm Wundt, 28 January 1889, UAL: A Wundt/III/401-500/433f/199-206.
62. Ludwig Lange to Wilhelm Wundt, 30 December 1887, UAL: NA Wundt/III/401-500/433c/187-190.
63. Ludwig Lange, "Das Inertialsystem vor dem Forum der Naturforschung," *Philosophische Studien* 20 (1902): 1–71.
64. See, for example: Ludwig Lange to Wilhelm Wundt, 27 August 1918, UAL: NA Wundt/III/401-500/433k/231-232 and Ludwig Lange to Wilhelm Wundt, 4 September 1918, UAL: NA Wundt/III/401-500/433l/233-234.
65. Ludwig Lange to Wilhelm Wundt, 15 March 1919, UAL: NA Wundt/III/401-500/434a/253-256.
66. Ludwig Lange to Wilhelm Wundt, 26 May 1919, UAL: NA Wundt/III/401-500/434b/257-262.
67. Kiesow, "F. Kiesow," 172.
68. Phyllis Keller, *States of belonging: German-American intellectuals and the First World War* (Cambridge, MA: Harvard University Press, 1979), 22.
69. Hugo Münsterberg, *Die Lehre von der natürlichen Anpassung in ihrer Entwickelung, Anwendung und Bedeutung* (Leipzig: Metzger & Wittig, 1885).
70. Keller, *States of belonging*, 23; Hugo Münsterberg, *Die Willenshandlung* (Freiburg im Breisgau: C.A. Wagner, 1888).
71. Frank J. Landy, "Hugo Münsterberg: Victim or Visionary?," *Journal of Applied Psychology* 77, no. 6 (1992): 789.
72. Hugo Münsterberg to Wilhelm Wundt, 9 June 1889, UAL: NA Wundt/III/701-800/764a/407-414.
73. Wilhelm Wundt to Hugo Münsterberg, 21 August 1902, UAL: NA Wundt/III/701-800/768/601-604.
74. Otis, *Müller's Lab*, 67.
75. Georges Dwelshauvers, *Psychologie de l'apperception et recherches expérimentales sur l'attention: essai de psychologie physiologique* (Brussels: Guyot, 1890), 147.
76. Hugo Münsterberg to Wilhelm Wundt, 10 November 1890, UAL: NA Wundt/III/701-800/764b/415-426.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

77. Wilhelm Wundt to Hugo Münsterberg, 12 November 1890, UAL: NA Wundt/III/701-800/765/427-438.
78. Hugo Münsterberg to Wilhelm Wundt, 26 March 1896, UAL: NA Wundt/III/701-800/765e/485-500.
79. Hugo Münsterberg to Wilhelm Wundt, 15 August 1892, UAL: NA Wundt/III/701-800/765b/455-458.
80. Hugo Münsterberg to Wilhelm Wundt, 26 March 1896, UAL: NA Wundt/III/701-800/765e/485-500.
81. Hugo Münsterberg to Wilhelm Wundt, 5 November 1905, UAL: NA Wundt/III/701-800/768a/607-622.
82. Hugo Münsterberg to Wilhelm Wundt, 10 November 1890, UAL: NA Wundt/III/701-800/764b/415-426.
83. Wilhelm Wundt to Hugo Münsterberg, 12 November 1890, UAL: NA Wundt/III/701-800/765/427-438.
84. Hugo Münsterberg to Wilhelm Wundt, 20 October 1915, UAL: NA Wundt/III/701-800/768e/663-670.
85. Nye, "Medicine and Science," 61; Paul, "Germanic Loyalty"; McCloskey, *The Bourgeois Virtues*, 66, 305.
86. Peter Olsthoorn, *Military Ethics and Virtues: An Interdisciplinary Approach for the 21st Century* (Abingdon: Routledge, 2011), i.
87. Bruce Fleming, *Bridging the Military-Civilian Divide: What Each Side Needs to Know About the Other, and About Itself* (Washington, DC: Potomac Books, 2010), 80–81.
88. Edward P. Thompson, "The Moral Economy of the English Crowd in the Eighteenth Century," *Past & Present* 50, no. 1 (1971): 7–136.
89. Shapin, "The House of Experiment," 389.
90. Robert E. Kohler, *Lords of the Fly: Drosophila Genetics and the Experimental Life* (Chicago, IL: University of Chicago Press, 1994), 92–93; Lorraine Daston, "The Moral Economy of Science," *Osiris* 10 (1995): 2–24.
91. Daston, "Moral Economy," 4.
92. Donna J. Haraway, *Modest_Witness@Second_Millennium.FemaleMan©_Meets_OncomouseTM* (New York, NY: Routledge, 1997), 28.
93. Ibid.
94. Thomas A. Kindermann, Gerald D. Guthrie and Frank Wesley, "Anna Berliner, Wilhelm Wundt's einzige Studentin," *Psychologie und Geschichte* 4, nos. 3/4 (1993): 263–277.
95. Horst Gundlach, "Wilhelm Wundt, Professor, und Anna Berliner, Studentin," *Psychologie und Geschichte* 5, nos. 1/2 (1993): 147.
96. Haraway, *Modest_Witness@Second_Millennium*, 29.
97. See note 31.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Bibliography

Blumenthal, Arthur L. "Shaping a Tradition: Experimentalism Begins." In *Points of View in the Modern History of Psychology*, edited by Claude E. Buxton, 51–83. Orlando: Academic Press, 1985.

Daston, Lorraine. "The Moral Economy of Science." *Osiris* 10 (1995): 2–24.

Davis, Stephen F. and Buskist, William, eds. *21st Century Psychology: A Reference Handbook*, vol. 1. Los Angeles, CA: Sage, 2008.

Deslandes, Paul R. *British Masculinity and the Undergraduate Experience, 1850–1920*. Bloomington, IN: Indiana University Press, 2005.

Dongen, Jeroen van and Paul, Herman, eds. *Epistemic Virtues in the Sciences and the Humanities*. Cham: Springer, 2017.

Dwelshauvers, Georges. *Psychologie de l'apperception et recherches expérimentales sur l'attention: essai de psychologie physiologique*. Brussels: Guyot, 1890.

Ellis, Heather. *Masculinity and Science in Britain, 1831–1918*. London: Palgrave Macmillan, 2017.

Fichte, Immanuel Hermann von. *Der neuere Spiritualismus, sein Werth und seine Täuschungen. Eine anthropologische Studie*. Leipzig: F.A. Brockhaus, 1878.

Fleming, Bruce. *Bridging the Military-Civilian Divide: What Each Side Needs to Know About the Other, and About Itself*. Washington, DC: Potomac Books, 2010.

Frevert, Ute and Schreiterer, Ulrich. "Treue: Ansichten des 19. Jahrhunderts." In *Der bürgerliche Wertehimmel: Innenansichten des 19. Jahrhunderts*, edited by Manfred Hettling and Stefan-Ludwig Hoffmann, 217–256. Göttingen: Vandenhoeck & Ruprecht, 2000.

Gall, Lothar. *Bürgertum, liberale Bewegung und Nation: Ausgewählte Aufsätze*, edited by Dieter Hein, Andreas Schulz and Eckhardt Treichel. Munich: Oldenbourg, 1996.

Gay, Hannah and Gay, John W. "Brothers in Science: Science and Fraternal Culture in Nineteenth-Century Britain." *History of Science* 35, no. 4 (1997): 425–453.

Gundlach, Horst. "Wilhelm Wundt, Professor, und Anna Berliner, Studentin." *Psychologie und Geschichte* 5, nos. 1/2 (1993): 143–151.

Gundlach, Horst. "Oswald Külpe und die Würzburger Schule." In *Hundert Jahre Institut für Psychologie und Würzburger Schule der Denkpsychologie*, edited by Wilhelm Janke and Wolfgang Schneider, 107–124. Göttingen: Hogrefe Verlag für Psychologie, 1999.

Haraway, Donna J. *Modest_Witness@Second_Millennium.FemaleMan©_Meets_OncomouseTM*. New York, NY: Routledge, 1997.

Hettling, Manfred. "Die persönliche Selbständigkeit: Der archimedischer Punkt bürgerlicher Lebensführung." In *Der bürgerliche Wertehimmel: Innenansichten des 19. Jahrhunderts*, edited by Manfred Hettling and Stefan-Ludwig Hoffmann, 57–78. Göttingen: Vandenhoeck & Ruprecht, 2000.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Keller, Phyllis. *States of Belonging: German-American Intellectuals and the First World War*. Cambridge, MA: Harvard University Press, 1979.

Kiesow, F. "F. Kiesow." In *A History of Psychology in Autobiography*, volume I, edited by Cark Murchison, 163–190. New York, NY: Russell & Russell, 1961.

Kindermann, Thomas A., Guthrie, Gerald D., and Wesley, Frank. "Anna Berliner, Wilhelm Wundt's einzige Studentin." *Psychologie und Geschichte* 4, nos. 3/4 (1993): 263–277.

Kirchhoff, Arthur, ed. *Die Akademische Frau. Gutachten hervorragender Universitätsprofessoren, Frauenlehrer und Schriftsteller über die Befähigung der Frau zum wissenschaftlichen Studium und Berufe*. Berlin: Hugo Steinitz, 1897.

Kivistö, Sari. *The Vices of Learning: Morality and Knowledge at Early Modern Universities*. Leiden: Brill, 2014.

Kohler, Robert E. *Lords of the Fly: Drosophila Genetics and the Experimental Life*. Chicago, IL: University of Chicago Press, 1994.

Landy, Frank J. "Hugo Münsterberg: Victim or Visionary?" *Journal of Applied Psychology* 77, no. 6 (1992): 787–802.

Lange, Helene. "Die akademische Frau." *Die Frau: Monatsschrift für das gesamte Frauenleben unserer Zeit* 4, no. 4 (1897): 193–199.

Lange, Ludwig. *Die geschichtliche Entwickelung des Bewegungsbegriffes und ihr voraussichtliches Endergebniss*. Leipzig: Wilhelm Engelmann, 1886.

Lange, Ludwig. "Das Inertialsystem vor dem Forum der Naturforschung." *Philosophische Studien* 20 (1902): 1–71.

Laue, M. v. "Dr. Ludwig Lange (Ein zu Unrecht Vergessener)." *Die Naturwissenschaften* 35, no. 7 (1948): 193–196.

Lindenfeld, David. "Oswald Külpe and the Würzburg School." *Journal of the History of the Behavioral Sciences* 14 (1978): 132–141.

Lubenow, W. C. *The Cambridge Apostles, 1820–1914: Liberalism, imagination, and Friendship in British Intellectual and Professional Life*. Cambridge: Cambridge University Press, 1998.

Mazón, Patricia. "Das akademische Bürgerrecht und die Zulassung von Frauen zu den deutschen Universitäten 1865–1914." *Zentrum für transdisciplinäre Geschlechterstudien, Bulletin 23: Zur Geschichte des Frauenstudiums und Wissenschaftlerinnenkarrieren an deutschen Universitäten* (2001): 1–10.

McCloskey, Deirdre N. *The Bourgeois Virtues: Ethics for an Age of Commerce*. Chicago, IL: University of Chicago Press, 2006.

McCormack, Matthew. *The Independent Man: Citizenship and Gender Politics in Georgian England*. Manchester: Manchester University Press, 2005.

Münsterberg, Hugo. *Die Lehre von der natürlichen Anpassung in ihrer Entwickelung, Anwendung und Bedeutung*. Leipzig: Metzger & Wittig, 1885.

Nye, Robert A. "Medicine and Science as Masculine 'Fields of Honor.'" *Osiris* 12 (1997): 60–79.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.

Ogden, Robert M. "Oswald Külpe and the Würzburg School." *The American Journal of Psychology* 64, no. 1 (1951): 4–19.

Olsthoorn, Peter. *Military Ethics and Virtues: An Interdisciplinary Approach for the 21st Century*. Abingdon: Routledge, 2011.

Otis, Laura. *Müller's Lab*. Oxford: Oxford University Press, 2007.

Paul, Herman. "What Is a Scholarly Persona? Ten Theses on Virtues, Skills and Desires." *History and Theory* 53, no. 3 (2014): 348–371.

Paul, Herman. "Germanic Loyalty in Nineteenth-Century Historical Studies: A Multi-Layered Virtue." *História da Historiografia* 12, no. 30 (2019): 16–43.

Preliminary Report of the Commission Appointed by the University of Pennsylvania to Investigate Modern Spiritualism in Accordance with the Request of the Late Henry Seybert with a Foreword by H. H. Furness Jr. Philadelphia and London: J.B. Lippincott Company, 1920.

Salkind, Neil, ed. *Encyclopedia of Research Design*, vol. 3. Los Angeles, CA: Sage, 2010.

Shapin, Steven. "The House of Experiment in Seventeenth-Century England." *Isis* 79, no. 3 (1988): 373–404.

Shapin, Steven. *A Social History of Truth: Civility and Science in Seventeenth-Century England*. Chicago, IL: University of Chicago Press, 1994.

Smith, Bonnie G. "Gender and the Practices of Scientific History: The Seminar and Archival Research in the Nineteenth Century." *The American Historical Review* 100, no. 4 (1995): 1150–1176.

Staubermann, Klaus B. "Tying the Knot: Skill, Judgement and Authority in the 1870's Leipzig Spiritistic Experiments." *The British Journal for the History of Science* 34, no. 1 (2001): 67–79.

Thompson, Edward P. "The Moral Economy of the English Crowd in the Eighteenth Century." *Past & Present* 50, no. 1 (1971): 7–136.

Ulrici, Hermann. "Der sogenannte Spiritismus eine wissenschaftliche Frage." *Zeitschrift für Philosophie und philosophische Kritik* 74 (1879): 239–271.

Wundt, Wilhelm. *Der Spiritismus: eine sogenannte wissenschaftliche Frage: offener Brief an Herrn Prof. Dr. Hermann Ulrici in Halle*. Leipzig: Wilhelm Engelmann, 1879.

Wundt, Wilhelm. "Ueber die Definition der Psychologie." *Philosophische Studien* 12 (1896): 1–66.

Zöllner, J. C. Friedrich. "On Space of Four Dimensions." *Quarterly Journal of Science* 8 (1878): 227–237.

Zöllner, Friedrich. *Wissenschaftliche Abhandlungen*, 4 volumes. Leipzig: L. Staackmann, 1878–1881.

Copyright © 2021. Springer International Publishing AG. All rights reserved.

Niskanen, K., & Barany, M. J. (Eds.). (2021). Gender, embodiment, and the history of the scholarly persona : Incarnations and contestations. Springer International Publishing AG.
Created from uunl on 2022-02-09 09:41:58.