

UCLA

Thinking Gender Papers

Title

Overlooking the Gender and Sexuality of a “Woman in Science” Physicist Lise Meitner in Weimar Berlin

Permalink

<https://escholarship.org/uc/item/4tj1x4bv>

Author

Vogt, Elizabeth C.

Publication Date

2010-04-01

gender
intersex
LGBT or lesbian, gay, bisexual and transgender queer women in science
history of science history of physics nuclear fission Weimar Berlin

Elizabeth Christine Vogt
Department of Women and Gender Studies
San Francisco State University

UCLA Thinking Gender Conference 2010

*Overlooking the Gender and Sexuality of a “Woman in Science”
Physicist Lise Meitner in Weimar Berlin*

Lise Meitner has become a feminist icon both because of her successful career as a “woman in science” and because of the extensive discrimination she faced, discrimination that was multi-faceted but based primarily on her gender and Jewish ancestry. Through her research on radioactivity and nuclear physics, Meitner was familiar with the frustration of being close to a discovery but overlooking a crucial observation or being unable to interpret key experimental results. Before identifying nuclear fission as the cause of the radioactivity they were studying, she and her Berlin team had been confident that their results were evidence of an entirely different phenomenon. Meitner felt their reluctance to look at a substance assumed to be unremarkable and the limits of their experimental techniques together delayed the discovery of nuclear fission by more than a year. This paper argues that gender assignment, gender identity and sexual orientation have been similarly overlooked in biographical studies of Lise Meitner, despite being crucial to the study of identity.

Lise Meitner’s life is the subject of two similar, recent biographies, *Lise Meitner: A Life in Physics*, by Ruth Lewin Sime and *Lise Meitner and the Dawn of the Atomic Age*, by Patricia Rife. Both books seek to recuperate the physicist’s legacy by showing how much of an injustice it was that her male colleague was the sole recipient of the 1944

Nobel Prize in Chemistry for the discovery of nuclear fission and that her accomplishments were subsequently overshadowed, if not forgotten. In examining this incident and Meitner's career as a physicist in Berlin, the biographies assiduously document the ways her experience was shaped not only by her gender but by her entire intersectional identity, including her bourgeois Viennese upbringing, her Jewish ancestry, her family's religious assimilation and conversion, her Austrian citizenship, her German cultural affiliation, her life-long celibacy, her interdisciplinary work and her faith in science as the search for truth. Both Sime and Rife use highly textured, intersectional approaches in telling Lise Meitner's story and recuperating her legacy.

However, these biographies do not explicitly consider Meitner's gender assignment, gender identity or sexual orientation, thereby implying that she is unmarked: not intersex, not transgendered, and heterosexual. Gender, transgender and sexuality studies have been drawing increasing attention to the idea that sex, gender and sexuality are socially constructed and that normative understandings of them represent only a small part of the continuum of sexual anatomy, gender identity and sexual orientation.¹ Little research has been done on scientists identified as gender and sexual minorities, i.e. lesbian, gay, bisexual, transgender and intersex (LGBTI), so there is a need for studies that explicitly look at these categories.² However, these methods from gender, transgender and queer studies not only seek to identify previously invisible intersex, transgender and non-heterosexual individuals in the historical record, they study how

¹ Anne Fausto-Sterling, *Sexing the Body : Gender Politics and the Construction of Sexuality*, 1st ed. (New York, NY: Basic Books, 2000), Joan Wallach Scott, *Gender and the Politics of History*, Rev. ed. (New York: Columbia University Press, 1999).

² Robert Toynton, "The De-Representation of Science and Queer Science Students in Higher Education within the Queer/Gay Discourse," *Teaching in Higher Education* 12, no. 5-6 (2007). Londa L. Schiebinger, *Has Feminism Changed Science?* (Cambridge, Mass.: Harvard University Press, 1999), 30, Joan Roughgarden, *Evolution's Rainbow. Diversity, Gender, and Sexuality in Nature and People* (Berkeley, CA: University of California Press, 2004).

normative, unmarked identities were constructed and understood locally, historically, culturally and intersectionally. This paper does not seek to prove that Lise Meitner was LGBTI and therefore marked with respect to gender identity or sexuality, rather it seeks to indicate and explore facets of her life that previous, otherwise intersectional, approaches have ignored.

The process of determining or assigning Lise Meitner's gender invites exploration, given the intense discrimination she faced for pursuing a career that fell outside of her prescribed gender role. Meitner's biographers declare that she was a woman and recuperate her on that basis, but they do not examine how she came to be identified as female. Sime and Rife introduce Meitner using the female pronoun, "she," rather than explaining how it was determined that she was a girl and not of another gender.³ Her biographers suggest that determining Meitner's sex and gender was clear-cut, without any ambiguities that would complicate such facile categorization. Sime and Rife do offer an alternative way of determining Meitner's gender, although they present it in the context of stereotyping and discrimination. After discussing the ways European society considered science to be masculine, the authors give examples where people assumed Meitner was a man based on her scientific work, thus revealing an alternative, albeit highly contested way of determining gender.⁴ Even as they complicate and historicize most of her other identity characteristics, Lise Meitner's biographers take her gender assignment for granted.

Sime and Rife also assume Meitner's gender identity matches with her assigned gender, and that she was therefore "normal," unmarked, or cisgendered, rather than

³ Patricia Rife, *Lise Meitner and the Dawn of the Nuclear Age* (Boston: Birkhäuser, 1999), 1, Ruth Lewin Sime, *Lise Meitner: A Life in Physics* (Berkeley: University of California Press, 1996), 1.

⁴ Sime, *Lise Meitner: A Life in Physics*, 36.

transgendered. Focusing on gender roles, Sime and Rife take pains to detail the ways people around Meitner understood gender to dictate appropriate behavior, and they explain how these expectations differed with respect to intersections including class, cultural affiliation and the time period.⁵ While discussing the ways Meitner's interest in science was seen as unusual and at times inconsistent with her gender, as well as Meitner's determination to succeed in science, the authors never suggest that Meitner felt she was not a woman.⁶ Sime and Rife suggest that, like many other women of her generation, Meitner chafed at the restrictions on what women could do, but she forced science and other people's stereotypes to change rather than feeling a need to change herself and her gender.

Lise Meitner's sexual orientation invites investigation both because she never married and because she lived in Berlin during the Weimar Republic, when the city became a hotbed of queer sexuality. Sime and Rife both address Lise Meitner's marital status and potential romantic relationships, but they do not address her sexual orientation as such. The biographers' focus on her sexuality hinges on the fact that she never married or had a family and that she appears not to have had a single love affair; although they do discover a marriage proposal, they suspect it did not correspond to a romantic relationship.⁷ The biographers are careful to convey the ambiguity of their evidence for heterosexual relationships, both presenting Meitner as celibate and possibly asexual—arguably an under-examined sexual orientation in its own right⁸—and also reserving room for the possibility of an unacknowledged affair. Still, Sime and Rife never address

⁵ Rife, *Lise Meitner and the Dawn of the Nuclear Age*, 2-3.

⁶ *Ibid.*, 3-5.

⁷ Sime, *Lise Meitner: A Life in Physics*, 35, 61.

⁸ Kenji Yoshino, "The Epistemic Contract of Bisexual Erasure," *Stanford Law Review* 52, no. 2 (2000).

Meitner's sexual orientation directly, nor do they explain why they considered only men as potential partners.

The biographies of Lise Meitner by Sime and Rife explore gender and sexuality, but they stop at normative understandings, thereby overlooking what more could be learned about her gender assignment, gender identity and sexual orientation. Historians working on LGBTI history almost always have to look beyond assumptions of heterosexuality and have learned both to look for evidence in new places and to approach evidence in new ways, asking different questions.⁹ There has been extensive scholarship on Weimar Berlin, the period between World War I and the rise of the Nazi Party, describing how the city became a queer capital, with a large, well-developed, commercial and fairly open gay and lesbian subculture, characterized by a large women's scene.¹⁰ Scholars have brought to light significant new resources and suggested where queerness lay hidden in otherwise unmarked situations.¹¹ In the case of Weimar Berlin, there is ample evidence of a lesbian subculture easily recognizable to twenty-first-century historians, but there is no evidence connecting Meitner to it. Another technique for this research into otherwise unmarked categories involves uncovering novel gender identities or queer relationships, such as the "romantic friendships" that became common among upper-middle class, educated American women of Meitner's time without being seen as threatening to the social order (perhaps she had a relationship of this sort with her close

⁹ Carroll Smith-Rosenberg, *Disorderly Conduct: Visions of Gender in Victorian America*, 1st ed. (New York: A.A. Knopf, 1985), 58-59. Susan Lee Johnson, *Roaring Camp: The Social World of the California Gold Rush*, 1st ed. (New York: W.W. Norton, 2000), 174. Susan Stryker, "(De)Subjugated Knowledges: An Introduction to Transgender Studies," *The Transgender Studies Reader*, ed. Susan Stryker and Stephen Whittle (New York: Routledge, 2006).

¹⁰ George Chauncey, *Gay New York: Gender, Urban Culture, and the Making of the Gay Male World, 1890-1940* (New York: Basic Books, 1994), 12, 144. Florence Tamagne, *A History of Homosexuality in Europe: Berlin, London, Paris, 1919-1939, Volume I & II* (New York, N.Y.: Algora, 2006), 39.

¹¹ Mel Gordon, *Voluptuous Panic: The Erotic World of Weimar Berlin* (Los Angeles, CA: Feral House, 2006).

friend Elisabeth Schiemann).¹² While it would be foolish to read too much into vague expressions of same-sex sentiment—since sexuality was understood so differently at the time—it would also be foolish to ignore ambiguous evidence of queer sexuality, because that may be the only evidence available.¹³ Looking for evidence that had been overlooked previously and creating new kinds of research questions are both necessary steps to uncovering genders or sexualities that were hidden because they were classified as non-normative in the past, the present or at some point in between.

To conclude, it is highly likely that Lise Meitner's gender assignment, gender identity and sexual orientation were as normative as they would appear to be from Sime and Rife's biographies, which do not interrogate these categories. Whether or not scholars find evidence of gender identities or sexual orientations that were marked as outside expected norms, analyses of these often-unconsidered characteristics provide insight into the cultures under study and expand the categories of difference that are included in feminist inquiry. Such an approach to Lise Meitner deepens understandings of how gender and sexuality regulated her life, and a further exploration could look into how profoundly science affected these aspects of her identity. Sime and Rife pulled Meitner from the shadows, forgotten in part because there was no expectation that a woman would play a key role in physics. By incorporating critical analyses of gender assignment, gender identity and sexual orientation, future feminist scholars may discover scientists who had been marginalized and forgotten due to the ways their LGBTI identities did not fit into the expectations of their time and place. Future scholars may also discover that some well-known scientists, assumed to be normative with respect to

¹² Elvira Scheich, "Science, Politics, and Morality: The Relationship of Lise Meitner and Elisabeth Schiemann," *Osiris* 12 (1997): 58-59, Smith-Rosenberg, *Disorderly Conduct: Visions of Gender in Victorian America*.

¹³ Johnson, *Roaring Camp: The Social World of the California Gold Rush*, 174.

these categories, had a more complex identity than previously understood. Overall these analyses contribute to feminist understandings of not only “women in science” but also of others marked somehow as not belonging in science.

Works Cited

- Chauncey, George. *Gay New York: Gender, Urban Culture, and the Making of the Gay Male World, 1890-1940*. New York: Basic Books, 1994.
- Fausto-Sterling, Anne. *Sexing the Body : Gender Politics and the Construction of Sexuality*. 1st ed. New York, NY: Basic Books, 2000.
- Frame, Lynne. "Gretchen, Girl, Garçonne? Weimar Science and Popular Culture in Search of the Ideal New Woman." *Women in the Metropolis: Gender and Modernity in Weimar Culture*, edited by Katharina von Ankum, 12-40. Berkeley: University of California Press, 1997.
- Gordon, Mel. *Voluptuous Panic: The Erotic World of Weimar Berlin*. Los Angeles, CA: Feral House, 2006.
- Johnson, Susan Lee. *Roaring Camp: The Social World of the California Gold Rush*. 1st ed. New York: W.W. Norton, 2000.
- Rife, Patricia. *Lise Meitner and the Dawn of the Nuclear Age*. Boston: Birkhäuser, 1999.
- Roughgarden, Joan. *Evolution's Rainbow. Diversity, Gender, and Sexuality in Nature and People*. Berkeley, CA: University of California Press, 2004.
- Scheich, Elvira. "Science, Politics, and Morality: The Relationship of Lise Meitner and Elisabeth Schiemann." *Osiris* 12 (1997): 143-68.
- Schiebinger, Londa L. *Has Feminism Changed Science?* Cambridge, Mass.: Harvard University Press, 1999.
- Scott, Joan Wallach. *Gender and the Politics of History*. Rev. ed. New York: Columbia University Press, 1999.
- Sime, Ruth Lewin. *Lise Meitner: A Life in Physics*. Berkeley: University of California Press, 1996.
- Smith-Rosenberg, Carroll. *Disorderly Conduct: Visions of Gender in Victorian America*. 1st ed. New York: A.A. Knopf, 1985.
- Stryker, Susan. "(De)Subjugated Knowledges: An Introduction to Transgender Studies." *The Transgender Studies Reader*, edited by Susan Stryker and Stephen Whittle, 1-17. New York: Routledge, 2006.
- Tamagne, Florence. *A History of Homosexuality in Europe: Berlin, London, Paris, 1919-1939, Volume I & II*. New York, N.Y.: Algora, 2006.
- Toynton, Robert. "The De-Representation of Science and Queer Science Students in Higher Education within the Queer/Gay Discourse." *Teaching in Higher Education* 12, no. 5-6 (2007): 593-605.
- Yoshino, Kenji. "The Epistemic Contract of Bisexual Erasure." *Stanford Law Review* 52, no. 2 (2000): 353-461.

In addition to these works, this paper draws extensively from my coursework from the fall semester of 2009 at San Francisco State University.