RE: "EPIDEMIOLOGIC INTERACTIONS, COMPLEXITY, AND THE LONESOME DEATH OF MAX VON PETTENKOFER"

When we (the two authors of this letter) met the last time in the fall of 2006, we were discussing Max von Pettenkofer's self experimentation by ingesting a broth of cholera as we sat in the cafe "Mariandl" around the corner from Pettenkoferstreet and his Institute. One of us (M. W.) had just rescued a bibliographic biography of von Pettenkofer (1) during a library reshuffle, written by one of von Pettenkofer’s successors as chair of the Munich Hygiene Institute (Karl Kisskalt, 1875–1962). Both of us were deploring our present forgetful time, which doesn’t appear to honor adequately the inherent genius of either old books or epidemiologic ancestors.
The author of “Epidemiologic Interactions, Complexity, and the Lonesome Death of Max von Pettenkofer” (2) has to be thanked for proving us wrong by his revisitation of a man who regarded himself explicitly as an epidemiologist. Morabia’s credit to von Pettenkofer for having presented one of the first formal descriptions of interaction in epidemiology is both a historical tribute and a challenge put before us. von Pettenkofer is credited mainly for having founded the first Institute for Hygiene in the world. It should be noted that his activities in the service of preventing disease, promoting health, and prolonging life ranged widely, from sanitation to the lighting of public places, from committee work to giving public lectures on science (his well-attended “populäre Vorlesungen”), and from statistical analyses to speaking up against the local overconsumption of alcoholic beverages. His specific hallmark was the combination of science and technology with a deeply rooted common spirit (3).

Kisskalt (1, p. 107) reports that, on the occasion of their first meeting, von Pettenkofer was shocked by Robert Koch’s exclusive focus on bacteriology and his overt disinterest in broader epidemiologic considerations. Later-born, integrative-thinking epidemiologists-to-be (4) may have to learn to carefully and respectfully extract from various fields what is of value for their study while avoiding showdowns with broths of cholera.

Kisskalt also reports a personal conversation with Georg Gaffky, Robert Koch’s closest collaborator and later successor, who stated that, when they had been approached by von Pettenkofer to provide a cholera culture, they were anticipating the kind of experiment he was planning and sent him a culture of low virulence: “[...] mir selbst sagte Gaffky: ‘Wir haben ihm eine schwach virulente Kultur geschickt, weil wir uns denken konnten, was er vorhatte.’” (English translation: “[...] Gaffky declared personally to me: ‘We have sent him [Max von Pettenkofer] a culture of low virulence, as we could easily figure out his plan’”)(1, p. 118). This information was confirmed to Kisskalt by the military physician handing over the culture to von Pettenkofer (1, p. 118). In fact, von Pettenkofer suffered from some diarrhea 2 days after his experiment on October 7, 1892, and an enormous quantity of Vibrio cholerae was isolated from his stool (1, p. 117). von Pettenkofer’s “experiment” was repeated 10 days later by his close collaborator Emmerich with similar results, this time with severe diarrhea on the second day and also without clinical cholera. von Pettenkofer concluded that these experiments were proof for his hypothesis. We hypothesize that von Pettenkofer may have missed some (humane) interaction.

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REFERENCES


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