What Did Hecker Say about Laughter? Funny You Should Ask
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## **Abstract**

The Darwin-Hecker hypothesis, that laughter induced by tickling and humor share common underlying mechanisms, is so-called in part because of a quotation attributed to Ewald Hecker. However, a German counterpart of the quotation does not appear in the location cited. Some textual sleuthing is undertaken to find the real source.

**Keywords:** Hecker, laughter, humor, the comic, tickle

The Darwin-Hecker hypothesis, namely that "laughter induced by tickling and humor share common underlying mechanisms", was christened and introduced to contemporary researchers and scholars working at the intersection of psychology, philosophy, and humor studies in a much-cited paper by Alan J. Fridlund and Jennifer M. Loftis, "Relations between tickling and humorous laughter: Preliminary support for the Darwin-Hecker hypothesis", *Biological Psychology* 30 (1990). This paper proceeded on the basis of a couple of quoted passages from Charles Darwin (1872) together with a shorter translated quotation (containing ellipses) attributed to Ewald Hecker.

According to Darwin, tickling and humor are "analogous" insofar as they share the response of laughter, as well as some qualities for the elicitation of that response. According to Fridlund and Loftis (1990: 142), whereas Darwin closely related tickling to humorous laughter, Hecker went one step further and "equated" them insofar as he "regarded humorous laughter as a skilled psychological titillation which, in producing alternating pleasant and unpleasant states, *was* a tickle." In support of this claim, they produce this aforementioned quotation allegedly translated from Hecker:

We have to see the comic as an intermittent, rhythmically interrupted, pleasurable sensation . . . which . . . makes us expect an intermittent stimulus of the sympathetic nerves. (16 [sic])

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Fridlund and Loftis's reference is to page 16 of *Physiologie und Psychologie des Lachens und des Komischen: Ein Beitrag zur experimentellen Psychologie für Naturforscher, Philosophen und gebildete Laien* (Hecker 1873b). However, page 16 does not contain a German counterpart of this quotation. When I mentioned this anomaly to Rod Martin, author of a brief but illuminating diagnosis and prognosis of the Darwin-Hecker hypothesis (Martin 2007: 173–76), he was quite amused and wondered whether it might be that Hecker himself did not believe in the Darwin-Hecker hypothesis. If so, that would indeed be a joke on the humor research community!

Contrary to Martin's hasty speculation, however, attributing Hecker's commitment to the Darwin-Hecker hypothesis does not stand or fall with the authenticity of this particular quotation, and there is in fact other evidence on page 16 from which Hecker's belief in the Darwin-Hecker hypothesis may be inferred; it's just that it does not occur in the form of the presented wording. But since all eponymous mentions of the Darwin-Hecker hypothesis in the contemporary literature do trace back to this particular quotation as *Ursprung*, one way to allay worries about what Hecker actually believed just *is* to authenticate the quotation by locating its source. As well, it is an entertaining puzzle for purists to pursue.

Since the source is not page 16 as alleged, we may consider several possibilities: (i) that the reference to page 16 as such is simply the result of a cognitive blip, perhaps a reversal or reorientation of the numerals in "61" or "19"; (ii) that the alleged quotation involves errors of translation or transcription; or (iii) that the quotation is not from Hecker (1873b) after all but from some other publication by Hecker or one of his commentators, e.g. Hecker (1873a), Krueg (1873a), Krueg 1873b). The situation calls for some textual sleuthing.

The main hurdle to be overcome in such detective work is the language barrier. When seeking a German sentence (or segment thereof, given ellipses) for which an English quotation is a reasonable match, what is reasonable need not be a close wordfor-word match. So, the best method is to pick out some key words or short phrases,

<sup>&</sup>lt;sup>1</sup> I had emailed Professor Fridlund, but he was not able to provide me with additional information. Fridlund and Loftis (1990) included a footnote thanking their translator Liselotte Fajardo; she is also mentioned as a reference librarian at the University of California, Santa Barbara, on the acknowledgements page of Temmer (1988 [1992]), but otherwise appears to have left no internet footprints.

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translate them into German, and run separate searches on them in the hope that this will lead to contexts in which a number of those words or phrases co-occur. This involves some trial and error and consideration of synonyms or near-synonyms. For example, the phrase "we have to" in the quotation (or its synonym "we must") might have derived from either "wir müssen" or "müssen wir" in the German text (albeit a search for those particular phrases yielded no hits).

As it happens, this method located two contexts in which there was significant co-occurrence of terms, as well as sentence fragments that matched parts of the English quotation. In a long-winded sentence on page 82, the second-last page of the monograph, we find this final clause: "dass wir das Komische als eine intermittirende, rhythmisch unterbrochene, freudige Gefühlserregung ansehen" [original italics], which translates as "[so] that we see the comic as an intermittent, rhythmically interrupted, joyous emotion." This does pair up sufficiently with the first part of the contentious quotation, namely "We have to see the comic as an intermittent, rhythmically interrupted, pleasurable sensation."

Some 260 (!) words further downstream, on page 83, we find: "Demnach wird eine intermittirende freudige Erregung wie wir sie als Wesen des Komischen nachgewiesen haben, eine intermittirende Sympathicusreizung erwarten lassen" [original italics], which translates as "Accordingly, an intermittent joyous excitement as we have demonstrated as the essence of the comic, an intermittent sympathetic stimulation can be expected." This also pairs up sufficiently with the second part of the contentious quotation, namely "which . . . makes us expect an intermittent stimulus of the sympathetic nerves", except that the interpolation of "which" gives the mistaken impression that "Demnach" is anaphorically connected to the first part of the quotation, which it isn't. Still, we may justifiably infer that the contentious quotation says something that Hecker would have held to be true even if he didn't himself say it all in the same breath like that.

The upshot, then, is that Hecker's alleged espousal of the Darwin-Hecker hypothesis is not impugned by the infelicities attending to the quotation, even though it turns out to be not so much a direct quotation, as a creative patching together of widely separated sentence fragments. But in the process, we have uncovered a "sin" that deserves its own name: *the sin of exegetical abuse of ellipsis*.

Coincidentally, another humor researcher has assumed even greater exegetical licence in committing this sin than Fridlund and Loftis's translator. In Kosintsev (2010:

84) we find the author claiming that Hecker elaborated the so-called "oscillation theory" on pages 76–83 of Hecker (1873b), in evidence of which he presents us with this quotation:

The comic with its (physiologically demonstrable) effect on our emotions evokes the same organic changes as tickling .... The essence of comedy is an intermittent stimulus of the sympathetic nervous system, and rapid oscillation between pleasure and pain. (Kosintsev 2010: 84)

The problem again is that there is no reasonably close match in German on pages 76–83. Employing the trial-and-error word-search method we can find partial matches for the second sentence of the quotation. So, on pages 80-81 we see "Wir haben also das Wesen des Lächerlichen als einen beschleunigten Wettstreit der Gefühle, d. h. als ein schnelles Hin- und Herschwanken zwischen Lust und Unlust erklärt," which roughly translates as "So we have explained the essence of the ridiculous as an accelerated competition of feelings, i.e., as a rapid swaying back and forth between pleasure and displeasure." This does contain the idea of something that might also be described as an oscillation between pain and pleasure and the idea of an essence. Similarly our previous quotation from page 83, namely "Demnach wird eine intermittirende freudige Erregung wie wir sie als Wesen des Komischen nachgewiesen haben, eine intermittirende Sympathicusreizung erwarten lassen", which translates as "Accordingly, an intermittent joyous excitement as we have demonstrated as the essence of the comic, an intermittent sympathetic stimulation can be expected," also contains the idea of an essence, together with the ideas of intermittency or oscillation from what is joyous to what is not and of sympathetic stimulation. All the elements are there but Kosintsev's stitched-together wording is more like an impression than a translation.

Be that as it may, a German counterpart of the first sentence in the quotation is nowhere in the vicinity. The trial-and-error word-search method finds it inside a subordinate clause on page 6: "das Komische bei seiner Einwirkung auf unser Gemüth (physiologisch nachweisbar) dieselben organischen Veränderungen hervorruft, wie der Kitzel", which translates as "the comic, in its effect on our mind (physiologically verifiable), calls forth the same organic changes as tickling". Except perhaps for "mind" in place of "emotion", this is a felicitous match. Nevertheless, the two sentences in

Kosintsev's quotation are presented as if they occur in the same paragraph, whereas the ellipsis actually represents a 66-page gap! I find that funny in both senses: strange *and* laughable.

I'm sure there's a moral here, but I can't locate the source.

## References

- Darwin, Charles. 1872. *The Expression of the Emotions in Man and Animals*. London: John Murray.
- Fridlund, Alan J., and Jennifer M. Loftis, 1990. "Relations between tickling and humorous laughter: Preliminary support for the Darwin-Hecker hypothesis." *Biological Psychology* 30: 141–150.
- Hecker, Ewald. 1873a. "Das Lachen in seiner physiologischen und psychologischen Bedeutung." Allgemeine Zeitschrift für Psychiatrie und psychisch-gerichtliche Medicin: 629–635.
- Hecker, Ewald. 1873b. *Physiologie und Psychologie des Lachens und des Komischen:*Ein Beitrag zur experimentellen Psychologie für Naturforscher, Philosophen und gebildete Laien. Berlin: F. Dümmler.
  - Available at Project Gutenberg: http://www.gutenberg.org/ebooks/27205
- Kosintsev, Alexander. 2010. *The Mirror of Laughter*. Translated by Richard P. Martin. New Brunswick, USA and London, UK: Transaction Publishers.
- Krueg. J. 1873a. "Das Lachen in seiner physiologischen und psychologischen Bedeutung. Von Dr. Ewald Hecker." [review of Hecker (1873a)] In *Psychiatrisches Centralblatt*, edited by M. Leidesdorf, III. Jahrgang, 67–68. Wien: Wilhelm Braumüller.
- Krueg. J. 1873b. "Die Physiologie und Psychologie des Lachens und des Komischen. Von Dr. Ewald Hecker in Görlitz." [review of Hecker (1873b)] In *Psychiatrisches Centralblatt*, edited by M. Leidesdorf, III. Jahrgang, 139–141. Wien: Wilhelm Braumüller.
- Martin, Rod A. 2007. *The Psychology of Humor: An Integrative Approach*. Burlington, MA: Elsevier Academic Press.
- Temmer, Mark J. 1988 (1992). Samuel Johnson and Three Infidels: Rousseau, Voltaire, Diderot. Athens, GA: University of Georgia Press.