

Replication in the Humanities

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1. What's on the Menu?

- 1.1 Concerns about replication in the biomedical [Bedgley 2012] and social sciences [Open Science Collaboration, 2015]; 'replication crisis' [Baker 2016; KNAW, 2018]
- 1.2 Applies to empirical research (inductive & abductive reasoning) rather than *a priori* work (deductive reasoning)
- 1.3 Causes of failure to successfully replicate
- 1.4 Value of replication
- 1.5 Replication in the humanities? [cf. Peels & Bouter 2018a; 2018b; 2018c]

2. The Key-terms

- 2.1 'Humanities'
- 2.2 'Replication study' [KNAW 2018]
- 2.3 Three forms of replication
- 2.4 Distinction between replicability and replication (relation to falsification and falsifiability) [Popper 1965]

3. Is Replication Possible in the Humanities?

- 3.1 Conceptual argument
- 3.2 Inductive argument and role of triangulation [Munafò & Smith 2018]:
 - The influence of Gnosticism on Augustine [Van den Berg et al. 2010]
 - Deciphering Egyptian hieroglyphic by comparing the Demotic, hieroglyphic, and ancient Greek texts on the Rosetta stone found in 1799 [Ray 2007]

- Studying the chemical composition, colors, and themes of the painting *Sunset at Montmajour*, comparing it with various letters, thereby showing it is a true Van Gogh [Van Tilborgh et al. 2013]

3.3 Variety and similarity (as in the sciences)

3.4 *Objection 1*: uniqueness [KNAW 2018]. Twofold reply

3.5 *Objection 2*: The humanities seek meaning beyond truth [De Rijcke & Penders 2018]

3.6 *Objection 3*: The objects of the humanities are humans and humans are interactive entities, rather than 'indifferent entities', which makes replication impossible [De Rijcke & Penders 2018]

4. Is Replication Desirable in the Humanities?

4.1 Yes, for at least six reasons. It can:

- show that the original study cannot be successfully replicated in the first place;
- filter out faulty reasoning or misguided interpretations;
- draw attention to unnoticed crucial differences in study methods;
- bring new or forgotten old evidence to mind;
- provide new background knowledge; detect the use flawed research methods

4.2 An example: Samuel P. Huntington's 1993 article "The Clash of Civilizations", which he later developed into a book-length argument: *The Clash of Civilizations and the Remaking of World Order* [Huntington 1996].

4.3 Replication and showing the need for replication

5. Guidelines for Replication in the Humanities

5.1 Focus on studies that employ an *empirical* method

5.2 Replicate (i) cornerstone studies, or (ii) a random selection from a sub-discipline

5.3 Scrutinize the study's replicability before attempting to replicate it

5.4 Attempt to replicate by (i) reanalysis of existing data sets, (ii) collection of new data with the same study protocol (a direct replication), or (iii) collection of new data with a modified study protocol (a conceptual replication)

5.5 Opt, if possible, for a conceptual replication, so that triangulation becomes possible

5.6 After a replication attempt, re-evaluate the need for further replication

6. Actual Replication in the Humanities at the VU Amsterdam (2021-2022)

6.1 John Henry Brooke *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991), chapter III

6.2 Two related studies:

- Buijsen, E. (2001). Rembrandt's Self-Portrait with Gorget: an ongoing debate, *Oud Holland – Journal for Art of the Low Countries*, 114(2-4), 155-163.
- Wadum, J. (2001). Rembrandt under the Skin. The Mauritshuis Portrait of Rembrandt with Gorget in retrospect, *Oud Holland – Journal for Art of the Low Countries*, 114(2-4), 164-187.

6.3 Results

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Van Tilborgh, L. T. Meedendorp, O. van Maanen. (2013). "Sunset at Montmajour': A Newly Discovered Painting by Vincent van Gogh", *The Burlington Magazine* 155.1327, 696-705.