

“Socrates is Mortal” in Naproche

Marcel Schütz

2025

Probably one of the most famous logical arguments is the following syllogism, mentioned the first time by John Stuart Mill in 1843 [2] in his *System of Logic* [1, Book II, Chapter 3]:

$$\begin{array}{c} \text{All humans are mortal.} \\ \text{Socrates is a human.} \\ \hline \text{Therefore Socrates is mortal.} \end{array}$$

We can formalize this syllogism in Naproche without changing its wording:

Theorem 1 (Mill’s Syllogism). Socrates is mortal.

Proof. All humans are mortal. Socrates is a human. Therefore Socrates is mortal. ■

References

- [1] John Stuart Mill. *A System of Logic, Ratiocinative and Inductive, Presenting a Connected View of the Principles of Evidence and the Methods of Scientific Investigation*. J. W. Parker, 1843.
- [2] David A. Wheeler. “The Origin of All Men are Mortal”. 2023. URL: <https://dwheeler.com/essays/all-men-are-mortal.html>.

License

© Marcel Schütz (2025). This work is licensed under a [Creative Commons “Attribution-NonCommercial-ShareAlike 4.0 International”](https://creativecommons.org/licenses/by-nc-sa/4.0/) (CC BY-NC-SA 4.0) license.