▶ MARTA VLASÁKOVÁ, *Frege's attitude towards sets.*

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The modern notion of set is considered to be invented by Georg Cantor and consistently established via some standard axiomatics of set theory. Set theory is primarily a mathematical discipline, but the current classical logic is usually held to be closely connected with it. Though logic has historically operated with "extensions of concepts" which are in some sense similar to Cantorian sets, there are important differences between the both concepts. The main difference consists in dealing with sets as "individuals", i.e. as objects like any others. The Cantorian notion of set was introduced into logic by Gottlob Frege. I would like to elucidate Frege's attitude towards sets and their role in logic. Frege did not need the notion of set or extension of a concept for grounding logic at all. He considered the notion to be "something derived, whereas in the concept – as I understand the word – we have something primitive" and "the primitive laws of logic may contain nothing derived". But he needed the notion for his edifice of logicism. After its collapse due to Russell's uncovering of a paradox, Frege eventually refused Cantorian sets completely. There are no objects like that.

[1] PAUL BERNAYS, ***Axiomatic Set Theory***, North-Holland, Amsterdam, 1958.

[2] GOTTLOB FREGE, ***Begriffsschrift***, Louis Nebert, Halle, 1879.

[3] Gottlob Frege, ed. by B. McGuinness, ***Collected Papers on Mathematics, Logic, and Philosophy***, Basil Blackwell, Oxford, 1984.

[4] GOTTLOB FREGE, ***Philosophical and Mathematical Correspondence***, transl. Hans Kaal, Basil Blackwell, 1980.

[5] JEAN VAN HEIJENOORT, *Historical Development of Modern Logic*, ***Modern Logic***, vol. 2, no. 3, pp. 242–255

[6] MICHAEL POTTER, ***Set Theory and Its Philosophy***, OUP, 2004.