Predicativism:
a reverse-mathematical perspective

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This is my abstract for the conference "Das Kontinuum - 100 Years Later," held at the University of Leeds, September 11–14, 2018.

Reverse mathematics is a foundationally-inspired research program which seeks to determine which axioms are needed to prove specific core-mathematical theorems. We present many examples of how reverse-mathematical research yields specific insights into foundational programs such as the finitism of Hilbert and the predicativism of Weyl and Feferman. From this perspective, we comment on Hilbert's program of finitistic reductionism, and on a parallel program known as predicative reductionism. We discuss some fascinating reverse-mathematical open problems which are motivated by finitistic reductionism, predicativism, and predicative reductionism.