KNOWLEDGE AND SCHEMATA

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Abstract: Mathematical logic is replete with schemata, in part because many foundational theories like PA and ZFC are not finitely axiomatizable. There are many traditional programs in the foundations of mathematics, like finitism and predicativism, which place restrictions on schemata; these programs might not uncharitably be viewed as suggesting that some instances of schemata like induction or comprehension are better known than other instances. Such restrictions are sometimes regarded as ill-motivated or ad-hoc. One source for such a reaction might come from qualms about the particular types of evidence offered for these restrictions. Another source for such a reaction might come from a view to the effect that knowledge of schemata in the foundations of maths and logic is such that once one has good reason to believe a broad swath of instances of a given schema, this reason and its quality extends to other instances of the given schema. This talk will try to get clearer on whether there are any plausible variants of this view.