

As known, Bernard Bolzano (1781–1848) was the first to offer a formally sophisticated account of (objective) explanation (Abfolge or grounding) in his *Wissenschaftslehre* (1837). Grounding is a relation between (collections of) truths Q and their objective reason or ground P, where P in some objective sense explains Q. Bolzanian grounding can be said to impose a hierarchy on truths: grounds are in some sense more fundamental than, and thus prior to, the truths that they ground, i.e. their consequences.

As of today, it remains an open question under which conditions exactly Bolzano holds that a (collection of) truth(s) is the ground of another. State-of-the-art reconstructions of (sufficient conditions for) Bolzano's grounding are given as deductive arguments satisfying certain conditions of simplicity and economy (cf. e.g. Roski & Rumberg 2016). Unfortunately, such this and similar reconstructions disregard several of Bolzano's claims about grounding, such as the requirement that a ground be at least as general as its consequence.

In this talk we put forward an alternative account of grounding that does justice to Bolzano's claims. We argue that a correct interpretation of Bolzano's views on explanation must take into account Bolzano's envisioning of a hierarchical ordering not only among the truths, but also among the concepts which make up a science. Such an hierarchy of concepts is a substantial part of the tradition of thinking about science, originating from Aristotle's *Analytica Posteriora*, which heavily influenced Bolzano's ideal of science (de Jong & Betti 2008, de Jong 2001). According to this traditional conception, a science consists of some fundamental concepts, and all other concepts are defined from them according to the well-known model of definitions *per genus proximum et differentiam specificam*. Concepts, accordingly, are on this conception hierarchically ordered as genus and species. We will argue that the hierarchical ordering that grounding imposes on truths in Bolzano's view emanates from the hierarchical ordering of the concepts which make up those truths.

We will show that only by taking into account the traditional theory of concepts, including the age-old doctrine of the five so-called *praedicabilia*, can one account for Bolzano's requirements for grounding in a satisfactory manner. We further strengthen our case by showing that our interpretation can account for certain other, general aspects of Bolzano's thinking about science, such as the reason why in Bolzano's view sciences consist of synthetic truths only. One consequence of our account is that Bolzano's attitude to the traditional theory of concepts turns out to be less 'anti-Kantian' than usually maintained (cf. e.g. Lapointe 2011).

References

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