

## MORE ON REFLECTION PRINCIPLES

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In the search for new axioms there has been a renewed interest in reflection principles, in part because they provide the best candidates – indeed some (like Tait) would say the only candidates – for axioms that are intrinsically justified on the basis of our conception of set. I will discuss a series of limitative results concerning such principles, results that collectively show that general reflection principles (in the sense of Levy, Bernays, Goedel, Tait, and others) are either weak (in that they are consistent relative to the Erdős cardinal  $\kappa(\omega)$ ) or inconsistent. I will then discuss other work concerning principles that are often called “reflection principles” – such as older work of Reinhardt and Magidor and more recent work of Welch and Bagaria – and argue that they belong to a fundamentally different class of principles and rest on different conceptions, conceptions that are best labeled “extension principles” or “resemblance principles;”. Here, in contrast to the case of reflection principles, the case that they are intrinsically justified on the basis of our conception of set is even more doubtful. I take these conclusions to underscore the importance of extrinsic justifications.

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