Structural realism is a rather popular view in philosophy of science. As with many popular views, sprouting is never far behind. No sprout has had as much grip on the view’s image as ontic structural realism. Indeed its supporters have such a stranglehold that ‘structural realism’ has almost become a byword for their views. In this talk, I want to redress this imbalance by returning to structural realism’s humble epistemic beginnings to examine exactly what made the view so attractive in the first place. To this effect, I will reconstruct several arguments – some of which little known – proposed in the early part of the twentieth century in support of the epistemic version of structural realism. Not wanting to dwell too much on the past, I will then switch to more recent arguments both for and against the position. A careful evaluation of these arguments will hopefully provide useful information as to what form, if any, epistemic structural realism must take in order to be a viable alternative to its direct competitors, namely standard scientific realism and constructive empiricism.