The indigenous languages of Australia are remarkable for their low level of phonological diversity. Phonemic inventories and phonotactic restrictions bear strong resemblances from coast to coast, ranging across more than two hundred languages in twenty-eight families. In this talk I review the well-known points of commonality in Australian consonant systems and introduce some new respects in which the languages are similar. I also raise the question of how the constrained phonological diversity of Australian languages ought to figure in our conceptualisation of the relationship between possible and probable languages – the ultimate object of linguistic theory, and attested phonological diversity – our principal empirical source of premises for reasoning about that ultimate object.