A choice sequence is a continually growing sequence whose growth may, or may not, be restricted in some way. They were utilised by Brouwer to resolve a crucial issue with his intuitionistic re-foundation of mathematics; specifically, they allowed him to bridge gap between the rationals and the reals.

Choice sequences received no true formalisation in Brouwer’s works, however, from [2] onwards, he considered them as a pair of growing objects; a list of elements generated so far, and a list of intensional first order restrictions.

A knowledge state is a formalised way of representing finite information about choice sequences. This allows us to formally represent intensional information about choice sequences, and achieve a notion of choice sequence close to that proposed by Brouwer. The theory $FIM-KS$ put forward in [1] demonstrates that knowledge states can be used to successfully found intuitionistic analysis. They have also been used in [3] to show that the theory of the creating subject is not needed.

This talk demonstrates that the theory of knowledge states put forward in [1] allows two paradoxes to be derived, and it then outlines their resolution.

