In his paper 'The Philosophical Basis of Intuitionistic Logic', Dummett argues towards a justification of intuitionistic logic from a broad Wittgensteinian thesis about meaning: that every aspect of meaning must be such that one's grasp thereof is capable of being manifested eventually and implicitly in observable behaviour. His argument is intricate; it would take us too far afield here even to sketch its general route. I am concerned rather with charting a different passage from the broad thesis just stated to the claim that it is intuitionistic logic which correctly reflects graspable meanings of the logical operators.

This new route takes as its point of departure the game theoretic semantics for first order languages which has recently been made better known by Hintikka in exegetical application to what Wittgenstein said about language games. I shall first try to improve upon Hintikka's explanation of the (classical) language game for first order interpreted languages; then examine his claim that these serve a Wittgensteinian purpose in capturing or conveying the forces of the logical operators; and finally describe a modified game which, given the broad meaning thesis above, serves this purpose better and confers upon the logical operators intuitionistic rather than classical meanings.

I shall call the whole, consisting of language and the actions into which it is woven, the 'language game'. (para. 7)

Our clear and simple language games are not preparatory studies for a future regularization of language - as it were first approximations, ignoring friction and air-resistance. The language games are rather set up as objects of comparison which are meant to throw light on the facts of our language by way not only of similarities but also of dis-similarities (para. 150) (Wittgenstein: Philosophical Investigations, Part I)
The game is between two players, each intent on winning. It is played with respect to a first order sentence \( \phi \) against the background of an interpretation \( M \) of the non-logical expressions occurring in \( \phi \). There are two ‘roles’ in the game, each occupied by one of the players who may, however, have occasion to swap these roles in the course of play. Let us simply call these roles T and F.\(^4\)

Before play begins, the players decide who shall be T at the outset and who F. Intuitively, he who starts as T may be thought of as associated with the claim that \( \phi \) is true in \( M \), and prepared to move accordingly in vindication of that claim; and he who starts as F may be thought of as out to show that \( \phi \) is false in \( M \). As play proceeds, the players will, in accordance with the rules of the game, make various choices intent on vindicating their claims: choices of conjuncts or disjuncts with which to proceed, and choices of individuals from \( M \) as vindicating instances or counterinstances to quantifications. Play proceeds with respect to the subformula remaining after each such choice, until finally after finitely many moves an atomic formula is reached. By this stage various individuals will in the course of play have been assigned to the variables occurring in the atomic formula. If this assignment satisfies the atomic formula (in \( M \)) he who happens to occupy role T at that final stage wins; if not, he who happens to occupy role F wins.

The rules governing moves are as follow:

(i) At \( \neg \psi \) roles have to be exchanged. Play proceeds with respect to \( \psi \).

(ii) At \( \psi \lor \theta \) and \( \psi \land \theta \) T and F respectively choose the subformula \( \psi \) or \( \theta \) with which play is to proceed.

(iii) At \( (\exists x)\psi \), \( (\forall x)\psi \) T and F respectively choose an individual in \( M \) and assign it to the variable \( x \). Play proceeds with respect to \( \psi \).

(iv) At an atomic formula play stops. If the assignment constructed satisfies this formula, he who happens to be T wins; if not, he who happens to be F wins.

After setting out this explanation,\(^5\) Hintikka then observes that \( \phi \) is true in \( M \) if and only if he who starts as T has a winning strategy; and \( \phi \) is false in \( M \) if and only if he who starts as F has a winning strategy. (Contrast ‘having a winning strategy’ with ‘happening to win a particular play’.)