ABSTRACT

The project attempts a critical study of Popperian methodological falsificationism from an analytical perspective. The critique of theory-ladenness shows that it leads to the abandonment of empiricism; instead an argument is built up for universals as names which indexically indicate the same kind in all possible worlds.

The intuitions of indexicality and of identity underlying the new theory of reference converge in Leibniz's Principle of the Identity of Indiscernibles; leading to the 'primitive' classification of kinds based on identity.

Identity as a primitive principle of classification, which can only be extensionally exemplified and not intensionally defined, replaces facts with existents, which evades the pitfalls of Cartesian foundationalism. As a mode of inference, logical identity as opposed to logical equivalence transcends truth-functional logics.

The rejection of the bivalence principle (of truth/falsity) is based on the 'fact' that (1) laws in physics exemplify functional dependencies which are expressible as symbolic mathematical identities (ii) theoretical structures are symbolic (mathematical) representations, and (iii) theoretical growth employs as mode of inference Leibniz's law which is non truth-functional.

This leads to the conception of Leibniz's law as 'creative' mode of inference for scientific discovery; where 'creativity of identity' is characterized by (a) the intrinsic creativity of the (fact) free proliferation of theoretical assumptions (b) the 'conceptual reshuffling' of phenomena wherein new classificatory structures transcend the old; and (c) the conjectural character of both (symbolic) premisses and conclusions.

Finally, identity as primitive principle of classification and identity as creative (non-truth functional) mode of inference interprets referential realism in its own terms; it presupposes only existents, i.e. the 'minimal form' of ontological realism.