The purpose of this paper is to clarify the existential or ontological status of intelligence and this means an analysis of both the primitive concept of intelligence found in everyday life and scientific constructs. Scientific constructs can be understood only in the context of the theories that have generated them and I have chosen to concentrate on the Spearman—Jensen theory of intelligence and the psychometric construct called $g$ or general intelligence. The first half of the paper will argue that psychometric $g$ has shown considerable promise as a scientific construct; the second half will show that its successes have been accompanied by significant failures and argue that the Spearman—Jensen theory must be revised and transcended.

**PSYCHOMETRIC $g$ AND ITS CRITICS**

The selection of the Spearman—Jensen theory reflects the personal view that A. R. Jensen has done most to give the concept of intelligence explanatory power. The presentation of the theory will cover the following topics: the relationship between the primitive concept of intelligence and IQ tests; the derivation of $g$ from certain performance trends on IQ tests; the critical debate about $g$; the ontology and explanatory power of $g$. Throughout I will attempt to defend Jensen against certain of his critics, on the grounds that the theory has often been unfairly attacked and its merits unacknowledged.

**Intelligence and IQ Tests**

Measuring intelligence is a prerequisite to giving it explanatory power which immediately poses the question of whether IQ tests measure intelligence. Early on Jensen (1972, pp. 75—77) asserted that intelligence was by definition what IQ tests measure. Block and Dworkin (1977, p. 415) responded with a critique of this kind of crude operationalism. Any attempt to define something in terms of the readings given by a measuring instrument leads to absurdities. Defining tem-
perature in terms of what thermometers measure denies the possibility of defective thermometers or the invention of a new instrument better than any now existent. Defining intelligence as what IQ tests measure would leave us unable to say any IQ test was better than another. Actually Jensen's so-called definition consists of a single sentence and was not really meant to define anything. It was a badly phrased attempt to introduce the construct g which is derived from performance trends on IQ tests.

The need for a concept of intelligence independent of IQ tests suggest an analysis of the primitive concept found in everyday life. Jensen (1979, pp. 80—81) argues that it arises in a comparative context. A Robinson Crusoe would become aware that he remembered things and learned things even in total isolation but would realize he was quicker than others at learning things only with a companion. Thus, we have the concept of intelligence as a mental ability distinct from memory and learning and indeed speak of people as intelligent even though they may be forgetful or ignorant. Perhaps this is why the concept has such a long history; that is, from ancient India to ancient Greece, from St. Thomas to Binet and Spearman, the notion persists that some people have 'better minds' than others and that this has to do with abstract problem-solving, induction and deduction, transfer of learning from one situation to another, the perception of relationships.

The later definitions of intelligence are not much improvement on the earlier ones and therefore the obvious next step is to move from the pre-scientific to a scientific concept, a measurable variable with explanatory power. However, this does not mean that the two concepts can proceed in complete isolation from one another. The primitive concept of intelligence describes a certain role that scientific concepts attempt to play: they are supposed to measure a mental ability with great importance for the life-histories of individuals and groups; whether someone is intelligent should tell us something about their academic and occupational achievements and groups that have a high average intelligence ought to show a high standard of cultural attainment. Moreover, if psychology discovered a potent mental ability distinct from memory and learning, and that ability happened to bear little resemblance to the primitive concept, it would be important to say so. People in general should not be allowed to think that those who score well or poorly on IQ tests are 'bright' or 'dull' if what the tests measure has little to do with the ordinary meaning of those words.