



PRESENTATION ON INTELLIGENCE

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at

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I. INTRODUCTION

Clifton Fadiman suggested I read Ray Kurzweil's *The Age of Machine Intelligence* (especially for its chapters on poetry, music, and painting). I want to report on my reading of these chapters, especially in regards to poetry and my study of the bibliography of philosophical books cited in support of their position.

The favorable books they have read include Plato, and, with one exception, all modern or contemporary books that in my judgment are in error. These include Hume, Kant, Churchland, Daniel Dennett, Fodor, Wittgenstein, Torrance, A. J. Ayer, etc. These writers are either materialists or positivists.

The one exception is a negative book by Dreyfuss that I do not think makes well the case I want to make for you.

I want to give you my sense of your two initial assumptions. I call them assumptions because they cannot be proved, and when asserted without proof or not supported by reasons and evidence, are sheer dogmatism. The two unproved assumptions are

Materialism: the brain is both a necessary and sufficient condition of thought. (There is only an analytical distinction between brain states and consciousness.)

Positivism: only empirical science is genuine knowledge; philosophical thought is mere opinion.

In my judgment, these two assumptions on your part are gratuitous. Neither is needed for the good work you do in education and in business.

I hold views to the contrary with respect to those two assumptions and think I can give you good reasons and evidence to the contrary.

In addition, with respect to the 20th century study of human and animal intelligence, I have examined all this literature and I think I have shown in a book of mine *The Difference of Man* that the distinction between animal and human intelligence (between perceptual thought and conceptual thought) explains what animals can and cannot do, and what only man can do with his mind. I have brought along for you the chapters in that book which deal with all the empirical evidence.

Let me make perfectly clear my reason for coming here today. *I may be wrong and your two assumptions may be correct.* But you have to pay attention to my philosophical objections and try to respond to them (when you understand them), with arguments to the contrary.

I hope you will try to do this tomorrow morning when I return. We may not be able to complete this process in two days. If not, and if tomorrow's session is inconclusive, I will be glad to return for another session at a later date.

I have one further introductory point. There are purely philosophical questions and mixed questions (questions to which both empirical science and philosophical thought make contributions).

Here are the two mixed questions at issue:

1. The nature of the difference between brutes and humans: either in degree or in kind; and if in kind, either only superficial or radical
2. Human and animal communication (signals vs. designators) and the realm of meaning

II. My Argument

In regard to the first mixed question, I hold that the difference is in kind and that that difference is radical not superficial.

Two things differ in degree when, with respect to a certain property that they have in common, one has more of it and the other less. In geometry, two triangles differ in degree with respect to their area if one is larger and the other smaller. In the physical world, two runways on an airfield differ in degree if one is longer, the other shorter.

Two things differ in kind when one of them has characteristics or properties not possessed by the other. In geometry, a triangle and a circle differ in kind by virtue of the fact that one figure has angles and the other has none. In the physical world, invertebrates and vertebrates differ in kind. The latter have backbones lacked by the former.

One distinction remains to be considered, and it is of the greatest importance here: that is the distinction between a difference in kind that is radical and one that is superficial.

Three states of matter—solid, liquid, and gaseous—appear to differ in kind. We can walk on water that is frozen solid, swim in liquid water, and inhale the gaseous vapors that arise from boiling water. The chemical constitution of the matter is the same in all three cases. The three different states of the same kind of matter result from differences of degree with regard to the character and velocity of molecular motion in the solid, liquid, and gaseous states. Hence, while the three states differ in kind, that difference in kind is superficial, not radical.

In regard to the second mixed question, I hold that the designative meanings in human language (which brutes, with only perceptual intelligence, do not have and cannot be *taught*) require conceptual intelligence.

This brings us to a crucial point that I hope you will consider very carefully. In human speech there are meaningless notations (spoken or written marks or sounds) which acquire meaning and become meaningful words in our vocabulary, have many meanings, change their meaning, lose their meaning, etc. These meaningless notations are instrumental signs.

Unless there were also formal signs (totally imperceptible and unexperienceable) that conferred meaning on these instrumental signs and made them meaningful words, there is no explanation of how meaningless notations acquire meanings and become meaningful words.

An object that is named by a word which has acquired its meaning without the mediation of other words is an object of acquaintance, we shall speak of the designation of such objects as “naming by acquaintance.” In contradistinction, when objects are named by words which have acquired their meaning only through the descriptive use of other words, we shall speak of the designation of such objects as “naming by description.”

It is seldom if ever the case that all the meaningful words which an individual is able to use are words that have become meaningful for him through naming by acquaintance. To this it must be added that it is never the case that all the meaningful words which an individual is able to use are words that have become meaningful to him through naming by description; for in that case he would ultimately run out of the meaningful words he needs for descriptive purposes. What has just been said about naming by description in relation to naming by acquaintance repeats what is usually said about the relation of knowledge by acquaintance to knowledge by description; namely, that some knowledge by acquaintance is indispensable to there being any knowledge by description. The reverse is not true: we can have knowledge by acquaintance without having any knowledge by description.

It may be helpful to illustrate the analytical points that have just been made. We have all used words to describe an object of perception to another person who is not in the sensible presence of the thing that has become an object of perception for us. What is an object of acquaintance for us is an object of description for him—an object he is able to imagine as a result of the verbal description we have given him.

A dictionary does not explain the meaning of designative signs. It gives you one or mere definitions of a word, but it will not tell you

what a word can designate. For example the dictionary definition of fire bell and of smoke will not tell you that each of them may designate fire.

Concepts (that animals do not have) are the formal signs that confer meaning on the instrumental, designative signs that name the imperceptible and the unperceived.

Concepts are meanings and unless that which is a meaning exists, nothing could ever acquire a meaning, change meaning, etc.

Mind is the realm of meaning, both perceptual and conceptual meaning.

My argument against the dogma of materialism is my argument against the nominalism of Berkeley and Hume.

I am going to try to show you that nominalism (the denial of abstract concepts) is self-refuting. If I can do this, I will have shown you that nominalism is in error (only general names, no general or universal concepts).

Materialists in psychology acknowledge no power of the mind except sensitive intelligence (sensation, perception, sensitive memory, and imagination); in short, no intellectual power which is the power that abstracts universal concepts and confers meaning on all our common nouns.

Self-refuting nominalism is an erroneous effort to explain how our common nouns have their general or universal meanings.

This argument that I have just summarized (for the distinction between brutes and humans and for untenable nominalism in its self-refuting effort to explain the general meaning of our common nouns) is contained in Chapters 2 and 3 of *Ten Philosophical Mistakes*.

III. CONCLUSIONS

IF I am correct that nominalism is self-refuting;

IF I am correct that conceptual intelligence is indispensable to account for the meaning of all common nouns;

IF I am correct that the generalizations and discriminations made by brutes are perceptual, not conceptual.

THEN the two basic assumptions that I have attributed to you (materialism and positivism) have been philosophically shown to be false. (In that there is a clear difference between perceptual and conceptual intelligence, and there is a radical difference in kind between humans and brutes, residing in an immaterial intellect.

My one unproved assumption: that anything which is material or a body is always a particular individual—because matter is the principle of individuation. (The relevance of Aristotle, Aquinas, and above all William of Ockham).

The significance of the unsolved problem that I discovered, a problem I find embarrassing, because it may show that I am wrong. 📖

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