Young, J. Z. Doubt & Certainty in Science
(the B.B.C. Reith Lectures, 1950) Oxford

Suggests biologists been wrong in concentrating on these
features of mind which, shared by other animals, should
look more as man's specialty - his brain, communication,
and social system.

Special features - all due to communication
- To discuss how brain makes communication between human
beings possible.

Refers to famous duelism of mind and matter
which is perhaps the central problem of modern
philosophy, religion, & science.

Information stored in form of a print or by sending
impulses through closed circuits.

The doctrine that learning is all of a C.P. type has
had immense success in Russia & is said to be a
basic part of the theory of Soviet education
Accepts Hebb's thesis of brain having to learn a
great deal before it can even see things.

There may be about 100 sensory & competent
scientists in whole study, brain connections. Yet
there must be 100,000 ol more chemists of a competence
entirely seems to feel that this is right property

biggest calculating machine has only 23,000 values whereas
brain has 6500 million cells.

The question of the nature of the memory trace is one
of the most obscure and disputed in the whole of
biology. Because definitely there is such a trace.
Emphasizes effect of nutrition on fiber and cell age as possible basis of memory trace lasting something especially significant about cell life.

Baby monkeys from whose large areas of cortex removed show little defect of the stimulus grows up, show marked deficiencies in learning capacity.

"When I was in Paris preparing these lectures, I began to develop my own views on eidetic memory and suggest that we learn pain and pleasure.

"By studying all the variety of life, including the life of man, biologists can include and transcend the other sciences."

"This study of the brain is certainly, one of the most challenging of all scientific problems. At present we spread much of our mathematical and physical genius on study of the world around us. Why not apply some of it to ourselves and especially to our brains?"

Quotes Preface!