AS WE MAY THINK — VANNEVAR BUSH

NEED: Man has built a civilisation which is very complex.
→ To mechanise records more fully. ↓ WHY?

To push this experiment to its logical conclusion and not merely become clogged down part way there by overtaxing his limited memory.

RESULT: Truly encompass the great record and to grow in the wisdom of race experience.

→ What does Bush exactly mean by the record? Is it the unlimited information that is stored or specifically the information that is being indexed and stored in various forms?
→ text / images / videos / audio etc.

MEMEX VS HUMAN BRAIN

Organic → Association based

Connections (network)

Mechanical → Tree structure

FOLDER
FOLDER — FILE
FOLDER — FILE
FOLDER — FILE

ASSOCIATIVE TRAILS.
→ A single file cannot be a part of two folders unless it is duplicated. There is only one path to reach an object vs. many

in the human brain.

Organised → GUI / command line (laptop screen)

ACCESS INFORMATION
CREATE CONNECTIONS + ASSOCIATIONS
PROCESS INFORMATION
RECALL INFORMATION

SCIENCE

PROVIDED
1. Swifter communication between individuals
2. record of ideas

ENABLED MAN TO → Manipulate and make extracts from → TO ENSURE
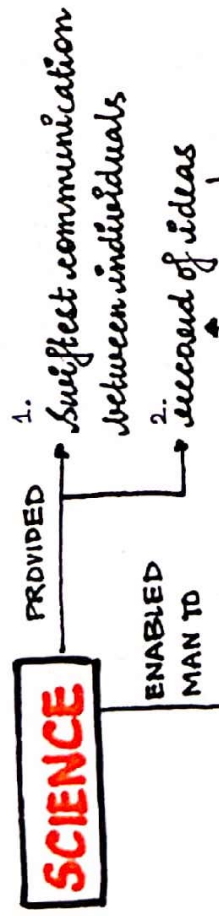
Evolution of knowledge that endures throughout the life of a race rather than that of an individual.

"Specialisation becomes extremely necessary for progress, and the effort to bridge between disciplines is correspondingly superficial."

PREDICTION: "The advanced arithmetical machines of the future will be electrical in nature, and they will perform at 100 times present speeds or more."

RECORD

TO BE USEFUL → Must be continuously extended
Must be stored
Must be consulted.

Vodex / Vocoder
Punched-card machine — Hollerith

"Our ineptitude in getting at the record is largely caused by the artificiality of systems of indexing."

INDEXING VS ASSOCIATION
alphabetically or numerically

Selection by association, rather than indexing may yet be mechanised.

science to implement different ways to produce, store and consult the records of race.
← ENABLES

= STORAGE + INFORMATION ACCESS + PROCESSING + OUTPUT (mechanism) (display)
Present day processor

STORAGE + INFORMATION ACCESS (memory) (can be consulted with exceeding speed and flexibility)
↓ Present day internet?
Present day RAM/ROM

MEMEX

CONSISTS OF →
A DESK
+
SLANTING TRANSLUCENT SCREENS (on top)
+
KEYBOARD
+
SETS OF BUTTONS AND LEVERS

PUBLICATIONS

HAVE BEEN EXTENDED → Far beyond our present ability to make use of the record.
↓ WHY?

Our methods of transmitting and reviewing the results of research are generations old and totally inadequate.
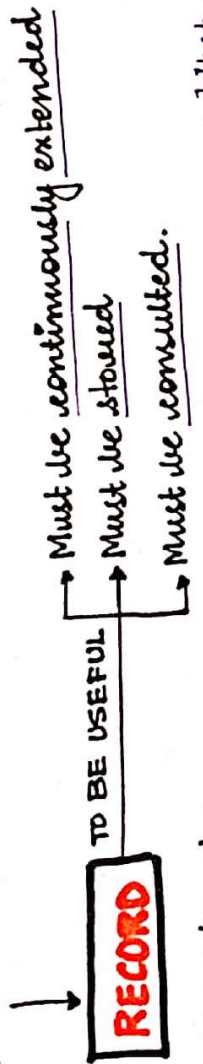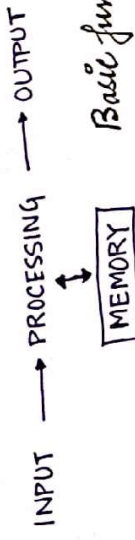↓ WHICH LEADS TO
Truly significant attainments being lost in the mass of the inconsequential.

Leibnitz → calculating machine
Babbage → arithmetical machine

PREDICTION: "The would-be [encyclopedia] have arrived at an age of cheap complex devices of great reliability; and something is bound to come of it."

INPUT → PROCESSING → OUTPUT

MEMORY

Basic functioning of the memex.