

Need another word that means the same as “symposium”? Find 15 synonyms for “symposium” in this overview.

Table Of Contents:

- [Symposium as a Noun](#)
- [Definitions of "Symposium" as a noun](#)
- [Synonyms of "Symposium" as a noun \(15 Words\)](#)

**The synonyms of “Symposium” are: meeting, sitting, assembly, conclave, plenary, lecture, speech, address, discourse, oration, presentation, report, sermon, disquisition, dissertation**

## Symposium as a Noun

### Definitions of "Symposium" as a noun

According to the [Oxford Dictionary of English](#), “symposium” as a noun can have the following definitions:

- *A collection of essays or papers on a particular subject by a number of contributors.*
- *A conference or meeting to discuss a particular subject.*
- *A drinking party or convivial discussion, especially as held in ancient Greece after a banquet (and notable as the title of a work by Plato).*
- *A meeting or conference for the public discussion of some topic especially one in which the participants form an audience and make presentations.*



## Synonyms of "Symposium" as a noun (15 Words)

<b>address</b>	Social skill. <i>They exchanged <b>addresses</b> and agreed to keep in touch.</i>
<b><u>assembly</u></b>	A group of machine parts that fit together to form a self-contained unit. <i>The tail <b>assembly</b> of the aircraft.</i>
<b><u>conclave</u></b>	The meeting place for a conclave.
<b><u>discourse</u></b>	A formal discussion of a topic in speech or writing. <i>A <b>discourse</b> on critical theory.</i>
<b>disquisition</b>	An elaborate analytical or explanatory essay or discussion. <i>Nothing can kill a radio show quicker than a <b>disquisition</b> on intertextual analysis.</i>

<b>dissertation</b>	A long essay on a particular subject, especially one written for a university degree or diploma. <i>He had considered writing his doctoral <b>dissertation</b> on Kant.</i>
<b>lecture</b>	Teaching by giving a discourse on some subject (typically to a class). <i>In each course there are supporting <b>lectures</b> and tutorials.</i>
<b>meeting</b>	A small informal social gathering. <i>He still remembers their <b>meeting</b> in Paris.</i>
<b>oration</b>	The style or manner in which an oration is given. <i>There is nothing quite like his messianic <b>oration</b>.</i>
<b>plenary</b>	A meeting or session attended by all participants at a conference or assembly. <i>Working parties would report back to the <b>plenary</b> with recommendations.</i>
<b>presentation</b>	A visual representation of something. <i>Depression frequently forms part of the clinical <b>presentation</b> of dementia.</i>
<b>report</b>	The act of informing by verbal report. <i>They heard a violent <b>report</b> followed by silence.</i>
<a href="#"><u>sermon</u></a>	A talk on a religious or moral subject, especially one given during a church service and based on a passage from the Bible. <i>I preached my first <b>sermon</b> on original sin.</i>
<b>sitting</b>	A period of time during which a committee or parliament is engaged in its normal business. <i>Twenty pieces of music is a bit much to take in at one <b>sitting</b>.</i>
<b>speech</b>	The act of delivering a formal spoken communication to an audience. <i>She wouldn't accept his correction of her <b>speech</b>.</i>



## SYMPOSIUM OF PAPERS ON DIGITAL COMPUTERS

Paper No. 1362  
MEASUREMENTS SECTION

8.572 : 518.5

### DIGITAL COMPUTERS AT MANCHESTER UNIVERSITY

By T. KILBURN, M.A., Ph.D., Associate Member, G. C. TOOTILL, M.A., M.Sc.,  
D. B. G. EDWARDS, M.Sc., and B. W. POLLARD, M.A., Graduate.

(The paper was first received 13th December, 1951, and in revised form 17th March, 1952. Proofs were made available to the public 15th August, 1952, and the paper was read before the MEASUREMENTS SECTION 14th April, 1953.)

#### SUMMARY

The new universal high-speed digital computing machine now working at the Computing Machine Laboratory, Manchester University, is described. It has a high-speed storage capacity of 10 240 binary digits and an intermediate storage capacity of over 280 000 binary digits. Its other features include a completely automatic transfer system between the two types of store; a B-tube which allows instructions to be modified in a much shorter time than by normal accumulator use, thus facilitating the programming of iterative processes; and a fast multiplier which carries out a multiplication in the same order of time as the normal addition or subtraction operations. Input and output operations in this machine utilize normal 5-hole teleprinter tape. Input is by way of a photoelectric reader and output can occur either from a tape punch or a teleprinter, or both can operate together. The method of maintenance and also some reliability figures are given.

#### (1) INTRODUCTION

Development of the cathode-ray-tube (c.r.t.) storage system<sup>1</sup> was begun in the summer of 1946 at the Telecommunications Research Establishment (T.R.E.). In January, 1947, the project was moved to Manchester University where, after further development, the construction of a machine was undertaken. The object of building this machine was to ensure that the proposed storage system was entirely suitable for use with digital computers and also to take correct account of its advantages and limitations. The successful operation in June, 1948, of this miniature machine<sup>2</sup> initiated a research programme on automatic high-speed digital computers under the general direction of Professor F. C. Williams. All the projects mentioned in the paper are part of this research programme.

The miniature machine incorporated means for the automatic control of the progress of a computation but had only a small storage capacity for numbers and instructions, a token computing circuit for performing subtraction, and input and output facilities of the simplest and crudest kind.

The emphasis now shifted to the construction of a more ambitious machine, which was to evolve from the miniature machine, and during the period 1948-49 the original apparatus used primarily for experimental work on c.r.t. storage was extended by a series of modifications into a computing machine of considerable size\* and capabilities. Each modification was made as quickly as possible in order to keep the machine available for mathematical use, and makeshift power supplies and input and output arrangements were tolerated.

In the summer of 1949 sufficient engineering and mathematical experience had been obtained to warrant the manufacture of a new computer, of the highest possible quality in all details of design and construction. It is the purpose of the paper to describe this new machine, but a brief explanation of the miniature machine is given first.

\* In the autumn of 1949 the machine contained 800 pentodes and 1 000 diodes.

Dr. Kilburn and Mr. Edwards are at Manchester University.  
Mr. Tootill is at the Military College of Science.  
Mr. Pollard is with Ferranti Ltd.

#### (2) EXPERIMENTAL WORK

##### (2.1) The Miniature Machine

The general form of digital computing machines is now well established, and the miniature machine contained like others a main store, accumulator, and control.<sup>2</sup>

The main store<sup>1</sup> recorded a number in 32-digit binary form, the 0 and 1 values of the digits corresponding to two characteristic states of electrostatic charge which can be made to exist on small areas of the fluorescent screen of a cathode-ray tube. As the X-time-base swept the electron beam along a line of these areas (Fig. 1), a signal, characteristic in turn of each digit

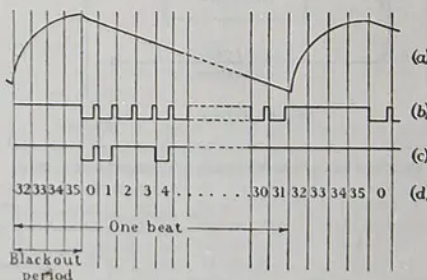


Fig. 1.—Store waveforms.

- (a) X-time-base.
- (b) Dash waveform.
- (c) Serial binary representation of nineteen (as an example).
- (d) Designations of successive time periods (digit periods).

on that line, was generated at the "read" output terminal of the store, and constituted a serial representation of the number [Fig. 1(c)]. A similar waveform from another source applied to the "write" input terminal during the X-time-base sweep caused the number it represented to be recorded in the store. In order not to destroy the stored information during the reading process, the read output was also fed to the write terminal through the "regenerative connection."

Thirty-two numbers were recorded on one cathode-ray tube in the store, the different lines of digit areas being selected by the Y-shift generator. During alternate X-time-base sweeps (termed "beats," see Fig. 1), the Y-shift generator selected each line in turn so that the stored data might be regenerated before leakage caused appreciable decay of the charge pattern. These beats are called "scan" beats. During the intervening "action" beats, the Y-shift generator could select any desired line so that its contents might be read or modified.

The accumulator of the miniature machine comprised a cathode-ray tube storing one number only, whose regenerative connection was made through a circuit for performing subtraction on two serial binary numbers. Fig. 2 shows the connections which permitted a number,  $s$ , from the main store to be