complementary pattern. This after-effect shows little transfer (when the stimulus is presented to one eye and the screen is viewed afterwards by the other). It has been found, however, that if one eye views the stimulus pattern and the other simultaneously views the screen, some similar but less-violent motion of the spots on the screen can be seen continuously.

It has been found that this phenomenon, as well as those described earlier, is unaffected when the stimulus presented is stabilized against eye-movement. This has been done by mounting a photographic reduction of the pattern on a stalk 1·5 cm. long attached to a contact lens of + 60 dioptres power. (A similar method of stabilization has been used independently by Prof. R. W. Ditchburn of Reading in another connexion (personal communication).) The stimulus-pattern 'fades' irregularly, as expected, but even when it has faded the other eye can detect the complementary motion in the spots of 'noise' on the screen.

This evidence of limited transfer complicates an already puzzling picture, and suggests that in these phenomena we may be dealing not with a single localized activity but with an activity to be expected in the highly interconnected visual network at several, if not all, levels from retina to cortex.

The second effect to be reported is seen with a stimulus pattern consisting of concentric rings of increasing thickness (Fig. 1). Viewed monocularly in bright light, this evokes a radial complementary image which is seen in apparent rivalry with it. If now the stimulus pattern is moved slightly towards or away from the subject, the complementary image is observed to contract or expand rapidly, providing a strikingly sensitive indication of motion in depth. The apparent inference is that the elements the activity of which generates the complementary image are highly sensitive to the spacing of the stimulus-contours. The exaggerated sensitivity of the complementary image could then have somewhat the same explanation as the great sensitivity of moiré patterns to relative movement. An important observation, however, is that the phenomenon does not require central fixation. The pattern may be freely explored with eye-movements without disruption of the complementary image. Any explanation based only on the central symmetry of the retinal receptor-pattern would thus seem to be ruled out.

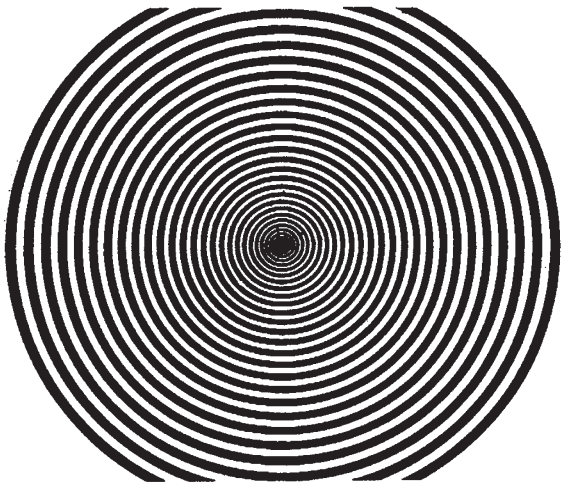

Fig. 1

D. M. MacKay

Department of Physics,
King's College,
London, W.C.2.
Oct. 12.

[1] MacKay, D. M., *Nature*, **180**, 849 (1957).

Lord Cherwell

There is little that need be added to the excellent obituary notice of Lord Cherwell in *Nature* of September 21, p. 579, but I should like to comment on the reference to the work in the Clarendon Laboratories in the 'twenties. It is true that the work was diverse, but any one of the problems being studied might have flared up into a whole school of research, which is indeed what many of them have since done.

Griffith was calculating the electrical conductivity due to electrons and ionized molecules in the upper atmosphere, which might very well have led to the work now associated with Appleton's name; Collie was trying to fix Wilson cloud-chamber tracks in gelatine, anticipating Powell's work at Bristol; I was working on the coherence of radiation at different parts of the wave-front, which is now being investigated by Hanbury-Brown and others. One day Lindemann asked me to apply thermodynamical theorems to chemical reactions at extremely high temperatures, beyond anything then known on Earth. The application to stellar constitution and nuclear explosions would have followed.

Lindemann's uncanny foresight revealed to him the importance of the solution of these problems; but, being himself outstandingly adept with his hands, he was apt to suggest experiments which demanded a technique difficult of attainment. In consequence many of the workers became involved in attempts to construct new types of delicate apparatus, and the solution of the main problem was indefinitely delayed.

H. R. Calvert

North Point,
Church Hill,
Merstham, Surrey.
Oct. 3.

Museums in Britain

The article in *Nature* of October 19, p. 769, on this subject reported that several museums must close unless financial assistance is rapidly forthcoming. The Government at present considers that financial aid is a local matter. The Royal Institution of South Wales (founded 1835) in Swansea is in a similar position to some of the museums mentioned, but fortunately local industry has come to its support. An industrial section is being formed within this Museum, members of the local University College are co-operating, and funds have been provided by industry to prevent closure.

R. B. Southall
(Chairman)
Hugh O'Neill
(Secretary)

Industrial Museum of South Wales, Ltd.,
The Royal Institution,
Swansea.