must ask where such journals still exist. Gone are the days when GEC, MVE, BTH, Reyrolle and English Electric each published such journals, including the one that I considered best of all—AEI Engineering. Mergers, freezes, squeezes and other causes have contributed to their disappearance, much to the regret of many, particularly when one studies the truly magnificent house journals from Continental firms, e.g., those of Brown-Boveri (which I consider one of the finest), Siemens, Merlin & Gerlin and others. Many of these are published in more than one language and therefore have a worldwide readership, with resulting benefits to order books.

The gap in British house journals from manufacturing giants can be reduced if my original plea can be met, i.e., for more practical papers to appear in Proceedings IEE; but, while still urging this, I look forward to the day when the house journals from our overseas offices appear, of which there will challenge those from Continental sources which I have mentioned.—Yours faithfully,

R. T. LYTHALL
6th December 1969

Whither the IEE?

Dear Sir—I wish to present my views on J. K. Wood’s article ‘Whither the IEE?’ (Oct. 1969 E & P, p. 386). I do not agree with Mr. Wood’s views on an optimum age limit of 45 for Members. How about those who achieve membership late in life and haven’t the fortune of qualifying for Fellowship before 45? In fact, age should be no bar to membership, if the IEE is interested in bringing under the royal banner engineers from all ranks of life and in all stages of development (or degeneration). I believe this to be of prime concern to the IEE and an upper age limit is detrimental to the progressive nature of a professional institution.

The core of the older members should be specifically invited to write about their professional experiences in Electronics & Power. ‘Personal glimpses’ and ‘first-person’ features in Electronics & Power might be a change for the better.

Mr. Wood has obviously got the wrong notion that the IEE is ‘to the ultimate benefit of members, industry and the UK’. The truly international character of the IEE is lost in these words, and, willfully or otherwise, Mr. Wood has omitted any mention of the obligation of the IEE to foster the national institutions, and thus keep the IEE insignia in the forefront in countries abroad.

The Head of the Commonwealth is herself the Patron of the IEE, and there is every reason for the IEE to stimulate challenging national programmes overseas, through the branch organisations, whose meetings are always a drab formality. There is more quibbling about the education and training requirements than the genuine desire to erase the colonial image that the IEE is only for confirmation of the appointment by the patronising missions in the countries abroad.—Yours faithfully,

S. C. ARULANANDAM
7a Hydean Way, Stevenage, Herts.
10th December 1969

[Members, whether in the UK or elsewhere, provide those of their ‘organisational drive’—after all, they are the IEE. The funds available to overseas branches are raised by the development of local activities which are regularly underwritten.—Editor]

Woodhead tunnels

Dear Sir—It was interesting to read about the CEGB using a railway asset at Woodhead (Dec. 1969 E & P, p. 435). It is a good sign that the railway between Manchester and Sheffield was electrified in 1954, with a recent extension near to Rotherham.

Readers may be interested to know that this route is to be developed for goods traffic, but the passenger trains are to be withdrawn in January 1970. The replacement diesel service is to use a longer route, via two old and long tunnels, that is not required for goods trains.—Yours faithfully,

G. STREETS
57 Hull Road, Hessle, Yorks.
6th December 1969

MODELS IN PSYCHOLOGY

Dear Sir—I would like to congratulate B. Michael James, on a most informative and interesting article on ‘Models in psychology’ (Nov. 1969 E & P, p. 386). I would like to suggest that, whereas the model may present elements of psychology simply to engineers, as mentioned in the article, it is in itself a process that can be formulated and evolved directly by the engineer, and may eventually explain to psychologists as well what is termed in the article ‘their own sno bar’. From Freud to Jung and Fromm, we find that Jung veered considerably from the theories of Freud; while Fromm psycho-analysed Freud.

I have found it very interesting to compare Fig. 5 with a diagram (see illustration) published in a short article by myself in the 1960 AEI (Manchester) Rotor Magazine. From this article, it will be seen that the kinesioin circuit was recognised, as well as the locomotor and cardiovascular system, as an action subject to control by the superconscious and subconscious (referred to as unconscious in Mr. James’s article). An engineering approach based on the study of the function of each part of the human system providing an input stimulus to the brain or receiving an output from it, together with the functional analysis of this traffic, will, I believe, be very rewarding.

The example of the study of retinas for various animals, including primates, shows not only a complex, but definite, mechanism in action before the information is finally transmitted, via the optic nerve, to the visual cortex or optic tectum, but also that the speed with which the information travels in the form of electrical pulses is dependent on the wavelength of the input signal arriving at the retina. These two lights of different colours flashed simultaneously will be perceived in sequence. A further interesting phenomenon in developing the study of the relation between various centres in the brain from a transfer-function approach, by relating output to input, is the effect of external feedback circuits.

Thus it has been demonstrated that, if a particular frequency picked up from an electronic ophthalmograph, considered to be an output, is fed back as an audio or visual signal via the senses (say, by a flashing light or a sound of that frequency), it will provoke a fit in a epileptic. Electromagnetic feedback has not been attempted, and it will be quite interesting if such experiments could be conducted. This development could have unlimited possibilities, for while the basic processes in the brain are chemical, it is manifested by electrical activity on which the whole communication system is based.—Yours faithfully,

C. N. NASSER
Sheik Abdulah Khalifeh Sabbah Building Rue Mme. Curie, Beirut, Lebanon
27th December 1969

Thinking metric

Dear Sir—Your correspondent, Cmdr. W. M. Phipps-Hornby, need not fear that the ordinary man in the street will require decades to adapt himself to metric thinking (Dec. 1969 E & P, p. 442).

Everyone who goes to live in a foreign land must, to meet a challenge and acquire the habit of adapting one’s thinking to local currency. At first the stranger mentally converts local prices back into his own currency, ‘Ah! 6 pesetas . . . that’s about 9d.’, but, after a very short time, this step is discarded and, for day-to-day amounts at any rate, he thinks in terms of the local units. I have found that the same change occurs with weights and measures, aided, no doubt, by the subconscious discovery that the foreign system is actually much easier to think in.

I am confident that only the very ill educated and the mentally stubborn will find the change of more than passing difficulty. I am not, of course, referring to the practical problem of converting standards, which in certain industries are indeed formidable. 18 months after the change, most Englishmen will be wondering why the conversion wasn’t made earlier; I should like to bet Cmdr. Phipps-Hornby a 50g gin that he will not be upset.

Many IEE members travel abroad extensively in connection with their employment, and it would be interesting to know if they hold similar views.—Yours faithfully,

G. F. BELLAIRS
Largo Antônio Viana, 3-1-E, Lisboa-2, Portugal
26th December 1969

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