

après tout, que toutes choses se soient toujours passées autrefois comme de nos jours ? ” (Roubault, 1949).

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CORRESPONDENCE

THE NAME “THOLEIITE”

SIR,—The widening use of “tholeiite” in areal geology, geochemistry, and geophysics prompts me to inquire whether the name will prove entirely satisfactory as a tool for earth science. Two reasons for doubt will be offered after a brief sketch of the history of the word has been presented.

It was introduced into German petrography by Steininger (*Geogn. Besch. des Landes zwischen d. unteren Saar und d. Rheine*, Trier) in 1840. The authors of the classic Mull Memoir of the Geological Survey of Scotland (1924) selected the old word to designate one of the two magma-types found in the Thulean province of plateau basalts. In 1931 (*Summ. Rept. of Progress, Geol. Surv. of Gr. Britain*, p. 62), and with greater detail in 1933, W. Q. Kennedy (*Amer. Jour. Science* (5), xxv, 256) published the hypothesis that the tholeiitic magma has been so differentiated that it can be described as the parent of the world’s andesite and the grandparent of the world’s rhyolite. In contrast he found another primary magma, of the “olivine-basalt type”, to be the parent of trachyandesite, and grandparent of trachyte, and the great-grandparent of phonolite and other “alkaline” rocks. Three years later Kennedy, in collaboration with E. M. Anderson (*Bull. Volcanique, Internat. Union of Geodesy and Geophysics*, Sept. 22, 1936) postulated for the present geological epoch a thick, crystallized, tholeiitic earth-shell underlying the Sial of the continents and confined to these sectors, and resting on a world-circling, crystallized shell of olivine basalt. In 1949 W. Wahl (*Amer. Jour. Science*, cclxvii, 156–160) expressed sympathy with that view of the outer basic shells of our planet as now constituted. In 1950 C. E. Tilley added still further to the dignity of “tholeiite” when in his Presidential Address to the Geological Society of London (*Quart. Journ. Geol. Soc.*, cvi, 37–61) he argued that tholeiitic magma has been the “primary” source of basic eruptives in deep-sea areas as well as continental areas.

My first objection to giving “tholeiite” such high distinction in earth science has to do with its spelling—a difficulty long felt by the conscientious teacher of petrography who wants his students to go to the roots of things. “Tholeiite” seems to have been derived from the name of a town of the Saar-Rhine district, mapped as “Tholey” in Stieler’s great Handatlas

(1921 and earlier editions). Although Rosenbusch and Zirkel adhered to Steininger's spelling, K. A. Lossen (*Zeit. Deutch. Geol. Ges.*, 1898, p. 258) did not, preferring "tholeyite"—likewise the choice of M. Schuster (*Geog. Jahresheft*, xxvi, 1914, p. 242) and of G. Fischer as late as 1951 (*Geol. Rundschau*, xxxix, 59). J. W. Judd (*Quart. Jour. Geol. Soc.*, xlv, 1890, p. 379) chose "tholeite", as did the editor of the *Summary Rep. of Progr., Geol. Surv. of Great Britain* (1912 and 1913) and also H. S. Washington (*Prof. Paper, U.S. Geol. Surv.*, No. 99, 1917). Incidentally it may be remarked that there is no obvious objection to eliding the first "i" in Steininger's word, if in future it should prove useful to students of rock-types, magmatypes, and the origin of basaltic melts.

The second reason for concern has to do with pronunciation—a trouble only partly lessened if "tholeyite" or "tholeite" were to be adopted for general use. I have not discovered any of the competing names in the New Oxford or any other complete British dictionary. "Tholeiite" does appear in the 1949 edition of Webster's New International Dictionary, published in the United States. There the proper pronunciation is given as "Tō'-li-īt", the editor evidently remembering that in German the "h" of the digraph "th" is silent. Thus there is some difficulty of pronunciation for a word intended for world-wide use, particularly evident if English-speaking and German-speaking petrographers, geologists, and geophysicists have to use it in *viva voce* discussions. One conceivable way to avoid such trouble in international debate on the different theories of the earth's basic shells and magmas would be to replace "tholeiite" by "palatinite", the obsolete name coined by Laspeyres (1867) but re-defined as a basalt that is olivine-free in both norm and mode.

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AGE OF THE PORTSALON CONGLOMERATE

SIR,—It is not quite clear what bearing Mr. Andrew's remarks (*Geological Magazine*, pp. 441–2) have on the question of a Torridon or Devonian date for the patch of red sediments and conglomerates near Portsalon. Either formation could equally well show sedimentary contact with and infiltration into an underlying metamorphosed quartzite of presumed pre-Torridon age. Mr. Andrews refers to the Geological Survey's early dating as based on "the very 'Old Red' look of the sediments". No doubt this was the case; it seems to have been taken for granted without any particular comment in the records of the Geological Survey in Dublin.

There is in fact a noticeable difference between some of the Portsalon conglomerates and those of known Old Red, Carboniferous, and Triassic age elsewhere in Ireland:—the strong development of chloritic minerals in the matrix between the pebbles near Portsalon. (The writer exhibited a specimen of this rock at a meeting of the Geological Society in 1947.) This circumstance, as well as its geographical position, suggests that the possibility of a Torridonian age for this very isolated outlier should not be excluded. The nearest outcrops of Devonian rocks known to me are probably those at Fintona or Pomeroy in N. Ireland, over 50 miles from Portsalon and nearly as far from it as the Torridonian in Islay.

I have not had the opportunity of making a direct comparison between the Portsalon rock and the nearest Torridonian; but it may well be that the metamorphic grade would give a clue to the age of these relatively undisturbed rocks of similar facies.

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