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Thoughts on a notable abstract: Trechmann (1953) reassessed

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Abstract

Charles Taylor Trechmann (1884–1964) was an independently wealthy researcher on the fossil faunas of north-east England and the Antilles. He formulated his theory of mountain uplift in response to the idea of a basal complex beneath the Antilles, proposed by Charles Alfred Matley (1866–1947). Trechmann's ideas on tectonics were promulgated mainly in a series of four monographs that he published privately. In 1953 Trechmann gave a talk on mountain uplift to the British Association for the Advancement of Science, but was refused publication in their journal 'Advancement of Science'. Trechmann implied that the rejection of this short note led to him writing the last and longest of his monographs. This explanation was likely disingenuous. Trechmann had difficulties in publishing his tectonic theory in recognised research journals. Most likely, he wanted to publish in 'Advancement of Science' to reach a wider audience for the mountain uplift theory. His last and longest monograph was probably always planned as a 'last hurrah' as a publishing scientist; Trechmann published little subsequently.

Key words: history of geology, British Association for the Advancement of Science, Jamaica, Basal Complex, C. A. Matley

1. Introduction

Dr Charles Taylor Trechmann (1884–1964) (Fig. 1) was an independent researcher, supported by his personal fortune, with expertise in the fossil faunas of the Permian and Pleistocene of north-east England, and the Cretaceous and Cenozoic of the Antillean region (Donovan, 2001, 2003, 2004, 2008, 2010, 2013). In the 1930s and after, Trechmann's research programme was distorted in response to the assertion of Charles Alfred Matley (1866–1947), of the second Geological Survey of Jamaica, that the island and others in the Antilles rested unconformably on an ancient (Precambrian? Palaeozoic?) Basal Complex

(Matley, 1929, 1932, 1951). That is, the Antilles had a structure analogous to the Lleyn Peninsula of north Wales, where Matley undertook his doctoral research (Matley, 1928; Donovan, 2013). This is an example of localism (Le Grand, 1988, pp. 80–81, 97; Oreskes, 1999, p. 52), Matley 'shoehorning' the geology of a new study area (Jamaica) into the pattern of a region with which the author was already familiar through his fieldwork (Lleyn).

Trechmann had travelled widely in the Caribbean and disagreed with Matley's analysis. It is probable that Matley and Trechmann first 'locked horns' in discussion of the structure of Jamaica (Taylor, 1981, p. 63) before they clashed in print (Trechmann,

1936a, b, 1937; Matley, 1936, 1937). Trechmann considered the ‘Basal Complex’ to be a post-Palaeozoic chimera (e.g. Donovan, 2008, pp. 611–613).

In disagreeing with Matley’s Basal Complex model, Trechmann was in a weak position, having no viable alternate tectonic explanation to propose, at least not initially. Trechmann formulated his theory of mountain uplift, using lunar attraction as a driving mechanism for the tectonic process, based (without acknowledgement) on ideas that were current when he was a student (Hayford, 1911; Oreskes, 1999; Donovan, 2008, 2010). But Trechmann’s ideas were unpopular and few research journals accepted his papers on tectonics (such as Trechmann, 1951, 1958). After Matley’s death in 1947, Trechmann was arguing his ideas in opposition to the Basal Complex theory that was already discarded. His main discussion of his theory was in a series of monographs that were privately published (Trechmann, 1945, 1948, 1950, 1955). It is the genesis of the last of these that I discuss below.

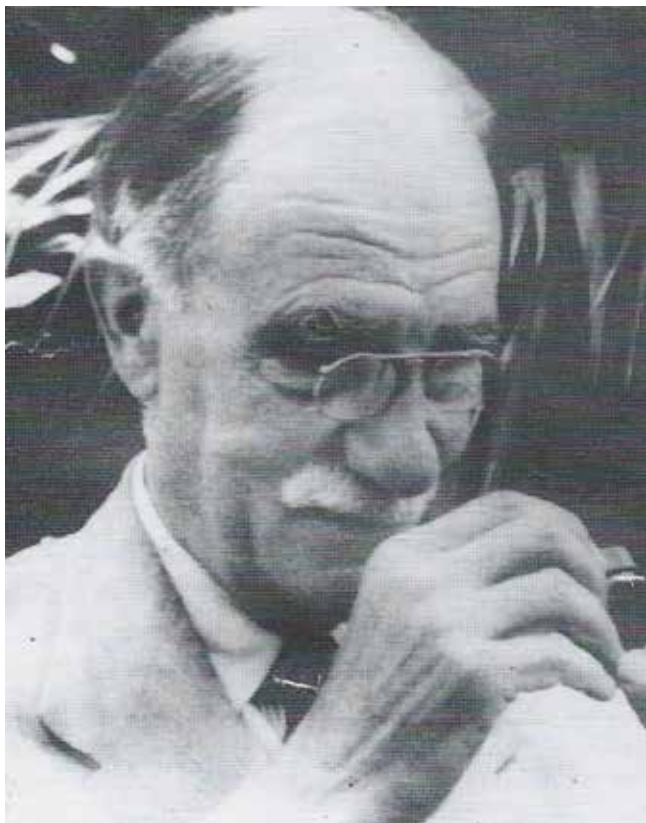


Fig. 1. Dr Charles Taylor Trechmann (1884–1964), date of image unknown (after Donovan, 2008, fig. 1).

2. The British Association, Liverpool, 1953

The British Association for the Advancement of Science (BA) convened for its annual meeting in Liverpool, England, on September 2nd – 9th, 1953. I know of no other public talks concerning his theory of mountain uplift that were given by Trechmann, although they must have occurred, but his most notorious was at this meeting. As Trechmann explained:

“This thesis is an extension of a paper I submitted to the British Association for the Advancement of Science, at its meeting in Liverpool in 1953. It was accepted for reading ... I was given half-an-hour on the last morning, with delays this meant 20 minutes, time to read about one-third of it and no time for any discussion. It was refused publication in the Proceedings with usual excuse, “The Editor regrets, lack of space.”” (Trechmann, 1955, p. 1).

“I put it in a short communication to the British Association in 1953 but it was refused publication. In an orange-coloured publication called *Advancement of Science* it was refused its title and quoted as the “Mountain Uplift Problem” ...” (Trechmann, 1955, p. 64).

This rejection had consequences. The unpublished ‘short communication’ eventually transformed into Trechmann (1955), his longest monograph on the theory of mountain uplift or, indeed, any subject. It was published privately. The cover showed that Trechmann’s indignation at the BA ran deep; he headed the cover and title page as being published under the auspices of ‘The British Association for the Suppression of Science’ (Fig. 2). This is a non-existent organisation and cannot have endeared him to the BA. However, this may not have mattered; in my bound volume of BA programmes of the annual meeting 1949–1954, Trechmann (1953) is his only mention. That is, he was not a regular attendee to the annual BA meetings.

3. The abstract

The purpose of this note is not to re-argue Trechmann’s ideas, which are untenable 70 years later, but to see what has survived of his original presentation.

Recently I was lucky enough to purchase a bound set of programme volumes from BA Annual Meetings, 1949–1954. Trechmann addressed Section C – Geology at 10.00 a.m. on Wednesday, September 9th (Fig. 3).

A feature of a modern conference is the abstract volume. Each talk or poster is accompanied by an abstract, commonly at least 200 words or so long, as decided by the meeting organisers, and summarising the author’s contribution (Donovan, 2017, pp. 39–41). This acts as a short record of the presentation, particularly important when they are not subsequently expanded into a full-length publication.

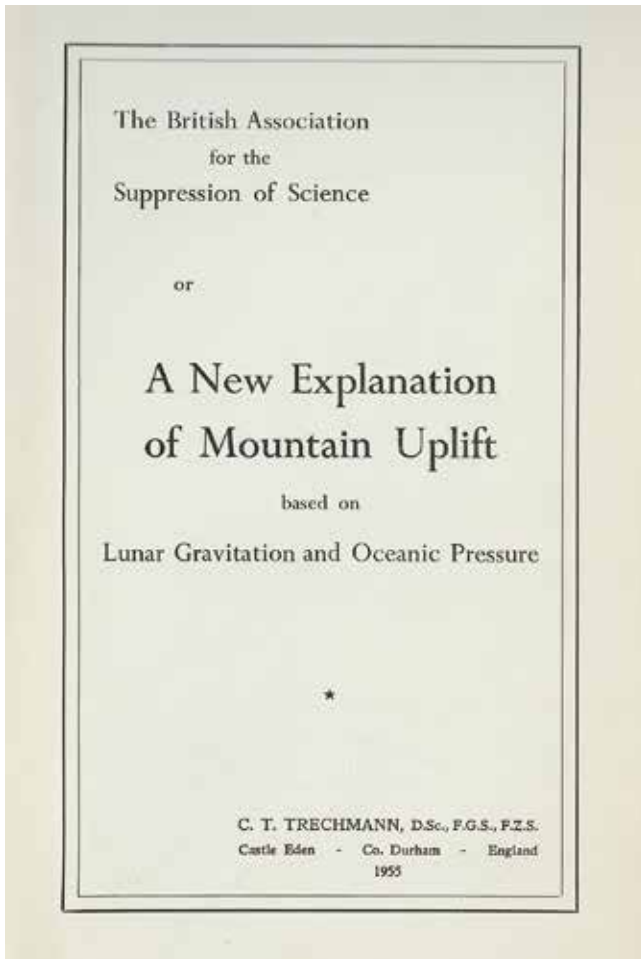


Fig. 2. Title page of Trechmann (1955), the principal statement of the Theory of Mountain Uplift, poorly organised, rambling, with a provocative title and, unfortunately, the most widely known contribution on this subject (see also Donovan, 2008, fig. 8; 2010, fig. 13). Book in author’s library.

It seems that full-length abstracts had not reached the BA by 1953. Each of the talks in Trechmann’s section is accompanied by a brief summary of one or two sentences, no more (Fig. 3). Trechmann’s is the shortest: “A new explanation of mountain uplift based on lunar gravitation and oceanic pressure.” Although grammatically stilted, it is not particularly worse than any of the other abstracts in this session.

4. Discussion

The purpose of the present paper is to examine the origin of Trechmann (1955) from, allegedly, Trechmann (1953). In Trechmann’s own words (see above), it was originally intended to be a “short communication” (Trechmann, 1955, p. 64), yet it was somehow transformed into a monograph of 64 pages. This change was striking, yet I do not believe it has excited comment.

I defined the starting point for this discussion in Donovan (2008, p. 614):

“...*The British Association for the Suppression of Science* ..., [was] an act of provocation only open to someone with the funds to publish privately, but with judgement too poor to recognise the damage that it would do to their scientific credibility [Fig. 2 here]. Such irreverence probably contributed to Trechmann’s poor reputation for over 50 years, which almost certainly derives from this title alone, which must be known to many more geologists than ever read the monograph.”

My own interpretation of the 1955 monograph is that Trechmann’s comments were somewhat disingenuous. The quoted passages above seem to imply that Trechmann only wanted to publish a short communication in ‘*Advancement of Science*’, journal of the BA. The implication is that this was transformed into the 1955 monograph as a response to the, perhaps, cavalier treatment he received from the editor. Instead, I interpret the submission to ‘*Advancement of Science*’ as an attempt to gain a wider audience for Trechmann’s ideas. As already discussed, few research journals published Trechmann’s papers on the mountain uplift theory. We do not know what

other rejections he may have received for other papers except when he reported them (Donovan, 2010, p. 72). Whether the rejected ‘short communication’ was sent to any other journal is unknown, but, if not, why not?

Professor Edward Robinson (written comm., April 7, 2022) has noted that Trechmann’s (1953) far-reaching contribution appeared in a session consisting mainly of parochial papers on the geology of the British Isles (Fig. 3). Although a copy of Trechmann’s presentation manuscript has not been located, the BA organisers were certainly aware in advance of the meeting of the content of his presentation (Trechmann, 1955, p. 1). Even though it was very different in content from the rest of the session, it may be that Trechmann’s contribution did not fit comfortably in any of the planned sessions in 1953.

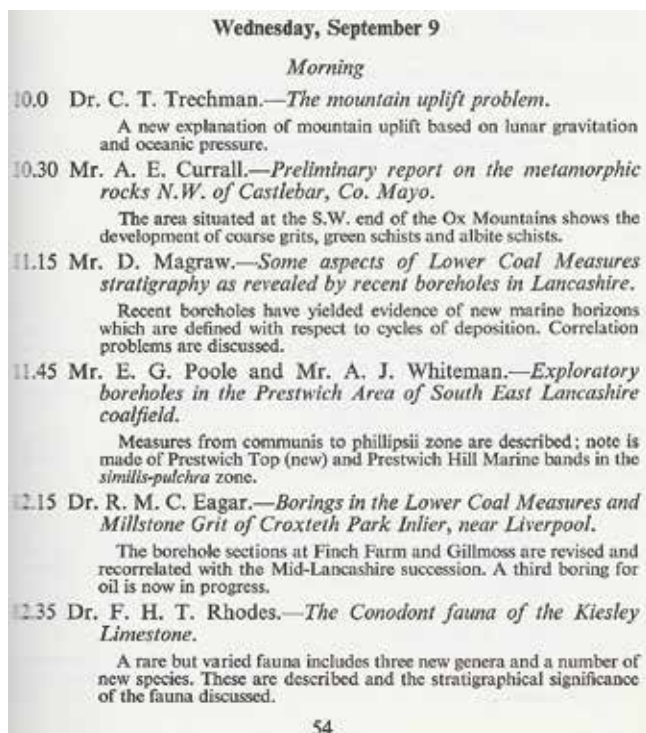


Fig. 3. British Association for the Advancement of Science, Annual Meeting, Liverpool, 1953, programme of Section C – Geology – on the morning of Wednesday, September 9th. Dr C. T. Trechmann was scheduled to speak at 10.00 a.m. (As an aside, note that the title by Dr F. H. T. Rhodes has a spelling error, more correctly ‘Keisley’). Book in author’s library.

Trechmann (1955) was the last major publication of a prolific author. It is likely that this was always intended whether ‘Advancement of Science’ accepted his short communication or not. Trechmann published little after 1955 despite maintaining a programme of fieldwork, at least in the Antilles. In 1955 he was 70 years old and may just have been tired as an author. It is also reasonable to surmise that Trechmann had no more to say about mountain uplift than he had said already.

5. Acknowledgements

I thank my external referee, Professor Edward Robinson (University of the West Indies, Mona), for his perspicuous review comments.

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