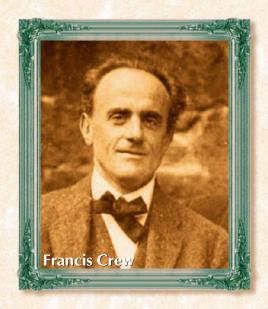
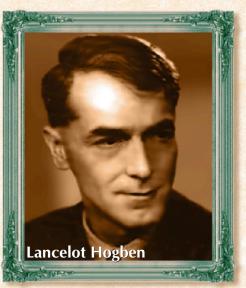
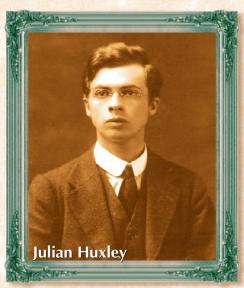
The Early History of the SEB and the BJEB







"The evil effects of the formal divorce of physiology from morphology are strikingly illustrated in the sister science of zoology." This observation was made in 1917 by Arthur G. Tansley (1871-1955) and four of his botanical colleagues in an effort to counteract attempts in certain universities to separate plant physiology from plant morphology in the curriculum. British botanists had, since the 1880s, honoured the physiological approach, while, as Tansley and his colleagues observed, "as a result of the independent development of animal physiology in relation to medicine, zoology has largely become synonymous with comparative anatomy."

These remarks reflected well on the situation within British zoology in the early 1920s that a group of zoologists wanted to resolve by promoting experimental zoology. This group was led by Francis Crew (1886-1973), the director of the Animal Research Department in Edinburgh, Lancelot Hogben (1895-1975), who worked with Crew at the ARD 1922-1923 and was a lecturer at the Physiology Department, University of Edinburgh, 1923-1925, and Julian Huxley (1887-1975), who was a lecturer at the Zoology Department, Oxford University, 1919-1925. My research has, however, revealed that contrary to Hogben's published recollection of the early years of the SEB, which was published in 1966 and has been circulating in the literature since, J.B.S. Haldane (1892-1964) was not one of the "Founding Fathers of the SEB."

The idea to form a Society and Journal to promote the experimental approach in British zoology was born in 1922 in discussions that Hogben had with the famous writer H.G. Wells, Huxley and others. That year Hogben and Crew made arrangements with the editor and owner of the Quarterly Journal of Experimental Physiology, the Edinburgh physiologist Edward A. Sharpey-Schafer (1850-1935), to the extent that they would take over the editorial control of the Journal and make it an outlet for papers on experimental zoology. The cooperation with Sharpey-Schafer did not go through due to difference in editorial policy, thus Crew suggested to Huxley in March 1923 that they should go "ahead with our original scheme" of starting their own journal. They were joined by the Liverpool Professors William Dakin (1880-1952, zoology), James Johnstone (1870-1932, oceanography), Alexander M. Carr-Saunders (1886-1966, sociology) and John McLean Thompson (1887-1977, botany). With the Liverpool quartet also onboard, Crew observed in May 1923 that "all goes well, I think." In subsequent months the group was joined by five other individuals that comprised the first editorial board of the British Journal of Experimental Biology (renamed the Journal of Experimental Biology in 1929), with Crew as the managing editor.

At the board meeting of the *BJEB* in May 1923, it was decided to pursue the idea of an Association and to hold a "preliminary meeting" at the Liverpool meeting of the British Association at the end of August

that year. They had agreed that in the event of a formation of such an Association, Hogben would act as a temporary secretary, which he thought quite natural as he "uniquely" enjoyed the advantage of having his "feet in both camps (zoology and physiology)." Crew chaired that meeting since Hogben did not attend the BA conference. The meeting came to a positive conclusion, after which Crew instructed Hogben to "make arrangements with various people annunciating the possibility of a conference to consider the formation of an Association."

In the process of organising the conference Hogben managed to alienate the Liverpool group that resulted in the socalled "Liverpool ultimatum," where they threatened to boycott the conference if Hogben's organisation of the conference was not terminated. This matter was not resolved for at the end of October, all the arrangements for the conference had been made; as a result, there was no turning back. With this in mind, Hogben insisted that Oxford, Cambridge, London and Edinburgh "could quite well run the conference without the help from Liverpool," which is what happened as no Liverpool delegate attended the inaugural conference that was held at Birkbeck College, London December 21-22, 1923.

Hogben wanted to name the Society "The Association of Comparative Physiologists" but at the meeting it was resolved that "The Society be called the Society for Experimental Biology" and

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"that its official organ shall be the *British Journal of Experimental Biology,*" whose first issue appeared in October 1923. As Hogben noted "botanists turned up in strength as hoped," but this was not reflected in the *BJEB* as very few botanical papers appeared in its first volumes and eventually the Journal became wholly zoological.

The Journal ran immediately into financial and editorial problems. The editorial crisis resulted from the fact that during the summer of 1923 the Cambridge Philosophical Society decided to establish Biological Proceedings of the Cambridge Philosophical Transactions. The BP received all the papers from the Cambridge experimental school, which was the strongest centre of experimental zoology in Britain and was led by James Gray (1891-1975), who edited the BP.

In the spring of 1925 Hogben realised that the BJEB did not have a future unless the Cambridge group joined their efforts. After discussing these matters with the Cambridge zoologist George P. Bidder (1863-1954), Hogben asked Crew to send Bidder a letter formally asking him for assistance. In his letter to Bidder, Crew observed that he was willing to do almost anything to secure Gray's aid; he was even prepared to see Gray as the editor of the BJEB. Crew expressed his hope that Bidder would convince Gray to start cooperation with the SEB group, for if the division was to remain, "both sides must fight" and "before one can achieve complete success the other must succumb."

Bidder's solution was to form the Company of Biologists, whose aim was "to produce or acquire and maintain biological journals with official reference to *The British Journal of Experimental Biology.*" The SEB Council discussed the

new scheme at a meeting on May 29 and expressed its approval of the "steps which have been taken to ensure the cooperation of Cambridge zoologists in the management of the Journal on the lines advocated by Dr. Bidder." The next day, the general meeting of the SEB approved Bidder's plan. In the following months all the arrangements were made for the foundation of the company, which took over the BJEB in the fall of 1925 with Gray as the new editor, while the Biological Proceedings of the Cambridge Philosophical Society was renamed the Biological Reviews that focused on the "publication of reviews of general or special biological interest."

The formation of the COB secured the editorial side of the BIEB but it did not make safe the financial side of the Journal, as financial troubles continued to plague it until the 1930s. In spite of the separation that occurred between the SEB and BIEB with the formation of the COB, the Journal was still financially very dependent of the Society. For one, it was only the Society that could apply for grants to support the Journal from the Royal Society. Another reason was the fact that the SEB delivered profits every year, for the Treasurer's report for 1925 revealed that the Society had "£70 in hand, and the annual income now exceeded expenditure by about £40." The financial troubles of the COB caused some tension between it and the SEB, which resulted in what George P. Wells (1901-1985) referred to as a "Battle Royal in 1931" and again in 1933 between the SEB and the COB.

Every year the SEB allotted £40-50 from its funds to the Journal, but as J. T. Saunders, the Secretary of the COB, emphasised in a letter to Wells, who was the zoological and physiological Honorary Secretary of the SEB, in July 1931, there was "nothing specific in the Articles which gives the SEB control in

any way of the Journal." Saunders' message infuriated William H. Pearsall (1891-1964), the botanical Honorary Secretary of the SEB, and Pearsall wanted to get "absolute control of the COB by gift of 'free shares' or otherwise." He later suggested that the Society should get "shares for every grant they have made, and do make." As an alternative, some SEB members suggested that they ought to "sever the connection between the Society and the Company." According to Wells these issues were left unresolved. This resulted in a "simmering period" in 1932 and part of 1933, but then "a second Battle Royal" flared up in the latter part of 1933.

A joint committee that the Councils of the SEB and COB appointed was established in the fall of 1933 to review the options open to secure the financial position of the Journal. It recommended two schemes, either that all members should receive the Journal, with an ensuing rise in annual fee or to only raise the annual fee for non-subscribing members. The Board of the COB could agree to either option in the beginning of November. A few days later, the Council of the SEB convened to discuss the proposals, but at the meeting a majority of the Council Members expressed their "belief that the arrange-ment of two separate organisations, the Company and the Society, is an un-satisfactory one" and that "the unification of the Company and the Society is very desirable and should be regarded as our ultimate objective." In the beginning of December the board of the COB rejected this proposed unification as they feared "that the Society was not yet ripe to safeguard the efficiency of the Journal." According to G.P. Wells, this letter was the final word in the debate that had existed between the SEB and COB since 1931 over the control of the Journal. From then on "Peace" existed between the two bodies.

This article is drawn from the author's PhD thesis (University of Manchester 2005) entitled, The rise of experimental zoology in Britain in the 1920s: Hogben, Huxley, Crew, and the Society for Experimental Biology.

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