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Information, meaning and physics: the intellectual evolution of the English school of information theory during 1946–1956. (English summary)

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The English School of information theory, so baptized by Warren McCulloch, was no more English than one of its members, Dennis Gabor (born in Budapest), nor quite a school, at least not in an institutional sense. Nevertheless, as the historian Ronald R. Kline observed [*The cybernetics moment*, paperback edition of the 2015 original, New Stud. Am. Intellect. Cult. Hist., Johns Hopkins Univ. Press, Baltimore, MD, 2017; [MR3701410](#)], in the 1950s, Gabor, Donald MacKay and Colin Cherry performed boundary work delineating this area. For the measurement of information in scientific experiments and in communication systems these three all sought to exploit, in one way or another, the formal insights of the “American School” of Norbert Wiener and Claude E. Shannon. The Franco-American physicist Léon Brillouin, who was employed at IBM’s Watson Scientific Computing Laboratory in the early 1950s, is not considered to belong to the English School, but the author argues that Brillouin’s [*Science and information theory*, Academic Press, New York, 1956; [MR0077817](#)] is closer, in a way, to the English School than to the American School, as attested by Brillouin’s reference to lectures and papers by Gabor in his presentation of the negentropy principle of information. A different view, albeit one the author seeks to complement, was advanced by Jérôme Segal [*Le zéro et le un*, Histoire de la notion d’information au XXe siècle, Vol. 1, Éditions Matériologiques, Paris, 2011, [doi:10.3917/edmat.segal.2011.01](#)], who saw Brillouin’s principle as a considered response to Shannon and Wiener’s work, understood in the frame of the evolution of his own wide-ranging, original and cross-disciplinary research in applied mathematics and theoretical physics.

The paper suffers from poor editing, with a repeated paragraph (p. 366), and four misspelled names (Colin Cherry, Ronald Fisher, Margaret Mead, John Tukey).

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