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## Marc Barbut (February 23, 1928 – December 12, 2011)

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In this dossier, shared with the Journal électronique d'histoire des probabilités et de la Statistique (JEHPS) published since 2005 by the seminar of the same name and the Laboratory of Probability and Random Models of the Paris 6 et Paris 7 Universities, along with the review Mathématiques et sciences humaines (MSH) founded in 1962 by the Center for Social Mathematics, now CAMS (EHESS), we give homage to Marc Barbut, co-founder of these two publications and tireless promoter of social, imaginative, and creative mathematics. This type of mathematics has been continually enriched by two sources: the problems of human sciences, which it attempts to interpret and elucidate, and the deep transformations of mathematics itself, particularly in the realms of modern algebra, structures of order and equivalence, discrete mathematics, the probability calculus, and statistics. But this continuous renewal of social mathematics is also enriched by philosophical and social critique and historical reflection.

In all of this, Marc Barbut was not only the promoter but also the relentless actor and author. His autobiography, otherwise rather flat and institutional, and the list of his publications, reproduced at the end of this dossier, can already attest to this tenacity. However, we wanted to be more precise, more human, and more historically focused when acknowledging Marc Barbut's diverse contributions to the human mathematics field, a field he helped develop, criticize, and promote with the aid of G. Th. Guilbaud, for whom Marc wrote the obituary in 2008.

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Marc's contributions have many facets: the first being simply the quality of human relationships he was able to foster with the women and men of his discipline. These testaments to his character can be found in this dossier, specifically evidenced by relationships with Spain of yesterday and today (see Arribas' text), or through certain political acts such as the signature of the Manifesto of the 121 against torture in Algeria, which historian and friend Marc Ferro explains. The second facet of Barbut's activity is also the most visible: his pedagogical talent. He constantly aimed to put his immense mathematical prowess into illuminating yet effective presentations, an effort that also appeared in his contributions to institutions (EHESS, University) explained here by Leclerc and Rosenstiehl, and in his manner of teaching the subtleties of probability to "literary-minded" students without losing any of his usual rigour Armatte; Shafer). This rigour in presentation and calculation is not an impediment or a brake to pedagogical quality, but rather a confirmation of its efficacy, anchored in a deep knowledge of mathematical properties acquired through research, the third component of Barbut's activity. This research allowed him to make important and recognized advances in combinatorial analysis, in algebra, in probability and statistics, illustrated here by some objects of predilection such as the median (Monjardet) and the measure of inequalities (Basulto and Arribas). Finally, beginning in the 1980s, Marc Barbut played a major role, next to Guilbaud, Bru, Coumet and Brian, in the creation, the programming, the animation, and the coordination of the seminar on the history of probability and statistics at the EHESS (Bru). By all accounts the historical culture acquired at the heart of this seminar and in the lectures that Marc dedicated to the authors did not become mere erudition; it informed and strengthened the preceding purely formal study. And his major publications on the stable laws of Pareto-Lévy and the measures of inequality, enriched by an historical and often controversial presentation, should be read and reread.