

Yves Galifret (1920-2013)

With the departure of Yves Galifret, we lost one of the last figures of the close circle of students of the French school of Experimental psychology of Henri Piéron (1881-1964), Professor at the *Collège de France*, encompassing, among others, Jacques Le Magnen (1916–2002), René Chocholle (1915-1986) or Ernest Baumgardt (1904-1969). Yves Galifret entered this scientific circle, inspired by French alienist Édouard Toulouse (1868-1947), when he studied at the *Institut national d'orientation professionnelle* (INOP), where Piéron, a founding member of this institution, noticed Galifret and put him to work of the psychophysical study of perception thresholds of 3D perception (1940). He soon became *aide-technique* in Piéron's laboratory, with funds from CNRS (1942), then *assistant* at the Collège de France (1946), before he became *assistant* and *sous-directeur* of French neurophysiologist Alfred Fessard (1900-1982), Professor of the Collège de France, and student of Piéron himself. Yves Galifret left the Collège de France when he became Professor of sensory psychophysiology at *Université Pierre et Marie Curie* where he remained Emeritus professor.

The scientific work of Yves Galifret follows the initial project of Piéron, described in 1910 as an experimental psychology, escaping the strict frame of Fechner's law, focussed on the analysis of the senses by neurophysiological interpretations based on nervous and neuronal activities. This is a beginning, in a premonitory manner, in the perspective of Louis Lapicque's nervous physiology, of the neurophysiology and neuroscience projects as they emerged in the 1940s, 1950s, and in the international neuroscience movement of the 1960s. The studies of Yves Galifret primarily focussed on the psychophysiological analyses of vision, escaping the absolute description of Fechner's law, and close to Harvard psychologist Stanley Smith Stevens (1906-1973), whose theory gave alternative ways of analyses. Yves Galifret did not work on vision only, but also on tact and the consciousness of time. He trained in electrophysiology in the school of Alfred Fessard at the Marey Institute, a renowned CNRS centre, where he worked with Pierre Buser on the neuronal mechanisms of vision. He also trained in Great Britain and the US in the laboratory of William Maxwell Cowan (1931-2002). At the end of the 1950s, he developed a way to implant fine tungsten electrodes in the brain of pigeon to study the binocular vision of colours. Yves Galifret progressively escaped Piéron's theoretical ideas on the subject. He organised an international meeting in Piéron's honour in 1959. The French scientific program of the neurophysiology of vision, as defined by Piéron, but undertaken by Galifret, is a subtle, fructuous and critical reorientation of experimental psychophysics combining the neurophysiology of the 1930s, with the great technical innovations of the 1950s, which led to a descriptive perspective in Germany as Freiburg German neurophysiologist, Richard Jung, himself acknowledged.

The intense scientific activity of Yves Galifret soon placed him on the international scenes of experimental psychology and neuroscience. He always devoted equal energy to his teaching and to his role as an engaged scientist at the *Union Rationaliste*, where he was General Secretary, and directed scientific activities and publications for more than 50 years. Yves Galifret devoted his great culture, outstanding intellectual curiosity, and scientific expertise to the media and the great societal debates of his time. His communication skills helped him to discuss important issues with his friends, scientists, philosophers and historians.

This rich intellectual life made Yves Galifret a unique Parisian personality. He also wrote articles of history of science, epistemology and philosophy of science. He developed a subtle vision of the history of psychology and brain sciences. His studies were important to the correct understanding of the complexity of the work of Piéron. Yves Galifret had a non reductionist vision of mind where emergentism had a place in the cognitivist perspective of Alfred Fessard or Francisco Varela. Galifret always defended a complex materialist vision of brain mechanisms, far from contemporary often too reductionist accounts. He always fought the illusions of the false sciences as well as dogmatism and simplism.

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