



Organisms



Journal of Biological Sciences



GIUSEPPE SERMONTI. IN MEMORIAM



Giuseppe Sermonti (Rome 1925 – December 16, 2018)

An inspired forerunner

In the night between 15 and 16 December 2018, a brilliant scientist and - much more relevant - a free spirit, left this (relatively comfortable) valley of tears.

Giuseppe Sermonti took a degree in Agronomical Sciences at Pisa University, followed by a Biology doctorate at 'Sapienza University' of Roma. He started his scientific career at the 'International Centre of Microbiological Chemistry' (CICM) of Istituto Superiore di Sanità having Ernst Boris Chain as director. Chain discovered how to isolate and concentrate the germ-killing agent produced by *Penicillium n.*, and predicted the beta-lactam structure of penicillin. For this research, Chain, Florey, and Fleming received the Nobel Prize in 1945. When Giuseppe Sermonti joined the CICM, his interest was the selection of most productive *Penicillium* strains, along this research work he discovered the sexual mating of *Penicillium* and *Streptomyces*, putting the bases of modern industrial biotechnology (Sermonti G., 1969). This discovery opened to prof. Sermonti a brilliant academic career: he was Professor of Genetics

at the Universities of Palermo and Perugia, President of the Italian Genetic Society.

Then, something happened. The free spirit and the refined intellectual at home from microbiology to ancient philosophy, ethnic studies and literature came out and highlighted the menace to creative science hidden in scientist ideology and economy-driven research (Sermonti, 1971; 1974). Sermonti claims, even if still 'out-of-the-choir', are now (more-or-less) freely debated (see Lazebnick's paper in this issue, and also Geman and Geman (2016), but in the seventies this was not the case. Giuseppe Sermonti suddenly became a 'bigot', a traitor of the scientific community. Up to this point, the critics were ideologically oriented and largely unmotivated, but Giuseppe Sermonti was still considered a 'scientist that was wrong'. He was definitely sent to the hell of the enemies of humankind by the (un)Holy Inquisition of correct scientific thought only when he dared to highlight some scientific shortcomings of neo-Darwinian approach (Sermonti, 1999).

Even in this case, he anticipated many nowadays-accepted perspectives in evolution - just as those largely discussed by Denis Noble (2015), but in the nineties,

the situation was different. Mariano Bizzarri told me of the ostracism he had to face from both professors and some fanatic students (members of the communist so-called 'collective of Rome') when he organized a lecture at Sapienza University, in which Giuseppe Sermonti presented his claims and the updated edition of the book *Forget Darwin (Dimenticare Darwin)*. Violent and scientific un-motivated critics, personal threats, letters to the newspapers as well as public petitions to prevent the presentation of the book: the scientist ideology at its worst!

In the meanwhile, Giuseppe Sermonti founded the *Osaka Group for the Study of Dynamic Structures* that took seriously into consideration the ideas of another 'free thinker', as C. H. Waddington, putting the bases of what is now 'regular science' under the heading of 'dynamical epigenetics'. Many prominent (and free-minded) scientists composed the Osaka group: Dave Lambert, Brian C. Goodwin, Atuhiro Sibatani, Franco M. Scudo, Francisco J. Varela, Antonio Lima-de-Faria, Mae-Wan Ho, Lev V. Belousov, Jerry Webster, René Thom, Hugh Paterson, Stephen Jay Gould, together with the brilliant Italian physicist Giuliano Preparata.

Giuseppe Sermonti was right, and his scientific thought revenged, but the battle never ends, free scientific thought is nowadays facing a more subtle menace: no more spectacular 'auto-da-fe' but a glacial silence (and lack of funding) for theses out of the mainstream. To break this deadly ice is the main aim of *Organisms* and this is why we commemorate Giuseppe Sermonti in the 'noisy silence' of other scientific and cultural voices.

References

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