DYNAMIS

Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam

VOLUME 33 (2)

2013

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SEARCHING FOR STONES AND BONES. CATALAN PALAEONTOLOGISTS AND HUMAN ORIGINS RESEARCH IN SPAIN

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Breaking the silence: Palaeontology and evolution in *La Vanguardia* Española (1939-1975)

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ABSTRACT: All traces of evolutionary theories had been removed from the Spanish public sphere during the late stages of the Civil War and early Francoism. Darwin's books were cleared from the shelves of libraries and bookshops and evolutionism was replaced by creationism in primary and higher education manuals. In the public sphere, there was a mixture of concepts concerning evolution that were borrowed from different evolutionary theories, some of them outdated. Talking about evolution in the press meant talking in a nineteenth-century manner about the ape origin of man, materialism and threat to the Catholic faith. In other words, evolution was something unpleasant and dangerous. In this context, certain Spanish palaeontologists went to considerable lengths to try and avoid all of this bad popular imaginary (linking it to Darwinism) and to rehabilitate evolutionism from a finalistic-theistic point of view, which fitted in well with the ideology of the Franco regime. This effort, which succeeded in bringing evolutionism back into the public sphere following a period of «evolutionary silence», was relegated to second place when a new period of regime openness came about. The more scientific jargon of genetics and Modern Synthesis, which was less conducive to origins and theological discussion, fitted in better with the aims of the new regime, thus changing public scientific authority from bones to genes. This paper highlights the ongoing process of the appropriation of evolutionary theory through the case study of the presence and treatment during Francoism of the theory of evolution in the Catalan newspaper *La Vanguardia Española*.

One foot in heaven and the other in science. The productive interactions of Miquel Crusafont (1910-1983)

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1.—Introduction. 2.—Scientific emergence and survival of Miquel Crusafont. 2.1.—Creation of professional networks 2.2.—Strategies of conciliation and ambivalence. 3.—The institutionalization. From the Palaeontology section of the Sabadell Museum to the Catalonian Institute of Palaeontology. 4.—Conclusions.

ABSTRACT: After the Civil War and World War II (and even during it), and under very unfavourable conditions, some Spanish scientists resumed the dissemination of scientific practice and the Spanish palaeontological heritage. Both were of interest to foreign scientists, some of whom interacted with the Spanish researchers over the following decades. One of the latter group was the Catalan palaeontologist Miguel Crusafont Pairó (1910-1983) who engaged in intense professional activity, obtaining results that established him in the national scientific setting and gained him international recognition among colleagues with diverse scientific ideologies, while achieving a position for Spanish Palaeontology in Europe. This article analyzes some of the strategies adopted by Crusafont to overcome spatial and ideological differences and describes his particular activities around the defence and management of sites and collections. All of this allowed him to construct a research career from a province in a peripheral region under the particular conditions of Spain at that time and to lay the foundations of Palaeontology and Palaeoanthropology in contemporary Catalonia.

Miquel Crusafont, George Simpson and the internationalization of evolutionary Palaeontology studies in Spain

1.—Introduction. 2.—Starting a relationship. 3.—Orientations and differences. 4.—International impact. 5.—Conclusion.

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ABSTRACT: Catalan palaeontologist Miquel Crusafont Pairó (1910-1983) was a leading specialist on fossil mammals of the Iberian Tertiary. He also introduced new quantitative approaches to biological evolution into Spain. Despite many difficulties in carrying out research on evolution in Franco's Spain, Crusafont achieved an outstanding position in the international community of palaeontologists. Besides being a competent scientist, he benefitted from the friendship of American palaeontologist George Gaylord Simpson (1902-1984), a major proponent of the evolutionary synthesis. This paper explores the relationship between both scientists and stresses the crucial role that Simpson played in the internationalization of Crusafont's work.

Hominids, doubts and big headlines: The Orce Man controversy in the Spanish press (1983-2007)

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ABSTRACT: In June 1983, several Spanish newspapers announced the discovery of a cranial fragment of the genus *Homo* in Orce, Granada, which seemed a scientific revolution at the time. One year later, the same fossil was attributed to a donkey, as the newspaper *El País* reported. A strident controversy began: the famous «Orce Man» became the «Orce Donkey», the discoverers were criticized for their precipitation and the scientific debate moved to the mass media. Through an exhaustive study of the case in the Spanish newspapers, this article first explores how this dispute unravelled and its relationship with the historical context of palaeontology and palaeoanthropology in Catalonia and Spain. Secondly, this paper seeks to understand why it was impossible to reach a consensus among the scientists dealing with «Orce Man». Finally, analysis of the role of the press in the dispute sheds light on how the media are involved in the generation and validation of scientific knowledge.

The multiple Eudald Carbonell: The various roles of Catalonia's most popular archaeologist

1.—Introduction – the icon of Atapuerca. 2.—The young archaeologist. 3.— The exhibition on Catalonian prehistory in 1976. 4.—Fighter against the «establishment». 5.—Hunter of the «first European». 6.—An advocate for Spanish science. 7.—Fighter against «scientific colonialism». 8.—Communist and «agent of reflection». 9.—The media scientist. 10.—Catalanist and «interdependentist». 11.—Conclusion: from outsider to celebrity scientist.

ABSTRACT: Eudald Carbonell is mainly known for being the co-director of the Atapuerca research project, a hominid site in Northern Spain that boasts

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the «oldest European». In the course of his career as an archaeologist, he has become a highly visible figure, not least because of his incessant attempts to communicate his ideas to the general public. In these past four decades, Carbonell has taken on a host of diverse roles: scientific but also social and political ones. The political and scientific context of Catalonia and Spain since the early 1970s proves crucial in these activities. Carbonell's claim to belong to a «peripheral» scientific community (be it Catalan or Spanish) is a central element in the construction of these roles. At the same time, Carbonell provides an instructive example of the «medialization» of science, transforming himself from an outsider into a celebrity and ultimately into a commodity.

ARTICLES

Divergences around humours in Sanskrit medical compendia

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1.—Introduction. 2.—Substances and flavours. 3.—Humoural correspondences. 4.—Divergences around humours 5.—Localisation and functions of the humours. 6.—Conclusions.

ABSTRACT: This article traces the genealogy of divergences around humours in the Indian medical literature of the classical period, using the Sanskrit editions of the medical encyclopaedias of Caraka, Suśruta and Vāgbhaṭa as primary sources. The basic thesis is simple: Indian medical traditions were developed within the framework of a theory of the humours, but the ancient sources of the Ayurvedic tradition show that there was never full agreement on the nature and functions of the three basic humours (*vata, pitta* and *kapha*). Some considered humours to be physical entities with a specific localisation in the body, while others regarded them as hypothetical entities for the classification of diseases that must be balanced by medical treatment. This ambiguity in their definition, delimitation and application leads to different ways of understanding the human body and its therapies.

Ethics and medicine in Galen's work

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1.—Introduction. 2.—Philosophy and medicine. 3.—Practical philosophy. 4.— Medicine and ethics.

ABSTRACT: In this study, I propose that Galenic ethics need to be understood within the context of medical doctrine. Recently, published work on the relations among Galen's self-fashioning programme, medical methodology and championing of Hippocrates has supported this hypothesis. I emphasize the idea that medical doctrine was an explanation of the concept of a good human life, a tool to be used in furthering the fulfilment of this objective and indeed one of the purposes of medicine. The basis of my argument is that practical philosophy was devised through a biological approach that attested to the existence of an Dynamis 2012; 33 (2): 273-279

organic purpose for those activities with a moral meaning (corporal desires, emotions, passions). This idea legitimizes the intervention of medicine in the realm of human behaviour. If emotions and desires have a physiological role it is surely the concern of medicine to explain them, and it will also, following the theoretical procedures established for dealing with any malfunction, effect a diagnosis and suggest treatment if either or both are unsound. Furthermore, one of the traditional ideas of disease, the imbalance between parts, explains immoral conduct without recourse to reason. In this way reason becomes a sure guide in the formation of character. According to this view, Galen, and by extension medicine, exert an authority within the debate over the causes of the frequent crises in the Roman world, well over and above (in Galen's own words) that offered by philosophy. When Galen proposed an interpretation of existential distress, anxiety and the persistence of evil as imbalances among organic parts, he was alluding to the breaking-up of the structural organization of the body and suggested that the contemporary milieu, which he considered reprehensible, could be attributed by analogy to the disorder in the structure of Roman society.

The «closed woman»: Female impotence in the Middle Ages and medical and legal inspection by midwives

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1.—Introduction. 2.—Surgery for *clausio matricis*. 3.—Reputable women for female physical examinations. 4.—Conclusions.

ABSTRACT: Sexual relationships were established in the 13th century as a prerequisite for confirming or annulling a marriage. Therefore, when a woman was accused of not being physically able to satisfy her marital sexual duties, a group of women had to inspect the wife's body for signs of virginity. This paper focuses on the medical and legal role of midwives in these cases. Latin and vernacular medical texts show there were two schools of thought about who should perform surgery designed to recover her sexual lost potency: the midwife or the surgeon. The Church, however, did not always compel «closed or impotent women» to undergo this surgical intervention, presenting the separation of the couple as an alternative. It is not clear whether midwifes or simply reputable women had to examine the female body before the divorce in these cases. Mediaeval ecclesiastical decrees use terms such as *matrona* or woman, but the present paper demonstrates that these refer to midwives.

DOCUMENTS

A late fight to defend the localist theory. Two letters from Hauser to Pettenkofer

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ABSTRACT: In this paper, I present two new letters between the German epidemiologist and hygienist Max von Pettenkofer (1818-1901) and his former disciple Philipp Hauser (1832-1925) on the occasion of the latter's award of the 1888 *Prix Bréant* for his research on the Spanish cholera epidemic. In the first letter, dated 26 December 1888, Hauser expounds his views on the localist theory. In the second, on 27 November 1892, he describes his objections to Koch and the bacteriological approach, based on its ineffectiveness for fighting infectious diseases.

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