

Francesc Español (1907-1999), exemplary biologist and naturalist

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Possibly because I am another of the survivors of a rather hectic period, which offered some hopes, very few of which ever effectively materialized –not even in the field of science– some friends asked me to write a few lines in memory of Francesc Español i Coll, one of our hardest working and most effective (and, therefore, eminent) naturalists, who died last summer on 29 June 1999. He had been retired for some time and suffered from a long, drawn-out illness, but he remained devoted to his dear science to the end. I suppose his last important work was the 195-page monograph he wrote for the *Fauna Ibérica* series on the Adnobiidae or borer beetles, about which he was an expert with all-encompassing knowledge.

The life and activities of Francesc Español have been presented as exemplary on occasion, and more than once by myself (see: *Francesc Español, 50 anys d'obra biospeleològica*, a 673-page volume published by the "Federació Catalana d'Espeleologia y la Diputació de Barcelona" (Catalan Federation of Speleology and the Provincial Council of Barcelona), 1981, and *Quaderns de Vilaniu*, 14, 109 pages, Institut d'Estudis Vallencs, 1988). These two volumes provide sufficient information mainly about his previous scientific activity and attempt to give an overview of the life and miracles of our departed friend, a true and complete "naturalist", a term that is rarely heard any more, except for stray references in nature documentaries. Meanwhile, most press and television journalists speak only of molecular and genetic biology and now and then dabble in a kind of picturesque ecology.

Commentaries have appeared in a number of publications on the activities and merits of Francesc Español. I certainly do not con-

sider myself authorized to attempt to give a complete overview of his life in this short text in memory of a dear colleague. He was a tireless worker and I can say from my own experience that he helped everyone who asked him for advice or information and he was always ready to lend a hand. We should all be lucky enough to be able to say the same. He was a good-natured man who was always eager to help anyone who asked him for clarifications or advice.

The nature of this text and the journal where it appears may lead us to think more about his scientific activity than his human and personal qualities. I sincerely believe that his life and scientific activities currently represent the model of a function that is too often underrated, especially now and especially in Barcelona. Specifically, it is the cultivation of taxonomy, fauna and studies on the distribution of the species and, in relation to that, the corresponding aspects related to disseminating the information and museums.

Museums continue to be important and should not become circus sideshows. It is surprising to note that we are quick to appreciate human artistic expression and yet are too cold to see or value the profound beauty of nature or the fact that our own history makes us a part of it. We are insensitive enough to evade our complete historical immersion in living nature. Judging by what I have read and seen, there seems to be a growing interest in the images offered by the life sciences, with the corresponding implications. We might also draw the same conclusion from the number of students who register each year to study the so-called life sciences. It is also true that politicians and

journalists are constantly talking about biological diversity and conservation, i.e., life sciences. Every day the television introduces images of life into our homes that could be very instructive, generally in scenarios very different from the ones we are accustomed to. But no one would deny that other complementary approaches that might help us understand the mechanisms and meaning of life in more detail, by showing us life itself, its mechanisms and meaning, are far removed from the programs that are usually broadcast.

Some intellectuals are horrified by the opinions recently voiced against the theory of evolution and how such ideological conflicts are created and propagated in the United States. But the truth is that Spanish intellectuals as a whole have never demonstrated full and general acceptance of the Darwinian theory of evolution. Rather, the notion is accepted superficially in some intellectual circles, but without questioning it and only as an argument to support certain philosophical perspectives, with the aim of opposing overly traditional aspects of religion, but never in a positive or correctly critical way.

I see that as a general fault here in Spain and possibly not only here, where, despite all that has been said, Darwinism never sparked much interest. Not even among so-called "progressive" attitudes was it truly welcomed. We should be aware that a better vision of the unity of nature could be a more convincing argument for doing or not doing specific things, than the threats (explained poorly and understood even less) of the hole in the ozone layer or global warming. It is a shame how often ecology is used as an argument for commercial or political reasons.

But, naturally, transmitting a more profound and intellectually more satisfactory image would involve changing the vision of our so-called city council representatives. Barcelona has a considerable debt with culture and everything that has to do with nature, which has been down-trodden for too long. It is clear that the activities of a few researchers such as Francesc Español, various botanists and other scientists, whose names need not be mentioned, exacted extraordinary effort because they were performed in the face of resistance that should never have existed. This fact constitutes a very negative argument

against believing too earnestly that Barcelona is a center of culture.

Español suffered the consequences of that situation, as have many students of recent generations. It is not the job of universities to take the place of museums. Nor should universities be responsible for the coordination of biological, physical and naturalistic points of view which logically and satisfactorily create a general interest in nature that results in a positive and effective way of treating living nature.

I recently wrote, "History or, more specifically, evolution, might reveal relations of descent or continuity, but this time structure can reflect the most diverse results, which should provide a satisfactory explanation. This explains Darwin's perplexity and success when faced with the panorama of the organic world, which called for logical order." As an ecologist, I still feel the same way, even at times, like now, when the in-depth focus on living nature is concentrated on the molecular or biochemical point of view. But our culture does not have enough naturalistic character to assimilate all the points of view we are bombarded with. The intermediate stages, the demands and the response, which necessarily involves evolution, are not expressed enough and are sometimes never voiced at all.

It is always gratifying for me to write about facts or people that show us we are not useless and that we can, if necessary, find enough of the right inspiration to build a culture with fewer cracks in it. But it is not easy to see the relationship between so-called molecular biology and the images and documentaries that show us large and small plants and animals in action, especially with the fantasy-world zoology invented to entertain and quite possibly to destroy the limited biological education our children receive.

The need for these intermediate stages, which are necessary in order to understand organic variety—that blessed "biodiversity"—should not be used as an excuse to go back to the old, poorly prepared exhibits of animals in classical-style museums, but should make us realize that we need natural history museums, regardless of how modern they are, and that their various functions should be preserved in modern culture.

Respect for nature must be combined with

respect for the museum visitor, who also forms part of nature. The truth is that we are all nature: nature that rolls into the great circle of life.

Some museums have gone or are going through this process successfully: they are able to make their exhibits attractive and spectacular and are abundantly equipped with a wide range of resources to stimulate visitors enough to make them think along Darwin's lines or other scientists' lines if they want. All we ask for is a little in-depth reflection without any of the political or commercial pressure about what ecology actually is. Many old museums still have fabulous collections of such things as mollusks and insects. Barcelona has collections that have never been properly displayed. For anyone really interested in nature, drawings and models (despite all the careful design that goes into them, not to mention the often erroneous ideas of model makers) cannot take the place of direct contemplation of the original material. A simple taxonomic arrangement that attempts to express kin-

ship is an endless source of ideas when its relationships are considered in light of the march of evolution in the colonization of the real world.

I hope this recollection of Francesc Español, who will live among us for many years and who was aware of these and other limitations more than anyone, will make all of us, who, for one reason or another, feel we are responsible for educating people, think a little bit and stop all this talk of diversity, sustainability, holes in the ozone layer and the greenhouse effect, and go back to the principles that are closer to the contemplation of nature, including the nature of the human species, without so much artificiality. May the memory and spirit of our dear Francesc Español, who dearly loved his beetles, inspire us along the way.

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