ANNUAL REPORT: COVA GRAN 2016 FIELD SCHOOL

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Meeting to explain the work plan of the day:

Since 2004, Dr. Jorge Martínez-Moreno and Dr. Rafael Mora from the Centre d’Estudis del Patrimoni Arqueològic of the Universitat Autònoma of Barcelona have co-directed the excavation of the Cova Gran (Catalunya, Spain). Dr. Alfonso Benito Calvo from Centro Nacional de Investigación Evolución Humana (Burgos) coordinates the geological studies. This season, Dr. Sirio Canos Donay from Institute of Archaeology-University College of London (United Kingdom) participated as Teaching Assistant (TA) in the training actions with the participants.

From June 26 to July 30, 10 students from Institute Field Research (IFR) and 5 staff members composed the archaeological team. The orientation of the field season was addressed to the participants acquire basic strategies related to the excavation in Paleolithic sites. The main goal was to increase the general understanding of the fieldwork practice and how the methodological decisions affect the interpretation of the archeological record. Cova Gran is a privileged archaeological site, key to analyze last 50,000 years of human presence in northeast of Iberia. At the same time, this settlement is not as easy to dig because due to their complex site formation history. In this sense, the excavation is challenging, and it is an excellent place to familiarize the participants with the difficulties resulting from the fieldwork activities.
**Fieldwork strategy**

In this season, the fieldwork was mainly focused in sector Ramp –R-, specifically in the rich Middle Paleolithic sequence. In previous years it was detected that this deposit was cut and filled by a new sedimentary body containing an unknown chrono-cultural sequence. This complex history should be determined by ongoing geological studies and will allow to characterize this new sector (named sector T) which may correspond to the early phase of the MIS 2 period (between 30-20 Ka). Namely, sector T will be essential to complete the Cova Gran chrono-cultural sequence and to characterize hunter-gatherer lifestyle in a phase where human presence at the southern Pyrenees is completely unknown.

This issue led to reorganize the fieldwork strategy to explore the relationships between the sectors S and T, which obliged to postpone the excavation of other areas, as was originally planned. This reorganization significantly affected the objectives of fieldwork. The involvement of participants IFR has been key to tackling the excavation in areas which provided limited information. It need to be said that this season has been successful thanks to the rapid understanding by the participants of the objectives and methods of excavation. Issues like to dig with the specialized tools used in Cova Gran, to follow irregular archaeological levels in an uncomfortable sedimentary deposit, are apparently simple skills but this is not always the case when participants have little or no experience in fieldwork, and usually it is not until the third week when they acquire these capabilities, always under direct supervision of the staff. In the 2016 season, participants have acquired these skills very quickly. This acquisition of technical expertise has enabled the IFR participants encompass within the excavation strategy generating positive synergies to address the research questions. Participants formed an integrated team that acts in coordination with the staff.

The excavation is a fundamental part of the project, but not the only one. Laboratory activities are essential for the development of the excavation. These tasks involve washing, labelling, initial classification of artifacts and database work. These systematic procedures made possible that the archaeological material recovered in the field, was daily updated in the database to have accurate information about the progress of the field work.

This information will revert in the excavation, evaluating the fieldwork decisions and if necessary rectifying them. These issues have been discussed in detail Martinez-Moreno et al. (2015). To implement this systematic is essential the integration of the participants, and this season their commitment were total.

Talks about general lab work and tool classification were conducted. The focus was on the classification and seriation elements of tool identification and the importance of context. Within a few days, students were able to work independently and conduct group discussions about object identification, function, and use. They acquired excavation skills, participated in digging, coordinating, selecting artifacts while screening, cleaning material, data base input, and discussions during lab work.

**Research dissemination**

Cova Gran is a long-term project started in 2004 and is planning to pursue over the coming years. Some innovative lines of investigation have been initiated, and a broad strategy of
scientific dissemination in international workshops. As a result, a significant number articles on Cova Gran have published, which are available in Scopus (www.orcid.org/0000-0002-6326-7058). This season extended our knowledge of this settlement, identifying new chrono-cultural sequences, hitherto unknown.

New analytics have been applied to understand hearths and pen-deposits site formation processes, and we are expecting their results next year. At the same time, the following articles referring to Cova Gran they have been published in scientific journals

- Polo-Díaz, A. et al. 2015. Formation processes and stratigraphic integrity of the Middle-to-Upper Palaeolithic sequence at Cova Gran de Santa Linya (southeastern Prepyrenees of Lleida, Iberian Peninsula). Quaternary International. doi:10.1016/j.quaint.2015.10.113
- Mora, R. et al. 2016. Contextual, technological and chronometric data from Cova Gran: Their contribution to discussion of the Middle-to-Upper Paleolithic transition in northeastern Iberia. Quaternary International. doi.org/10.1016/j.quaint.2016.05.017
- Martínez-Moreno, J. et al. 2015. From site formation processes to human behaviour: towards a constructive approach to depict palimpsests in Roca dels Bous. Quaternary International. doi.org/10.1016/j.quaint.2015.09.038

Although the latter publication does not focus specifically on Cova Gran, it presents the theoretical and instrumental basis of the field work methodology, becoming a key text to analyze our project in Cova Gran. Another informative article summarizing the archaeological Cova Gran project has been accepted in Current World Archaeology Magazine.