

# From the Archaeological Record to Virtual Reconstruction

The Application of Information Technologies at an Iron  
Age Fortified Settlement  
(San Chuis Hillfort, Allande, Asturias, Spain)

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José Lombardía Zardaín (1913-2004)

Francisco Jordá Cerdá (1914-2004)

Alfonso Pérez Garrido (1930-2017)

*In memoriam*



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*Dedicated to Paco, Laura and Sara: Semper fidelis*

# Prologue

It was around sixty-six years ago when José Lombardía Zardaín (1913-2004) -a carpenter from the Council of Allande (Asturias, Spain)-, who was an archaeology enthusiast, discovered what seemed to be a hillfort in mount San Chuis. Quite wisely, he alerted Alfonso Pérez Garrido (1930-2017) right away. The latter was a merchant from Pola de Allande, the capital of the mentioned council, a man with a strong interest for knowledge and the preservation of the historical remains found in his land. A few years later, in 1955, Alfonso Pérez Garrido notified the then Head of the Archaeological Research Department from the Asturian Provincial Council and Director of the Archaeological Museum of Oviedo, Francisco Jordá Cerdá (1914-2004), the finding of a stone with some carvings during the forestry works that had taken place in the Council of Allande. Francisco Jordá Cerdá went to Pola and payed a visit to the site of the carved stone. After the purpose of the journey had been completed, Alfonso Pérez Garrido disclosed to him the existence of the hillfort found by José Lombardía Zardaín some years earlier. Immediately, they paid the latter a visit to his carpentry workshop in order to climb up to the San Chuis hillfort that very same day and perform the first scientific survey. The archaeological diggings started in Summer of 1962 and continued until the following Summer, under the direction of Francisco Jordá Cerdá. The archaeological works at the hillfort were interrupted for more than fifteen years, until 1979, when the very same director who had started the works resumed them; by then he was a Professor of Archaeology, Epigraphy and Numismatics in the University of Salamanca, and this time the leader of a large team of students, graduates and specialists from several Spanish and Portuguese universities, who Summer after Summer worked in the settlement until 1986.

All these archaeological works brought to light a large part of the hillfort of an approximate stretch of 2000 square meters and provided a large quantity of archaeological information, which was carefully obtained and recorded following a very detailed methodology. During the years that had elapsed since the end of the diggings to the present, researchers who belonged to Francisco Jordá's team and some new members who were gradually incorporated to the working team of San Chuis worked intensely in the production of a digital cartography of the settlement, a geophysical survey of the unexcavated areas, an stratigraphy of the site and its chronology through a program of radiocarbon dating, an analysis of the urban planning and defences, an study of ceramic, lithic

and metal remains and an analysis of the faunal and anthracologic remains.

Finally, the author of the present book, Juana Molina Salido, had the courage to accept my proposal for doing her doctoral dissertation using all the existing data, documents and knowledge about the hillfort, which we had accumulated along the years. The goal of her work was the integration of all these data, reports and publications in a spatial data infrastructure using the new information and communication technologies for their future adequate preservation, with the aim of making them available to the scientific community and for their outreach and dissemination to society. The result of this effort is the book the reader is now holding, together with the complementary information which can be browsed at the Archaeopress website. A book which gathers the history of the hillfort's research, campaign after campaign, analysing its archaeological register; but which above all focuses on the spatial data infrastructure and on the analysis of the archaeological remains, both constructive and artifactual, in order to attain an innovative proposal of a virtual 3D reconstruction of the settlement, that will allow its observation from a different perspective. Ultimately, the material contained in this work represents a step forward in the archaeological practice, for it allows to reconstruct the traces of the past in a very attractive manner, and can be used for virtually visiting the settlement through a website specially created for that purpose, and even for a future construction of a centre for the interpretation of the hillfort; in essence, it provides a great chance to give back to society the results of a research undertaken with public funding.

Sixty-six years have elapsed since the hillfort's discovery and many have been the people who have worked investigating and defending its archaeological record. For this reason, I want to remember specially here the three persons who intervened in its discovery, José Lombardía Zardaín, Alfonso Pérez Garrido and Francisco Jordá Cerdá, as well as all the neighbours, students and graduates who participated in the diggings and the researchers who have worked with its archaeological record. Finally, I wish to highlight the enormous effort made by the book's author, Juana Molina Salido, who undertook her doctoral dissertation without any institutional financial support, as well as the wise contributions of Professor Gonzalo Ruiz Zapatero, co-director of the dissertation, and of course, the enthusiasm expressed by David Davison, editor of Archaeopress, in fostering the publication of this book,

and the great work of Darko Jerko, who was in charge of the complex layout.

I wish to put an end to this prologue with a consideration. Since the first publication by Professor Francisco Jordá Cerdá, the San Chuis hillfort has always been a first line reference in the study of the Asturian Iron Age. More than fifty years have elapsed since it was unearthed for the first time, and now, we have in our hands a

beautiful book which gathers, in a quite synthetic way, the different investigations undertaken. It will surely become a new reference in the research of the Spanish Iron Age; however, the book does not represent the end of the archaeological investigations in the San Chuis hillfort, quite the opposite, it opens a pathway for proposing new hypotheses and for the development of new lines of research. The San Chuis hillfort and its discoverers deserve it.

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