

Collapse from within? Social rebellion and the end of the El Argar in south-east Iberia (c. 1550 BC)

Bárbara Bonora Soriano, Adrià Moreno Gil, Marcello Peres, and Roberto Risch

The secret of historic change through the utilisation of political power resides precisely in the transformation of simple quantitative modification into a new quality, or to speak more concretely, in the passage of an historic period from one given form of society to another.

That is why people who pronounce themselves in favour of the method of legislative reform in place and in contradistinction to the conquest of political power and social revolution, do not really choose a more tranquil, calmer and slower road to the same goal, but a different goal.

(Rosa Luxemburg 1899, 50)¹

Zusammenfassung

Zusammenbruch von innen heraus? Soziale Rebellion und das Ende von El Argar in Südost-Iberien (ca. 1550 v. Chr.)

Die Rebellion ist ein zentrales Konzept in der politischen und sozialen Theorie; ihre Identifizierung in prähistorischen Kontexten stellt jedoch eine erhebliche methodologische Herausforderung dar, da sie Dimensionen wie kollektives Handeln, Intentionalität und Machtverhältnisse umfasst, die keine direkten materiellen Spuren hinterlassen. Dieser Beitrag untersucht die Tragfähigkeit der Rebellion als analytisches Konzept in der prähistorischen Archäologie anhand des Zusammenbruchs von El Argar (südöstliche Iberische Halbinsel) um 1550 v. Chr.

Um dieser Frage nachzugehen, entwickeln wir einen interpretativen Rahmen, der archäologische, bioanthropologische und paläoumweltliche Indizien integriert, um Brüche in den Mechanismen sozialer Reproduktion zu identifizieren. Die Analyse konzentriert sich auf Veränderungen von Siedlungsorganisation, Produktionssystemen, Bestattungspraktiken und Bevölkerungsentwicklung während der letzten Jahrhunderte von El Argar.

Die Ergebnisse legen nahe, dass der Zusammenbruch des argarischen Systems nicht allein durch Umwelt- oder Wirtschaftsfaktoren erklärt werden kann, sondern besser als Ergebnis zunehmender interner Spannungen zu verstehen ist, die in einem Prozess sozialen Zerfalls gipfelten. In diesem Sinne wird das Konzept der »sozialen Rebellion« als heuristisches Modell vorgeschlagen, um die beobachteten Transformationen als eine Form von internem Konflikt und struktureller Neuordnung zu interpretieren.

Schlagwörter Rebellion, Konfliktarchäologie, El Argar, Bronzezeit Iberiens, Sozialer Wandel

Summary

Rebellion is a central concept in political and social theory, however, its identification in prehistoric contexts poses significant methodological challenges, as it involves dimensions – such as collective agency, intentionality, and power relations – that leave no direct material traces. This paper examines the viability of rebellion as an analytical concept in prehistoric archaeology through the case of the collapse of El Argar (southeastern Iberia) around 1550 BC.

To address this issue, we develop an interpretative framework that integrates archaeological, bioanthropological, and paleoenvironmental evidence in order to identify patterns of rupture affecting the mechanisms of social reproduction. The analysis focuses on transformations in settlement organisation, productive systems, funerary practices, and demographic dynamics during the final centuries of El Argar.

The results suggest that the breakdown of the Argaric system cannot be fully explained by environmental or economic factors alone but is better understood as the outcome of accumulated internal tensions that culminated in a process of social disarticulation. In this sense, the concept of »social rebellion« is proposed as a heuristic model to interpret the observed transformations as a form of internal conflict and structural reconfiguration.

Keywords Rebellion, archaeology of conflict, El Argar, Bronze Age Iberia, social transformation

¹ Das ganze Geheimnis der geschichtlichen Umwälzungen durch den Gebrauch der politischen Macht liegt ja gerade in dem Umschlage der bloßen quantitativen Veränderungen in eine neue Qualität, konkret gesprochen in dem Übergänge einer Geschichtsperiode, einer

Gesellschaftsordnung in eine andere. Wer sich daher für den gesetzlichen Reformweg anstatt und im Gegensatz zur Eroberung der politischen Macht und zur Umwälzung der Gesellschaft ausspricht, wählt tatsächlich nicht einen ruhigeren, sicheren, langsameren Weg

zum gleichen Ziel, sondern auch ein anderes Ziel, nämlich statt der Herbeiführung einer neuen Gesellschaftsordnung bloß unwesentliche Veränderungen in der alten.

(Rosa Luxemburg 1899, 50)

Introduction

Since its beginnings, archaeology has sought to explain the historical dynamics that gave rise to diverse social formations, as well as the changes, continuities, and transformations they experienced over time, including those that led to their collapse or reconfiguration².

During the conference from which this monographic volume and its contributions are derived, the qualitative and quantitative differences faced by historical and prehistoric studies became particularly evident. The analysis of social processes in Prehistory requires specific approaches, largely mediated by archaeological practice, and distinct from those developed for the study of societies with written documentation. The differential preservation of the archaeological record, the fragmentation and incompleteness of the evidence, issues of context and formation processes, difficulties in inferring social and ideological dimensions, and problems of temporal resolution associated with wide margins of error of ¹⁴C dates, as well as the inevitable interpretative biases of researchers, all compel the construction of interpretations based on biased material evidence, significantly conditioning the scope of possible inferences.

These difficulties become even more evident when the object of analysis is rebellion, a phenomenon whose identification and characterisation in prehistoric contexts pose specific theoretical and methodological challenges. Unlike other historical processes, rebellion necessarily refers to dynamics of internal conflict, relations of power, and forms of collective action – dimensions that leave no direct material evidence and can only be approached indirectly through the integrated analysis of different archaeological indicators.

The concept of rebellion has occupied a central place in philosophical, political, and social thought, where it is commonly defined as a collective action oriented toward the rupture of a pre-existing order of domination. From its Latin etymological root (*rebellio, re-bellare*), rebellion implies not only the exercise of violence in all its forms, but the renewal of conflict against a recognised and established authority, presupposing a prior relationship of subordination and an – explicit or implicit – questioning of the legitimacy of power. In classical and modern political philosophy, authors such as J. Locke (1689) and J.-J. Rousseau (1762) linked rebellion to the loss of legitimacy of power. From a materialist perspective, K. Marx (1867) and K. Marx/F. Engels (1848) interpreted collective resistance – understood as class struggle or revolutionary action – as a response to structural exploitation rather than to conjunctural crises. For H. Arendt (1958; Arendt 1970), rebellion arises when power can no longer reproduce itself symbolically and increasingly relies on coercion.

These interpretations have been expanded by emphasising that rebellion does not necessarily manifest itself

through episodes of overt violence. In this sense, from very different perspectives and life experiences (state socialism and capitalism), V. Havel (1978 [2018]) as well as J. Scott (1985; Scott 1990) have argued that processes of resistance often begin through everyday practices of disengagement, desertion, sabotage, or symbolic rejection, which precede – and sometimes replace – direct confrontation. Despite their differences, these perspectives share a fundamental idea: rebellion does not constitute a form of indiscriminate violence, but rather a form of political force or, more broadly, a rupture of the mechanisms that sustain a given social order. They also express that resistance (German *Widerstand*, i.e. to »to stand against«) is the first action exercised by individuals and communities, consciously and unconsciously, in front of established powers.

While the concept of rebellion is abstract, an uprising (German *Aufstand*, i.e. »to stand up«) requires a very specific, concrete practice. R. Luxemburg (1906) argued that revolutions are the outcome of a long, uncontrollable, and often illogical sequence of acts of resistance, demonstrations (*Demonstrationsstreiks*), fighting strikes (*Kampf-streiks*), uprisings, and revolts. According to S. Žižek (2007), uprisings such as those in the 21st-century Parisian banlieues do not necessarily follow a political program or an articulated project, but rather express a radical rejection of the dominant system. Although developed in the context of contemporary societies, this perspective highlights that processes of social rupture do not always require explicit ideological formulation.

When uprisings expand in time and space and develop into revolts and rebellions, new forms of social cooperation and organisation emerge. In this process, existing vocabularies are re-signified, while new words, gestures, and symbols are created. As T. Negri (2017, 38–39) emphasises, revolts possess a creative force with strong linguistic, symbolic, and performative dimensions. The centrality of language in these processes often culminates in the production of manifestos.

Relevant to archaeological theory and practice is Luxemburg's emphasis on the lasting material and psychological impact (*Wirkung*) of uprisings, however limited in time and space they might be³. Such processes affect both material conditions and forms of consciousness and perception, including artistic expression, and in doing so, produce an *archive of traces* (cf. Caygill 2013, 49). These *traces* are generated through force, which is substantial to all forms of resistance and rebellion, although disproportionately exercised by established powers rather than by resisting groups. The blatant asymmetry and brutality in the deployment of violence by states and empires against popular movements is so recurrent that it may be considered a structural historical pattern. Historical examples from different periods illustrate this dynamic, even if their specific forms and intensities vary considerably. See Ramos et al. on the Morisco revolts in south-

2 Childe 1951; Lumbreras 1974; Renfrew 1984; Spriggs 1984; Tainter 1988; Yoffee/Cowgill 1988; González/Risch 1990; Bate 1998, Schwartz/Nichols 2006; McAnany/Yoffee 2010; Middleton 2017; Villalobos 2022; Milevski 2023.

3 *Das Kostbarste, weil Bleibende, bei diesem scharfen revolutionären Aufund Ab der Welle ist ihr geistiger Niederschlag: das sprungweise intellektuelle, kulturelle Wachstum des Proletariats, das eine unverbrüchliche Gewähr für sein*

weiteres unaufhaltsames Fortschreiten im wirtschaftlichen wie im politischen Kampfe bietet (Luxemburg 1906, 22).

ern Spain, and contributions in this volume on early modern peasant uprisings; the Napoleonic repression and killings following the Black uprisings in Haiti; the poorly armed Irish uprisings of the early 20th century; the recent unarmed Catalan revolts for independence, just to name a few; or Goya's *Los Desastres de la Guerra*. Physical harm or direct violence against persons is often limited or absent in many uprisings and revolts, yet it remains one of the primary means through which established powers respond.

Therefore, the archaeological identification of the traces of resistance, uprising, revolt, and ultimately revolutions cannot be reduced to the detection of isolated events or singular episodes of violence. Rather, it must focus on the analysis of the forces, strategies, and counter-strategies through which the mechanisms of social reproduction are disrupted or reinforced over time (Tab. 1). Rebellions have changed and continue to change the world, but the (abundant) physical traces they leave are not unequivocal nor diagnostic.

An Archaeology of Resistance and Rebellion requires, first, the systematic documentation and critical evaluation of spatial and temporal patterns of rupture observable in the archaeological record (stratigraphic, architectural, economic, ritual, etc.), and second, their integration with evidence of violence and destruction. Although archaeology and physical anthropology have generated substantial data on these aspects, surprisingly little effort has been devoted to identifying synchronies and interrelations between them.

In archaeology, rebellion constitutes the most problematic concept within this set, insofar as it necessarily implies collective agency, intentionality, and opposition to power. The impossibility of directly accessing the discourses, motivations, or forms of organisation of social actors has generated persistent caution in the use of this term, favouring alternative interpretations based on models of systemic collapse, environmental crisis, or economic dysfunction.

Nevertheless, even in the absence of written sources, certain processes of rupture can be inferred from the archaeological record when different material domains are analysed in an integrated manner. The identification of rebellion in prehistoric contexts cannot be based on direct evidence of

intentionality, but rather on the observation of significant discontinuities that selectively affect the institutions, practices, and material devices that sustained social domination. From this perspective, rebellion can be approached archaeologically as a historical process of material and symbolic disarticulation of the existing order, whose effects become visible in the radical transformation of settlement patterns, ritual practices, productive systems, and forms of social organisation.

From an epistemological point of view, the study of prehistoric phenomena such as rebellion requires the construction of interpretative frameworks capable of linking archaeological evidence with complex social practices, as well as the development of well-articulated conceptual models that allow for robust interpretations (Kristiansen/Rowlands 1998) and their submission to critical testing through attempts at falsification. This approach contributes to more clearly delimiting the scope of archaeological knowledge and to guiding the interpretation of the record in a rigorous manner.

In this sense, a model can be defined as a theoretical and methodological construction designed to organise, simplify, and relate empirical data to analytical concepts in order to explain processes that are not directly observable in the archaeological record. Since the same material pattern may admit multiple explanations, models make interpretative assumptions explicit, delimit which inferences are legitimate, and allow alternative hypotheses to be compared. Rather than representing concrete events, models articulate relationships between economic, social, environmental, and political variables, as well as plausible dynamics of change, conflict, and social reconfiguration.

Hence, the aim of this paper is to critically examine the viability of the concept of *rebellion* as an analytical tool in the study of prehistoric contexts. To do so, we will focus on a particular case study, that of the collapse of El Argar and the entire Early Bronze Age (henceforth EBA) complex in the Southeast of the Iberian Peninsula around 1550 BC. The abruptness and far-reaching consequences of the 1550 BC breakdown established it as the dividing moment between

Term	Central feature
Conflict	Tensions or frictions between actors; may remain latent or manifest.
Resistance (<i>Widerstand</i>)	Active or passive opposition to an established order or power; can be individual or collective, and not necessarily public or organized.
Uprise (<i>Aufstand</i>)	Spontaneous, local, and short-lived outbreak of collective action, typically without central coordination or a prior articulated political program; may be nonviolent (e.g. R. Luxemburg's Demonstrationsstreik).
Revolt	Larger-scale and more intense than an uprising; often still spontaneous and lacking centralized leadership or a fully developed ideology; though often nonviolent, it historically has been contested violently by the established powers.
Rebellion	Sustained collective action against an established authority with a clearer political agenda, ideology, or shared consciousness (e.g. class or national); may involve organized leadership and tends to be contested violently by the dominant class. The rise of new and growing social networks leads to the construction of a new language and, eventually, to a manifesto.
Revolution	Rebellion resulting in a new political and economic organisation; usually implies actions of violence in multiple directions.

Tab. 1 Terms to define struggles inside society and their definitions.

Tab. 1 Begriffe zur Beschreibung gesellschaftlicher Konflikte und ihre Definitionen.

the Early and Late Bronze Ages (henceforth LBA) in Iberia. In this sense, this paper can be understood as a continuation of studies co-authored by some of us (Lull et al. 2013; Delgado-Raack/Risch 2016a), which explored in-depth the collapse of 1550 BC and the economic, social, and political differences between the EBA and LBA communities. The goal here is to broaden the scope by including the neighbouring groups of El Argar in the analysis, as well as to provide a more in-depth explanation of *what* actually happened around 1550 BC. To this end, an interpretative model is proposed that articulates different archaeological indicators – relating to settlement, production, ritual practices, and social organisation – in order to assess the extent to which the documented transformations can be interpreted as a process of internal social conflict and a breakdown of the mechanisms of reproduction of the social order.

The Iberian southeast in the first half of the 2nd millennium BC

The EBA of Iberia, and especially that of its south-eastern region, is deeply influenced by the appearance of the El Argar society (c. 2200 cal BC). El Argar, together with other European EBA groups such as the Únětice Group of Central Europe and Minoan Crete, has been considered as one of the »hot societies« that, in a surprisingly synchronic fashion, developed unprecedented levels of social hierarchisation as well as of political and economic centralisation around 1850–1750 BC (Lull et al. 2011; Knappett 2012; Meller 2019). The shared historical trajectories of these groups, characterised by a rapid economic and demographic growth followed by a sudden collapse, led us to define them as »disruptive societies« (Peres/Risch 2023a, 15; Moreno et al. 2023, 103). In the case of El Argar, this can be clearly seen in its rapid growth from a core territory of ca 5500 km² around 2200 BC to occupying an area of over 35 000 km² by 1700 BC, and a sudden collapse around 1550 BC.

The label »disruptive« is also appropriate when considering the impact these societies had on human communities established in regions beyond their immediate control. These groups suffered the consequences of the development of productive forces fostered by disruptive societies and their associated need to access new sources of raw materials, goods, and workforce. Consequently, as we have already argued elsewhere (Moreno et al. 2023; Moreno et al. 2025), it is necessary to move towards a more holistic vision of these disruptive groups, which acknowledges their impact on the human communities beyond their direct control.

In our specific case, this means moving beyond the focus on El Argar in isolation in favour of a broader approach that also integrates the evidence from neighbouring communities (Fig. 1). This is especially important in order to understand the mechanisms and possible causes underlying the collapse of the entire EBA complex in this part of Iberia around 1550 BC, but also to trace and identify possible

differences in this process. Before doing that, nonetheless, it is necessary to introduce the defining characteristics of the Argaric group as well as those communities that neighboured it.

The most idiosyncratic element of El Argar, highlighted since the beginning of its study in the 19th century, has been its funerary practices. They are characterised by single or double inhumations in *pithoi*, stone cists, *covachas* (small artificial caves), or simple pits, located beneath settlements, representing a radical shift away from the previous Copper Age collective tradition. Argaric burials also presented a wide array of grave goods, which included pottery, metallic objects mostly of silver and copper, as well as food offerings. Crucially, the distribution of grave goods among burials was clearly uneven, with some containing lavish offerings while most of them only had very few associated objects or none at all.

The system of production developed by El Argar was based on the accumulation of agricultural goods and the means for their storage and processing in political centres, where large, specialised workshops emerged. Crucially, these centres were located far from the areas with the highest agricultural potential, evidencing a complex system of territorial control based on a multi-tiered settlement hierarchy (López Padilla 2009; Lull et al. 2011; Martínez Monleón 2014). Within this vertically integrated system, political centres served as nodes which accumulated and redistributed cereal surpluses, as well as textiles and other manufactured goods to smaller dependent sites⁴.

Central settlements also played a key role in the spread and control of metallurgical production, with an output of metal objects that far exceeded that of the previous Copper Age and neighbouring EBA groups. Metallurgical production in El Argar was highly centralised, with the area around the Sierra Morena range concentrating almost all the archaeological evidence of smelting and melting within El Argar territory. Furthermore, Peñalosa, the only Argaric site with a full metallurgic *chaîne opératoire* and located near the only copper mines with documented EBA exploitation, is also found in this area (Moreno/Contreras 2010; Arboledas/Alarcón 2018; Arboledas et al. 2017). Recent studies have also proved that such a centralised system did not apply only to »high-value« products (so-called prestige goods) such as metal, but also to common-use objects such as pottery (Moreno et al. 2025; Garrido et al. 2025).

The levels of inequality reached by El Argar in conjunction with its rapid territorial expansion have led several scholars to classify it as a prehistoric state⁵. This starkly contrasts with the groups identified by archaeology further to the north, with much more egalitarian organisations. In La Meseta, the southern part of the central Iberian plateau, settlements are grouped under the *La Mancha Bronze Age*, also known as the *Las Motillas* culture, characterised by fortified sites or towers situated in the broad plains of present-day Albacete and Ciudad Real⁶. In the rugged terrain of the Spanish Levante and the Iberian mountain ranges, marking

4 Risch 1995; Lull/Risch 1995; Verhagen et al. 1995; Verhagen et al. 1999; Delgado-Raack/Risch 2016a; Risch 2016b.

5 Lull/Estévez 1986; Lull/Risch 1995; Arteaga 2000; Cámara 2001; Chapman 2003; Lull et al. 2010; Cámara/Molina 2011.

6 Nájera 1984; Fernández Miranda et al. 1988; Nieto/Sánchez Meseguer 1988; Sánchez Meseguer/Galán 2016.

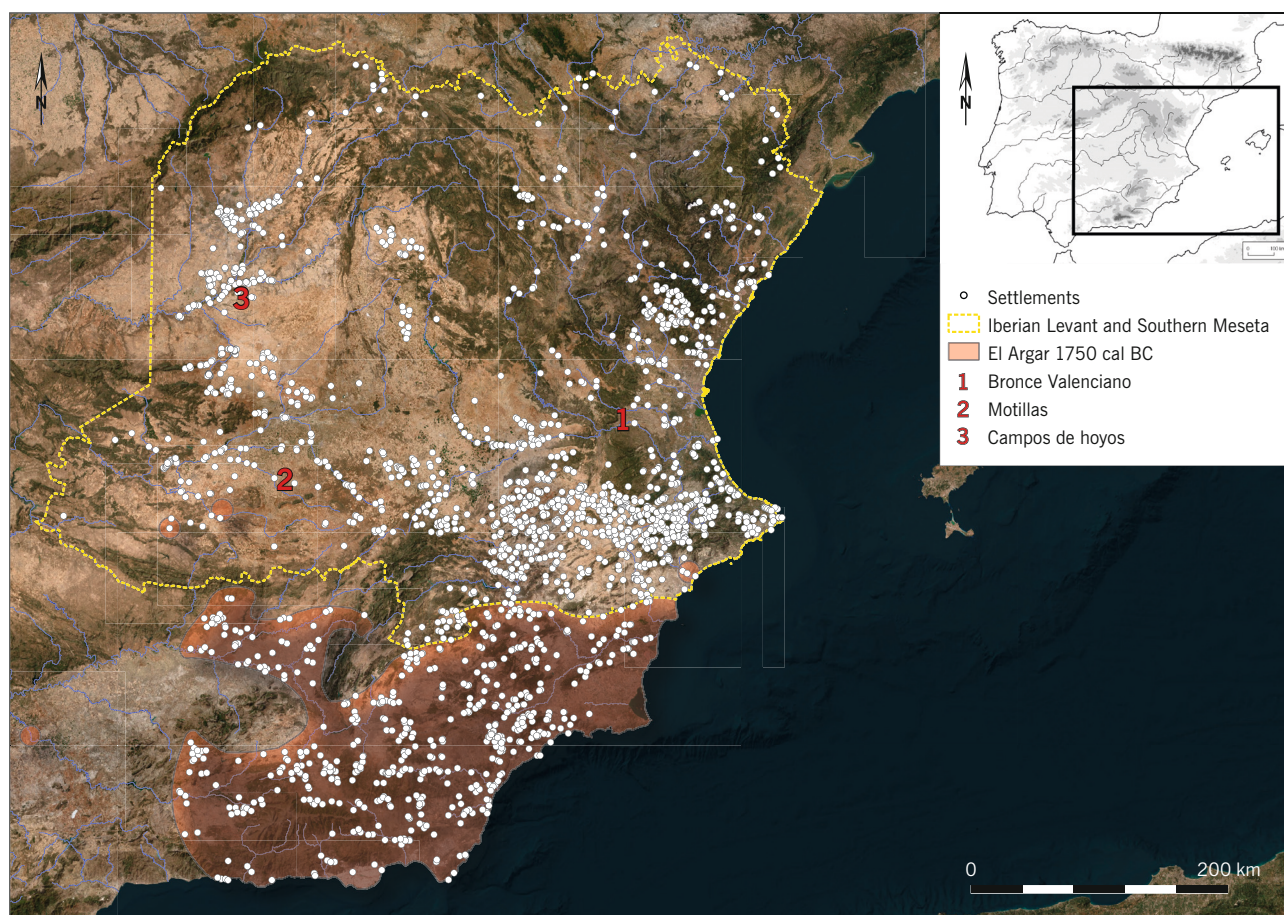


Fig. 1 The Iberian south-eastern quadrant during the EBA.

Abb. 1 Der südöstliche Quadrant der Iberischen Halbinsel während der frühen Bronzezeit.

the eastern limits of the Meseta, numerous small hilltop settlements are attributed to the *Valencian Bronze Age*⁷.

It is important to note, however, that in contrast with El Argar, regional studies have so far been unable to associate a specific archaeological materiality with any of these supposed entities, due to the non-specificity and scarcity of funerary practices, complex architecture, and artefact types. Nonetheless, it has been possible to establish that these non-Argaric groups developed their own strategies to avoid and resist Argaric domination (Peres/Risch 2026), supporting much more egalitarian social organisations⁸.

Setting the stage for Rebellion: Archaeological evidence and articulation of an explanatory model

1. Settlement pattern and spatial organisation

The spatial analysis of the Iberian south-eastern quadrant is key in order to understand, at a supra-regional level, the process of disintegration of the EBA settlement structure (Fig. 1). To do so, we have selected all the excavated and radi-

ocarbon-dated⁹ settlements of this area with occupations immediately before and/or after 1550 BC, totalling more than 1100 ¹⁴C-dates distributed across 149 archaeological sites (Fig. 2). After that we analysed the gathered settlement and chronological data along two axes: inside/outside El Argar territory and before/after 1550 cal BC.

A first glance at the data makes it possible to grasp the scale of the EBA collapse: the number of radiocarbon-dated sites decreases from 133 to only 51, a reduction of 61.7%. Contrary to what might be expected, the ratio of abandonment is similar in both Argaric and non-Argaric territories (Tab. 2). This may suggest a collapse that, rather than being concentrated within El Argar, affected the entire Iberian south-eastern quadrant in a similar way, thereby supporting the idea that the Argaric centre and its northern periphery were deeply connected realities (Peres/Risch 2023).

A closer look at the settlements themselves, however, adds further nuance to this picture. Most of the EBA settlements that continue to be occupied in the LBA undergo notable internal reorganisations, usually accompanied by a significant reduction in their size, in what seems to be a generalised trend towards atomisation and population dis-

7 Fernández Vega 1985; Burillo/Picazo 1997; Jover 1999; Jover et al. 2018.

8 Peres/Risch 2022; Peres/Risch 2023a; Peres/Risch 2023b; Moreno et al. 2023.

9 We have extracted the great majority of our data from the open-source IDEARQ C14 database <<http://www.idearqueologia.org/c14/?ln=en>> [18.05.2026]) compiled by the

CSIC as well as from other publications which had still not been incorporated into the IDEARQ database.

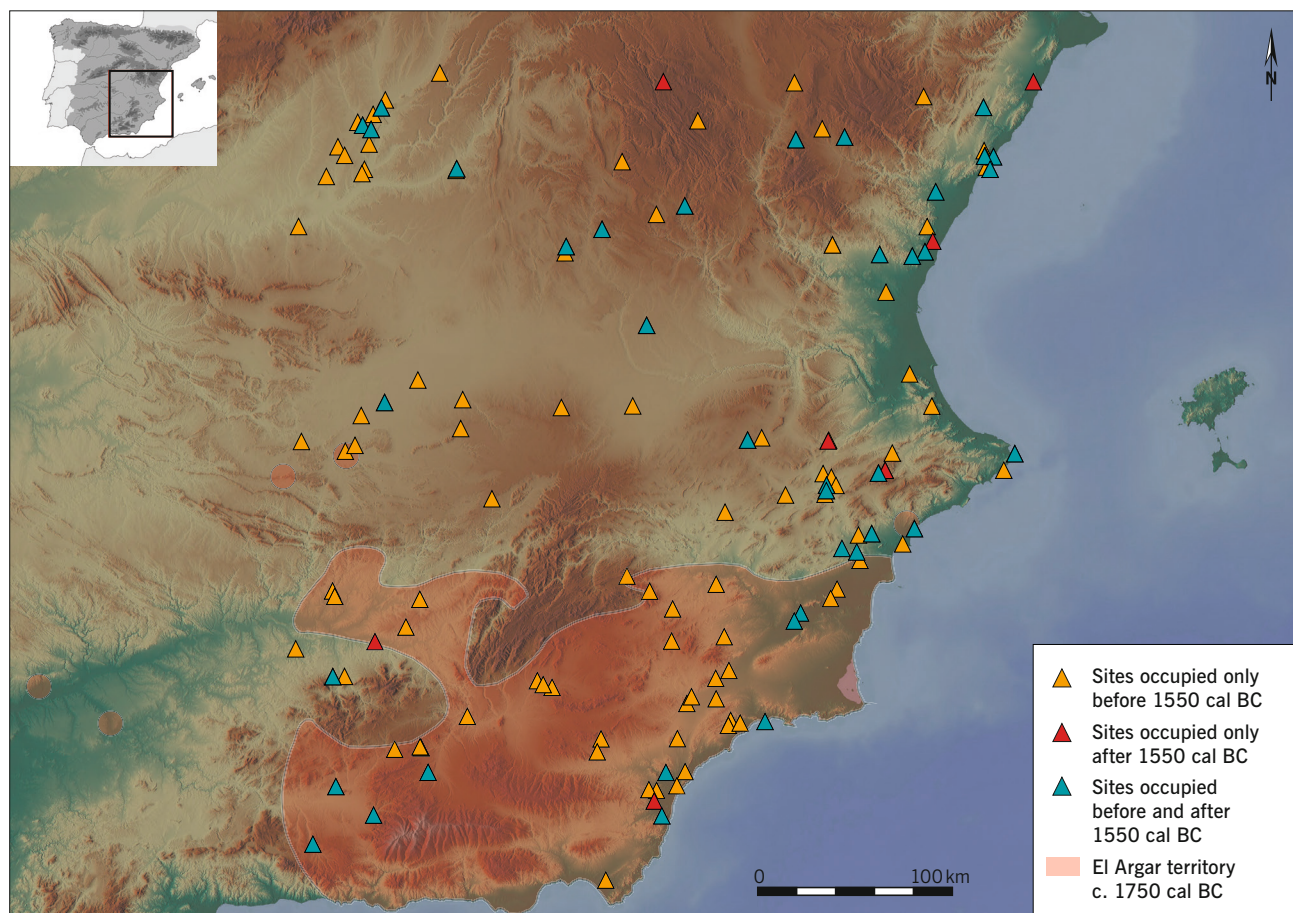


Fig. 2 Map of radiocarbon-dated sites occupied before and after 1550 BC.

Abb. 2 Karte der radiokarbondatierten Fundstellen, die vor und nach 1550 v. Chr. bewohnt waren.

persal. Moreover, centralised storage and specialised workshops disappear from the archaeological record. Instead, domestic-scale production and economic self-sufficiency appear to become the norm during this period (Delgado-Raack/Risch 2016a). Crucially, the large political centres typical of El Argar disappeared nearly completely and, with them, the Argaric network of territorial domination.

The only exception to this pattern known until now, i.e. the only LBA settlement that might be considered a political centre comparable to the Argaric ones, is Cabezo Redondo in Villena (Alicante), which is located outside the Argaric territory. The settlement, founded around 2100 cal BC, reached its phase of maximum expansion between 1700 and 1300 cal BC. During the last phase of occupation, the

persistence of complex urbanism, high-capacity cereal storage, specialised workshops, and a highly developed metallurgy, especially of gold¹⁰, makes Cabezo Redondo a complete exception in the south-eastern Iberian LBA¹¹.

It is also worth noting that only 9 out of the 51 radiocarbon-dated LBA settlements are new foundations. They all share the typical features of other LBA sites, i.e. small size and self-sufficient production at a household scale. In this sense, the disappearance or reduction in size of the El Argar political centres indicates a clear drive towards population dispersion and atomisation in the Argaric territory after 1550 BC. On the other hand, the reduction in the number of settlements across the entire south-eastern quadrant might also have to do with a shift from hilltop to

	El Argar territory	Non-Argaric territory	Total
Before 1550 cal BC	47 (77.0 %)	86 (69.9 %)	133
After 1550 cal BC	14 (23.0 %)	37 (30.1 %)	51
Total	61	123	184

Tab. 2 Summary of the radiocarbon-dated settlements occupied immediately before and after 1550 BC.

Tab. 2 Zusammenfassung der radiokarbondatierten Siedlungen, die unmittelbar vor und nach 1550 v. Chr. bewohnt waren.

10 Notably, two hoards of golden objects are known in relation to Cabezo Redondo: the *Tesorillo* of Cabezo Redondo, located within

the settlement area, and the larger Villena treasure, found c. 6 km northeast of Cabezo Redondo.

11 Hernández et al. 2016; Barciela et al. 2023; García Atiñzar et al. 2024; Martín 2025.

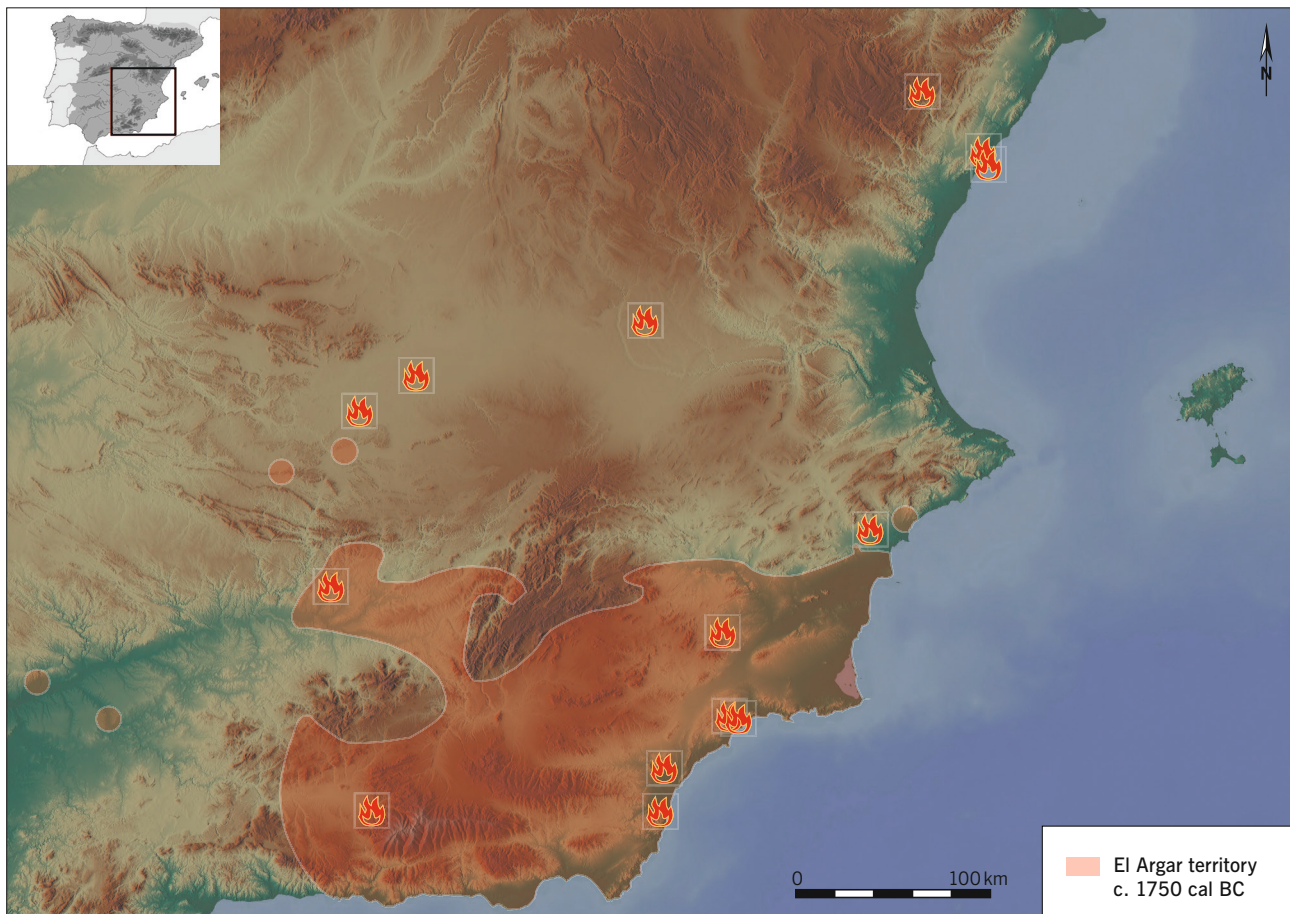


Fig. 3 Map of settlements with evidence of fire and/or destruction layers around 1550 BC.

Abb. 3 Karte der Siedlungen mit Belegen für Feuer und/oder Zerstörungsschichten um 1550 v. Chr.

flatland settlements, harder to detect archaeologically, as well as a possible transition towards less permanent types of habitats in the LBA. Overall, this evidence points to a widespread movement of people who no longer gravitated around the Argaric centres or their immediate peripheries.

Finally, another set of evidence worth examining is the presence of destruction and/or fire levels at the transition between the EBA and LBA, which may serve as proxies for a possible conflictive or violent end to some settlements (Fig. 3–4). Within the El Argar territory, at sites like La Almoloya, fires have been documented in several areas of the settlement (Fig. 4c), including the palatial complex 1, where the princely burial AY38 was found (Lull et al. 2015a; Lull et al. 2021). Similarly, the destruction of the monumental bastion at Cerro de la Encina also occurred around 1550 BC. Fires and destruction levels mark the abandonment of the acropolis of Peñalosa (Fig. 4d), and have also been documented at sites like Gatas, Cabezo Negro, and Ifre (Siret/Siret 1890, 122).

Signs of conflict, however, extend beyond the Argaric territory. In La Mancha, some of the *motillas* show clear hints of violent endings. A fire layer (Level 6) has been

documented at the end of the second phase of Motilla de los Romeros¹² (García Pérez 1987, 150). The occupation of Motilla de los Palacios ends with a fire layer (stratum 10)¹³, which sealed a trench containing abundant stones and the highly fragmented human remains of at least four individuals (Nájera 1982, 400). Similarly, on the Levantine coast, at the site of Orpesa la Vella, the excavators conclude that »the definitive abandonment of the settlement during the Middle Bronze Age could have happened not only as a consequence of a new fire, as can be suspected by the stratigraphy, but simply because of a rushed abandonment due to an impending attack« (Gusi/Olaria 2014, 102). This statement gains even more relevance when considering that the Middle Bronze Age phase of Tossal de Mortórum (Fig. 4b), located only seven kilometres to the northwest, also ends with evidence of fire (Aguilella 2017, 199).

2. Economic organisation and surplus control

The EBA breakdown implied profound changes in the entire productive system as well as the economic bases of the communities inhabiting the Iberian southeast, and especially

¹² CSIC 77: 3290 ± 120 (1σ: 1736–1437 cal BC).

¹³ GrN 10143: 3340 ± 35 (1σ: 1635–1540 cal BC).



Fig. 4a–d Some examples of fire and destruction levels in settlements around 1550 BC. a Floor with burnt plant remains from the roof structure of building UH1 at El Negret, Alicante; b Backfilling of Phase 3 with evidence of fire, including ash, charcoal, and carbonised seeds at Tossal de Mortorum; c Fire destruction levels and collapse of the roof and mudbrick partitions of Building H18 at La Almoloya, Murcia; d Fire alteration of the walls of the corridor of the acropolis at Peñalosa, Jaén.

Abb. 4a–d Einige Beispiele für Brand- und Zerstörungsschichten in Siedlungen um 1550 v. Chr. a Fußboden mit verbrannten Pflanzenresten aus der Dachkonstruktion des Gebäudes UH1 in El Negret, Alicante; b Verfüllung der Phase 3 mit Brandspuren, darunter Asche, Holzkohle und verkohlte Samen in Tossal de Mortorum; c Brandschuttschichten und Versturz des Daches sowie der Lehmziegelwände des Gebäudes H18 in La Almoloya, Murcia; d Brandspuren an den Wänden des Korridors der Akropolis in Peñalosa, Jaén.

within El Argar. This profound transformation is visible at all stages of the economic cycle, namely, production, storage, distribution, and consumption.

At the level of production, the vertically integrated system that characterised El Argar imposed a high degree of material and technical standardisation, leading to a hitherto unprecedented level of homogeneity in the Argaric material assemblage. This was further reinforced by the proliferation of large workshops dedicated, among other activities, to metalworking, the processing and manufacture of ivory objects, weaving, and flour production.

This process of material normativisation and standardisation is most clearly reflected in pottery production. The formal repertoire was restricted to eight shapes, and decoration was absent beyond the polishing or burnishing of surfaces, implying a drastic limitation of individual expression

among potters. Furthermore, the standardisation of pottery was not only formal but also technological, including the selection of very concrete phyllosilicate clays available only in particular geographical regions (Moreno et al. 2025; Garrido et al. 2025).

Similarly to pottery, the typology of metallic objects in El Argar was also restricted and included both emblematic objects associated with the exercise of political power, such as silver diadems (Lull et al. 2021), and specialised means of violence and coercion, like halberds and swords (Peres/Risch 2026, Fig. 12c–d). As for the non-Argaric regions, a recent macro-regional study based on the spatial distribution of artefactual categories concluded that the same means of production were common across the entire centre-eastern part of the Peninsula. This suggested a situation in which relations of production between small, atomised

communities developed under conditions of relatively fluid access to locally produced means of labour. Only for a few specific raw materials, such as copper or ivory, was it possible to detect an uneven distribution, as the frequency of these objects was significantly higher in regions closer to El Argar and progressively decreased with distance (Peres/Risch 2023a). Thus, in the non-Argaric territories, domestic-scale production, without spatial exclusivity, appears to have remained the norm.

After 1550 BC, there was a complete and sudden abandonment of all material expressions of El Argar. Idiosyncratic Argaric pottery types, such as chalices, disappear, and emblematic Argaric objects and weapons also vanish from the archaeological record. They are replaced by a much wider typological repertoire and by the spread throughout southeast Iberia of *Cogotas* pottery, characterised by excised decoration (*boquique*) and originating in the northern Iberian plateau.

In metallurgical production, it is worth noting the shift from silver, which clearly dominated during the EBA and especially within El Argar (Lull et al. 2014), to gold, which became the most ubiquitous precious metal during the LBA (Perea 2014). This change implies a profound restructuring of Argaric metal supply and distribution networks. An analogous case is provided by ivory, which during the EBA showed a radiating circulation pattern from the south-east (the Argaric enclave of Illeta dels Banyets and Fuente Álamo) towards the Levantine region and La Mancha (Peres/Risch 2026, Fig. 12a). As a highly valued imported raw material, ivory circulated in Bronze Age Iberia primarily in the form of prismatic buttons and pre-cut ivory blanks (preforms) intended for the manufacture of such buttons. The combination of this standardized form and its distinctive distribution pattern has led to the interpretation of ivory as a form of proto-money within peninsular exchange networks, or at least as a symbolic marker of large-scale alliances and economic agreements (Peres/Risch 2026). The abrupt cessation of ivory circulation around 1550 BC, coinciding with the collapse of the Argaric political system, suggests the simultaneous disruption not only of certain well-established peninsular exchange networks but also of a wide-ranging network of connections with North Africa that had been mediated, either directly or indirectly, through El Argar.

Important changes in subsistence production can also be observed before and after 1550 BC, especially in the Argaric region, where the available data are more abundant. Carpological and paleo-dietary evidence indicates that cereals constituted the main nourishment of Argaric populations, with a clear predominance of wheat and especially barley. By the end of the El Argar sequence, an agricultural production based on extensive cereal monoculture was fully developed, especially in the core Argaric regions of Murcia and Almería, with barley predominating as a species well adapted to arid conditions (Ruiz et al. 1992; Delgado-Raack/Risch 2016a). It should be noted, however, that in the interior Argaric regions of Granada and Jaén, characterised by higher rainfall, agricultural production was more diversified and included a higher proportion of wheat and pulses (Jover et al. 2025).

The importance of cereals is reflected in the proliferation of grinding stones, which appear by the hundreds or even thousands in Argaric political centres (Fig. 5). Crucially, these are often found concentrated in certain buildings, which can be considered as grinding workshops, such as those documented in trench 41 at Fuente Álamo (Risch 2002), Building H2 at La Almoloya (Lull et al. 2015a), and Department XVIII and Building H83 at La Bastida (Ache 2019).

The storage of the resulting agricultural surplus was carried out in large pottery vessels (*pithoi*) with capacities ranging between 60 and 250 litres (Velasco 2021), which were placed in storage areas such as those documented at Ifre House C (Siret/Siret 1890, Pl. 17), Fuente Álamo III-Building I and trench 39 (Schuhmacher 2003), and Gatas IV-ZB-109 (Risch 1995; Risch 2002). All this evidence indicates that the potential flour production and accumulation in Argaric central settlements far exceeded the needs of the local population, pointing towards a function as veritable »cereal banks« (Delgado-Raack/Risch 2016a, 36; Eguíluz/Risch 2024).

Beyond El Argar, cereal cultivation also seems to have formed the subsistence base for the groups established in the Valencian and La Mancha regions. Only further to the north, in areas more distant from El Argar, do hunting and animal husbandry seem to have increased in importance (Peres/Risch 2023a). Practices of centralised storage also existed among the communities north of El Argar, most notably exemplified by the *motillas* of La Mancha. However, the scale of productive specialisation and surplus accumulation was significantly lower, as indicated by the complete absence in La Mancha and the Iberian Levant of large storage vessels exceeding 100 litres, such as those documented in the Argaric region. Only the masonry silos found at La Motilla del Azuer and at Dornajos would, in this sense, be indicators of a cereal-based economy oriented toward accumulation or surplus production beyond El Argar.

The limited evidence available for subsistence production during the LBA suggests the continued predominance of a cereal-based agriculture during this period (Pérez Jordà 2013; Delgado-Raack/Risch 2016a). However, notable changes can be observed in its organisation. In general, the number and size of grinding artefacts decreased significantly, and in most cases grinding tools were associated with other, more or less specialised, means of production, such as metallurgical or pottery-making tools (Delgado-Raack/Risch 2016a, 37). The situation in Valencia and La Mancha follows a very similar pattern of non-specialised domestic production. As noted above, the only exception to this pattern is Cabezo Redondo, where the economic organisation of the settlement continues to show strong similarities with that of El Argar.

3. Funerary practices and reproduction of the social order

The intramural burial system, characterised by its spatial integration within domestic units throughout the entire Argaric diachrony, functioned not merely as a funerary practice. Through the repetitive association of specific



Fig. 5a–c Accumulation of grinding stones from the settlement of Fuente Álamo.

Abb. 5a–c Ansammlung von Mahlsteinen aus der Siedlung Fuente Álamo.

material forms, gender-related symbolism, and the quantity and quality of funerary wealth, death rituals actively contributed to the reproduction of a structured social order. In this sense, funerary practices constituted a central mechanism for the reproduction and legitimisation of social inequality within Argaric society, particularly fostered, and maintained by the elite¹⁴.

The combination of radiocarbon dating and observations of relative chronology derived from the stratigraphy of different Argaric settlements and their associated burials indicates that, from around 1800 cal BC onwards, social differentiation intensified and became increasingly formalised (Castro et al. 1993–94; Lull et al. 2011). This process was expressed through the selective inclusion of specific funerary offerings, highlighting distinctions based on age, sex, and social position or class. These three sociological criteria operated in a combined manner, establishing strict norms that were systematically applied within the Argaric funerary ritual.

Exceptional burials, concentrated within a limited number of households, display a marked accumulation of grave goods in both quantity and quality, together with a strong symbolic differentiation linked to sex: diadems predominantly associated with female burials and swords with male burials (Fig. 6). Significant examples include tombs: 38 at La Almoloya (Lull et al. 2021); 9 at Fuente Álamo; 51, 62, 398, 454, 429, and 824 at El Argar; 6 at El Oficio; 2 at Gatas (Siret/Siret 1887; Schubart/Ulreich 1991); 4 at Cerro de las Víboras (Eiroa 1993–94); 1 at Cabeza Gorda (Ayala/Tudela 1993).

In these tombs, some of them individual and others double burials, female individuals were buried wearing a silver diadem placed on the skull, together with a rich and abundant variety of items and materials. By contrast, the remaining tombs were occupied by male individuals buried

with a copper or bronze sword, which can be inferred to have been carried on the chest or on the back in an honorific position or as a symbol of status (Bonora 2021). In some cases, such as the tomb from Cerro de las Víboras, the sword constitutes the only grave good, while in others it appears only sparsely accompanied by ceramic vessels, a dagger or knife, or ornamental items such as beads, earrings, or bracelets.

This pattern has led to the proposal that the strong gendered differentiation observed in elite funerary assemblages reflects a differentiated structure of power within Argaric society. According to this interpretation, while elite women were buried with highly emblematic objects – such as silver diadems – that materialised ideological legitimisation and social authority, elite men were preferentially associated with weapons, namely swords and daggers, whose significance appears to have been primarily functional rather than emblematic. In this sense, weapons would have constituted the most effective means of enforcing political decisions, suggesting that certain men may have played an executive role within the Argaric system of domination, whereas ideological legitimisation and possibly governance itself would have been concentrated in female hands (Lull et al. 2021).

Argaric burials possessed not only a commemorative dimension – preserving the memory of specific individuals – but also a performative one. Through highly codified and repetitive ritual compositions – the careful selection of grave goods, their placement on the body, and their association with particular age, sex, and class categories – funerary ceremonies staged and materialised socially recognised roles (Bonora 2025). In this sense, the funerary ritual contributed to the continual re-enactment of socially defined figures – elite women marked by diadems, elite men

14 Lull/Estévez 1986; Schubart/Arteaga 1986; Contreras et al. 1995; Cámara et al. 1996; Lull/

Risch 1995; Lull et al. 2005; Aranda et al. 2008; Lull et al. 2010; Schubart 2012.

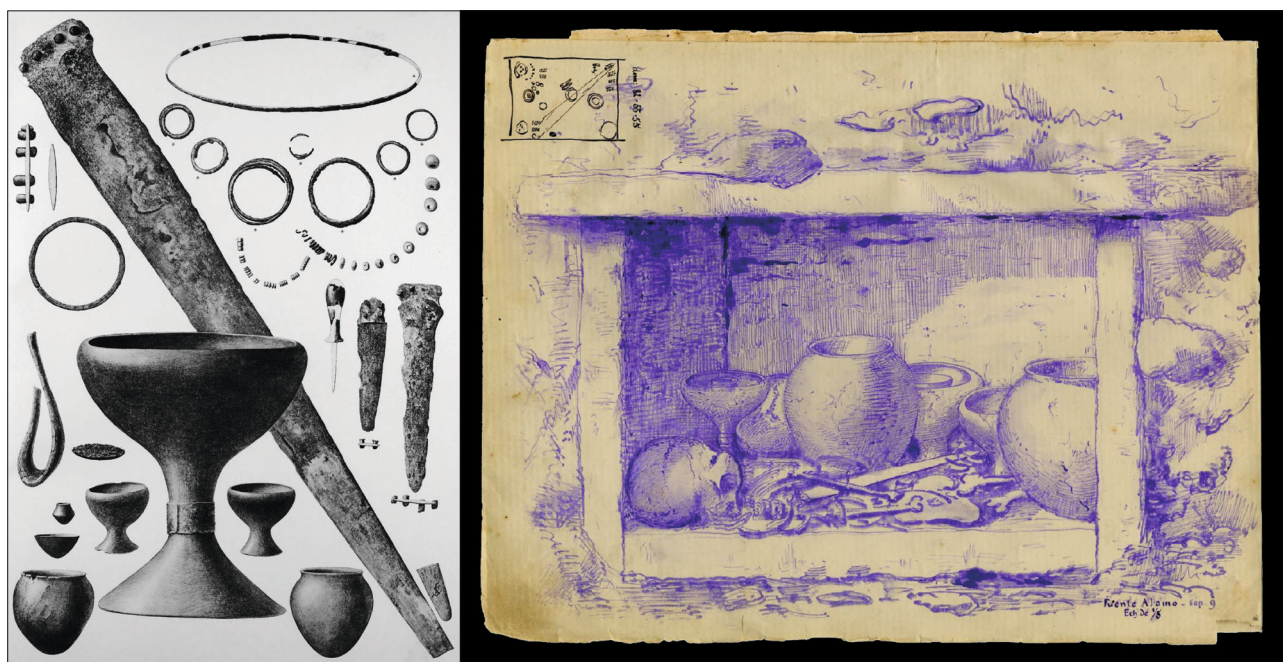


Fig. 6 Funerary assemblage and section drawing of Tomb 9 at Fuente Álamo, showing the grave goods associated with the double burial, including the silver diadem attributed to the female individual and the sword linked to the male individual.

Abb. 6 Grabbeigaben und Profilzeichnung von Grab 9 in Fuente Álamo. Dargestellt sind die Grabbeigaben der Doppelbestattung, einschließlich des silbernen Diadems, das dem weiblichen Individuum zugeschrieben wird, und des Schwertes, das mit dem männlichen Individuum in Verbindung gebracht wird.

marked by swords – thereby naturalising and stabilising the existing hierarchy.

Alongside the highly formalised intramural burial system, archaeological records also document the reuse of earlier megalithic monuments during the Argaric period. Sites such as El Barranquete and Los Eriales have revealed burials with materials and radiocarbon dates compatible with the Argaric sequence, inserted into megalithic structures whose uses extended far before and beyond the Bronze Age (Aranda/Lozano 2014; Milesi et al. 2023).

The reuse of dolmens during the Argaric period can be understood not as mere continuity, but as a socially significant act (Aranda et al. 2018). In contrast to the individualised and household-based intramural burial system characteristic of El Argar, megalithic monuments traditionally embodied collective forms of identity and long-term ancestral memory. Their coexistence during the Argaric sequence could therefore be interpreted as part of social practices aimed at counteracting processes of fragmentation and hierarchical differentiation.

In this perspective, the dolmen would have constituted an alternative locus for the affirmation of collective belonging, potentially operating as a space of resistance to the individualised and stratified identities promoted by the Argaric intramural funerary regime. While the available evidence does not allow us to determine the scale or intensity of such practices, their existence suggests that the Argaric social order may not have been ideologically uncontested.

After c. 1550 BC, this funerary regime was abruptly and entirely abandoned. Intramural burials disappear from the archaeological record, together with the highly formalised rituals, the emblematic objects, and the gendered associa-

tions that had structured elite funerary practices throughout the Argaric sequence. The total cancellation of intramural burial practices across the Argaric territory represents a radical rupture with previous traditions and cannot be interpreted as a gradual transformation or cultural drift. Rather, the sudden disappearance of this deeply entrenched ritual suggests a deliberate rejection of the symbolic devices through which social hierarchy and elite authority had been legitimised.

Markedly different scenarios are observed with respect to funerary practices in the neighbouring territories. The groups traditionally associated with the Valencian and La Mancha Bronze Age display mortuary configurations that diverge significantly from the highly formalised intramural system characteristic of El Argar.

In the case of the Valencian Bronze Age, a certain degree of continuity has been proposed in the use of natural cavities as burial spaces since the Copper Age. The available radiocarbon determinations for these funerary contexts place them firmly within the Bronze Age sequence. The recurrent utilisation of fissures, caves, and rock shelters located in proximity to settlements has been identified as a defining feature of this cultural horizon (Tarradell 1963; Tarradell 1969). Examples include Peñón de la Zorra (Jover/De Miguel 2002), La Horna (Hernández 1994), La Coveta del Frare (García Borja et al. 2013), Cova del Garrofer (Pérez Fernández et al. 2022), and Puntal de los Carniceros (Jover/De Miguel 2002). The reuse or continued use of megalithic structures is also documented, as in the case of Tossal del Mortórum (Aguilella 2017).

None of these locations, however, appears to have functioned as a continuously used and formally delimited

necropolis serving a single community in a stable and institutionalised manner. Rather, they have generally been interpreted as burial spaces used at different chronological moments, often situated in proximity to contemporaneous settlements and therefore potentially associated with them. In several cases, multiple individuals were interred within the same cavity, forming collective burial deposits whose composition and temporal depth vary from site to site.

Alongside these cave and collective burials, sporadic individual inhumations within settlements are also documented, such as those recorded at Lloma de Betxí, Muntanya Assolada (De Pedro 2010) and Les Raboses (Ripollés 1994). C. Redondo constitutes, also in this domain, a distinctive case within the regional framework, as it presents burials beneath house floors and, in some instances, grave goods including gold or silver items (Hernández et al. 2016). These features – together with the previously mentioned aspects – have been interpreted as differentiating the site within the Valencian sphere and as reflecting certain connections with the Argaric domain.

In sum, the funerary record of the Bronze Age in the Valencian territories is characterised by the coexistence of multiple mortuary traditions within a broad cultural framework. Grave goods are present in some burials; however, their variability and limited differentiation do not provide sufficient grounds to argue for a formally institutionalised and systematically reproduced system of social stratification (De Pedro 2010; Jover/García 2024).

Contrary to the situation observed in El Argar, the transition around 1550 BC does not appear to constitute a structural break in the funerary practices of the Spanish Levante. During the Late Bronze Age, a comparable plurality of practices continues to be documented. The site of Mas del Corral, generally attributed to the Late Bronze Age (Trelis 1992), provides an illustrative example: a fissure located near the settlement contained a minimum of twelve individuals (seven adults and five subadults), considered contemporaneous with the habitation phase. At the same time, an adult male was buried in a cist within the settlement area, and two perinatal individuals were interred in ceramic vessels (De Miguel/Siles 2020).

A similarly differentiated pattern can be observed in the EBA groups traditionally associated with the La Mancha Bronze Age. The funerary record in this region is also quite scarce, and most of the documented burials correspond to individual or double inhumations located beneath the settlements, with the most notable example being the *motilla* of El Azuer with over 60 graves¹⁵. These types of graves have also been documented in sites like Morra del Quintanar (Martín Morales et al. 1993, 36–37), Motilla del Retamar (Colmenarejo et al. 1988), and El Acequión (Fernández Miranda et al. 1990; Martín Morales et al. 1993); however, all of them have less than 10 tombs recorded. Also in this region, there is evidence of the continuation of collective burials as well as tumular graves, as documented in Castillejo del Bonete (Benítez de Lugo et al. 2014), Bocapucheros

(Benítez de Lugo et al. 2022), and El Amarejo (García Atiénzar et al. 2025).

At El Azuer, the most comprehensively studied site, up to 65 graves (with 67 buried individuals) have been recovered directly beneath the settlement and fortification areas, most of them without or with very few grave goods. The most usual containers were pits, either simple or lined with small or medium stones, other, less frequent tomb-types included masonry cists, a single stone-slab cist and *pithos* burials, exclusively used in child inhumations. All in all, the funerary record in La Mancha shows clear similarities with the Valencian region, with coexistence of individual burials within the settlements and collective and tumular monuments not connected to them. In La Mancha too, the quantity and quality of grave goods present in the burials suggest a lack of, or at most, very tenuous social hierarchisation.

Following the overall tendency of the entire south-eastern Iberian quadrant, the LBA funerary record in La Mancha is remarkably limited. The little available evidence suggests continuity with the EBA trend. In the last phase of El Azuer (phase 4), dated between 1638 and 1325 cal BC, burials beneath the settlement and fortifications continue, with an increase of child burials (Nájera et al. 2012, 179). Similarly, in the *tumulus* of El Amarejo, inhumations continue to happen until approximately 1200 BC (García Atiénzar et al. 2025), without any remarkable difference to the previous EBA.

The comparative overview of the Valencian and Manchegan evidence highlights a fundamental difference in structural organisation with El Argar. There, intramural burial was not merely one funerary option among others, but a central and standardised mechanism through which hierarchy and differential access to goods were materially reproduced over time. Its systematic and regionally coherent character distinguishes it sharply from the more plural configurations documented in neighbouring territories.

From an archaeological perspective, the elimination of intramural funerary practices constitutes one of the strongest indicators of social rupture in the late Argaric sequence. By dismantling a central mechanism of symbolic reproduction, this change points to a conscious disruption of the ideological foundations of power. In this sense, the abandonment of the funerary system should be interpreted not merely as a cultural transformation, but as an active component of a broader process of social conflict and political reorganisation, consistent with a scenario of internal revolt against the Argaric order.

4. Bioarcheology, demography, and living conditions

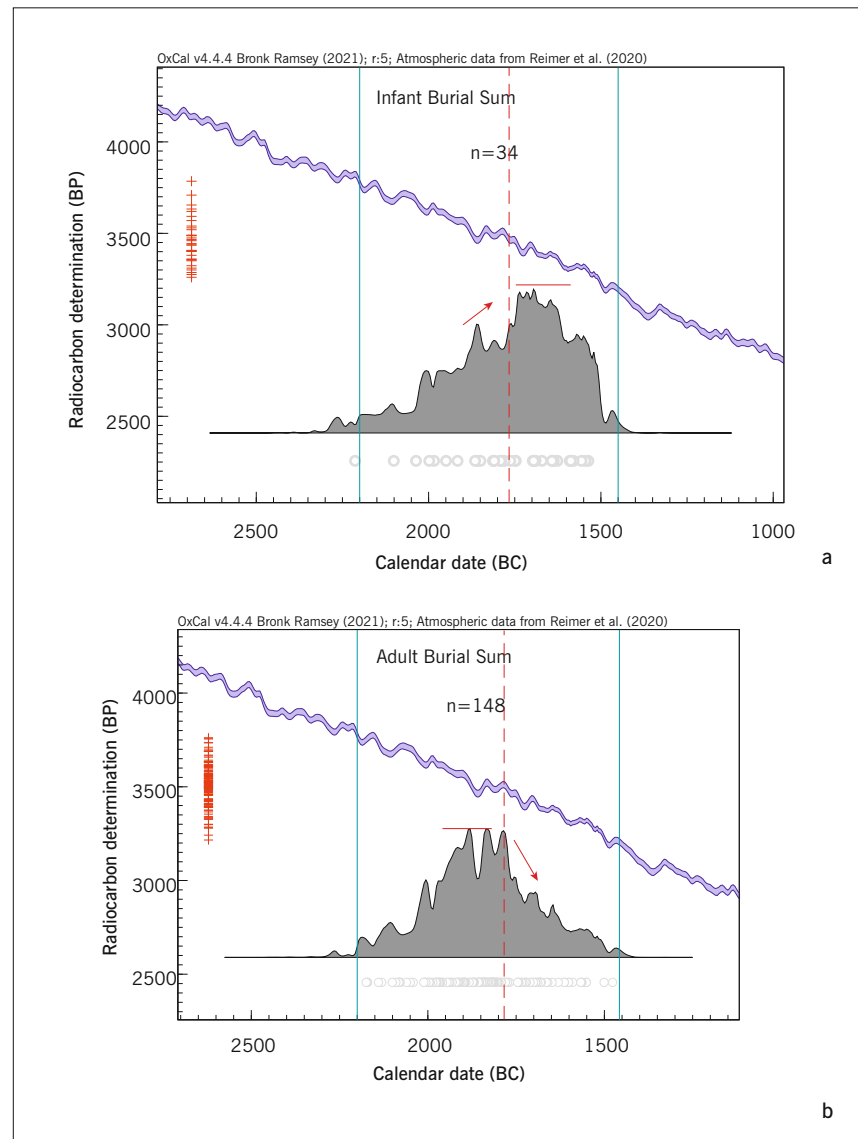
Another aspect characterising the final centuries of El Argar is the increasing proportion of infant burials. This pattern has been clearly documented at sites such as La Bastida and Gatas (Lull et al. 2013) and may represent a broader phenomenon across the Argaric territory. A com-

15 Another 70 graves have been documented in Cerro de la Encantada, however the classification of this settlement as belonging to the

La Mancha Bronze Age and not to El Argar is disputed.

Fig. 7a–b Summed probability distributions (SPDs) of radiocarbon dates for adult and infant burials. A total of 182 samples from funerary contexts at 25 sites across the Argaric territory were included. Radiocarbon dates were compiled from the datasets of IDEARQ C14, Celdrán et al. 2025; Villalba-Mouco et al. 2021; 2022; Lull et al. 2021, 2017; Jover et al. 2020; López Padilla 2014; Molina et al. 2014; Cámara/Molina 2011; Aranda et al. 2008; Castro et al. 1996.

Abb. 7a–b Aufsummierte Wahrscheinlichkeitsverteilungen (SPDs) der Radiokarbonaten für Erwachsenen- und Säuglingsbestattungen. Insgesamt wurden 182 Proben aus Bestattungskontexten an 25 Fundorten im gesamten argarischen Gebiet berücksichtigt. Die Radiokarbonaten wurden aus den Datensätzen von IDEARQ C14, Celdrán et al. 2025; Villalba-Mouco et al. 2021; 2022; Lull et al. 2021, 2017; Jover et al. 2020; López 2014; Molina et al. 2014; Cámara/Molina 2011; Aranda et al. 2008; Castro et al. 1996 zusammengestellt.



parison of the summed probability distributions (SPD) of radiocarbon dates from adult and infant individuals (Fig. 7) reveals a divergent demographic trend: adult burials gradually decline after c. 1800 cal BC, whereas infant interments become proportionally more frequent and remain relatively stable until c. 1550 cal BC.

This shift cannot be interpreted straightforwardly as a simple demographic fluctuation. The overrepresentation of infant burials in the final phase may reflect an actual increase in infant mortality, a transformation in funerary selection criteria, or a combination of both processes.

When considered alongside the frequent detection of pathologies associated with nutritional deficiencies and infectious stress – particularly *cribra orbitalia* and porotic hyperostosis documented osteologically¹⁶ – the hypothesis of heightened physiological stress gains plausibility. Stable isotope analyses from La Bastida and Gatas further reinforce this interpretation. In the latest phase, isotopic

shifts suggest either a reduction in animal protein intake or decreased manuring practices, potentially reflecting declining agricultural productivity (Knipper et al. 2020). Moreover, some subadult individuals – especially at Gatas – display isotopic patterns consistent with more intense or prolonged metabolic stress. Cross-sectional isotopic evidence indicates that children were generally breastfed until approximately 1.5–2 years of age; disruptions in weaning practices may have increased vulnerability during this critical developmental stage (Knipper et al. 2020; Oliart 2021).

Another pathological indicator considered is linear enamel hypoplasia. This defect reflects interruptions in enamel formation during childhood and is commonly associated with episodes of physiological stress, including nutritional deficiencies and post-weaning stress. Because enamel does not remodel, such defects remain visible in permanent teeth and therefore provide a retrospective marker of stress

¹⁶ Buikstra et al. 1999; Robledo-Trancho 2003; Jiménez-Brobeil et al. 2008; Oliart 2021.

experienced during growth. This pathology has been identified in Argaric skeletal assemblages such as Fuente Álamo (Kunter 2001) and Peñalosa (Contreras 2000). At Peñalosa, enamel hypoplasia was recorded in five of the nine individuals who preserved permanent canines (56 %), suggesting that early-life stress episodes affected a significant portion of the population, although the sample remains limited.

Elevated infant mortality, if present, may have contributed to changes in mortuary practices, increasing the ritual visibility of subadults within the intramural burial system. At the same time, the concurrent decline in adult burials suggests that the pattern cannot be explained solely by age-specific mortality and may reflect increasing selectivity in access to intramural interment, implying a redefinition of social membership and burial rights.

Taken together, these developments indicate not merely demographic fluctuation but a reconfiguration in the relationship between biological vulnerability and social reproduction during the Late Argaric phase. Although none of these indicators alone demonstrates famine or systemic collapse, their convergence suggests growing biological stress within communities, simultaneously redefining the social frameworks that structured burial access and group membership in the final centuries of El Argar.

Discussion

Explanatory Model of the End of El Argar (c. 1550 BC)

All the reviewed evidence has been brought together in a unified model that seeks to provide a systemic interpretation of the collapse of the Argaric society around 1550 BC, understanding the phenomenon not as an isolated event but as the outcome of an accumulation of economic, social, demographic, and environmental tensions that culminated in a structural rupture of the political and productive system (Fig. 8). A series of forces of transformation can clearly be identified in the research carried out over the last three decades:

- Prior to the transformative episode around 1550 BC, Argaric society exhibited structural conditions characterised by a high degree of economic complexity and pronounced social stratification. However, this complexity did not represent a stable equilibrium; rather, it was the result of a progressive process of productive intensification that entailed profound transformations in labour organisation, resource management, and social relations.
- Large-scale mining activities, represented by sites such as Peñalosa, indicate the systematic exploitation of strategic metallurgical resources – particularly silver – likely integrated into supraregional exchange networks and controlled by dominant sectors. This activity not only required advanced technical organisation but also the capacity to mobilise and concentrate labour around a key resource, as well as to regulate and control its circulation.
- In parallel, the agricultural sphere underwent a comparable process of intensification. The increase

in the number and size of grinding stones documented across several settlements points to sustained growth in cereal production. This intensification was achieved through the expansion of cultivated land, associated with deforestation processes and occurring within a context of increasing climatic aridity. The growing reliance on barley, a more resilient crop, suggests adaptation to progressively more demanding environmental conditions.

- Agricultural intensification cannot be understood independently of mechanisms of storage and product management. The proliferation of large ceramic storage vessels (*pithoi*), linked to specialised workshops engaged in standardised production, indicates the existence of organised systems for the accumulation and management of resources. Thus, increased production not only generated greater volumes of goods but also required structures capable of concentrating, preserving, and redistributing them.
- This dynamic of productive expansion and material accumulation unfolded within a context of probable demographic growth, which would have intensified pressure on agricultural resources and the environment.
- The social consequences of this process are reflected in the funerary and bioanthropological record. The increase in infant burials and the presence of pathological indicators associated with nutritional deficiencies and infections suggest that living conditions did not improve uniformly. On the contrary, part of the population appears to have experienced a deterioration in biological reproduction and general health.
- At the same time, the consolidation of elite burials characterised by an abundance of grave goods and singular objects points to heightened social differentiation and an unequal concentration of wealth and value. The relative decline in the ritual representation of other adults reinforces the notion that access to certain material and symbolic resources was becoming increasingly restricted.

Taken together, intensive mining, agricultural expansion under environmental stress, surplus accumulation through centralised storage, probable demographic growth, and increasing funerary differentiation do not constitute independent phenomena but rather interconnected dimensions of a single process: the consolidation of a highly productive yet increasingly tensioned system. Its stability depended on the continuous siphoning off of surplus, sustained labour mobilisation, and effective control over strategic resources. Any significant disruption to these components – whether due to environmental depletion, difficulties in the social reproduction of the labour force, or tensions derived from growing inequality – had the potential to affect the system as a whole.

The archaeological record suggests that around 1550 BC this dynamic was disrupted. The interruption of mining activities at sites such as Peñalosa, the reduction in the number and size of grinding stones, and the disappearance of standardised large storage vessels indicate the disarticulation of the principal mechanisms of surplus generation and management. At the same time, changes in settlement

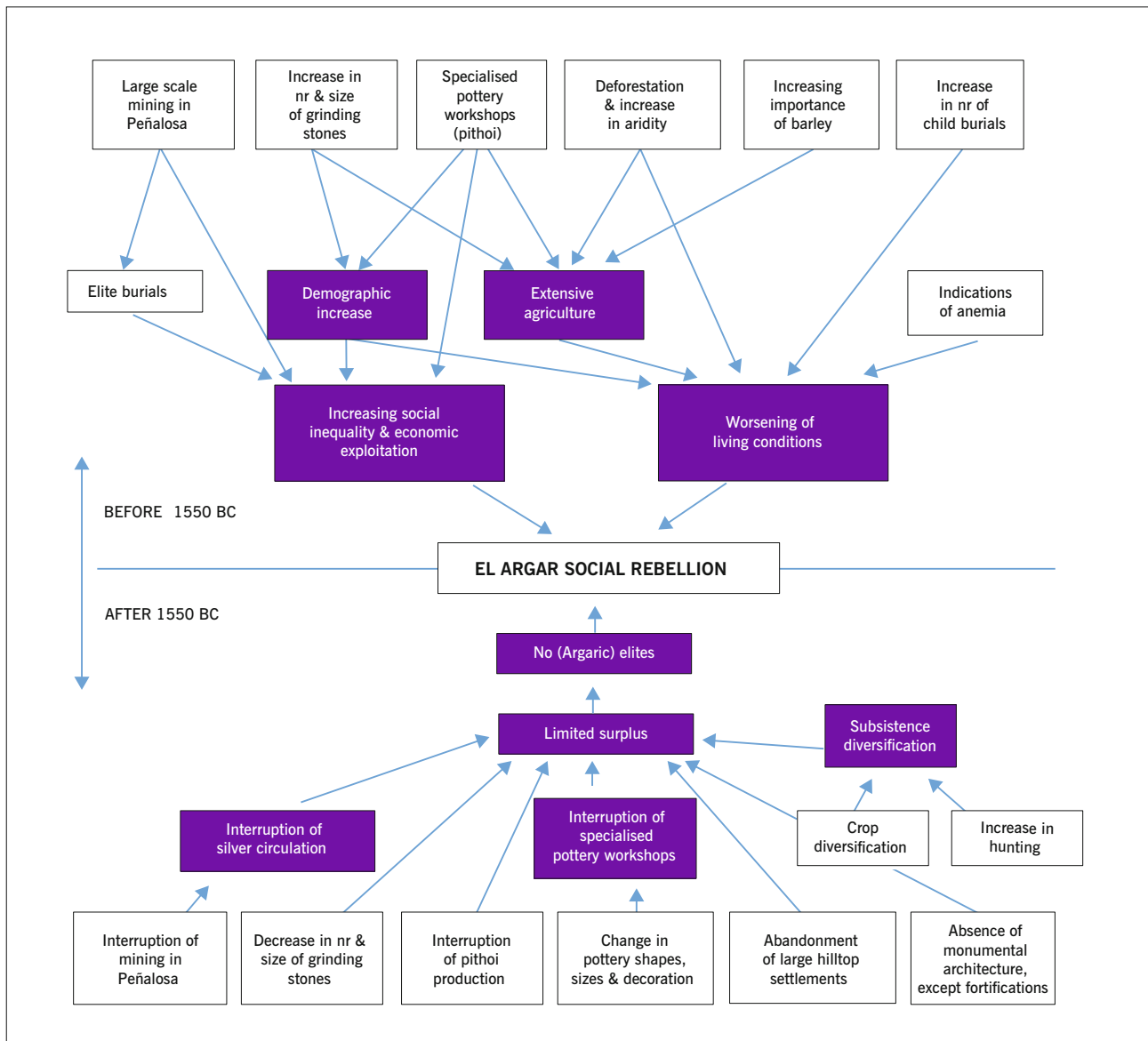


Fig. 8 Explanatory model of the »El Argar Social Rebellion«. Schematic representation of the interrelated economic, demographic, environmental, and social processes preceding c. 1550 BC and their subsequent disruption.

Abb. 8 Erklärungsmodell der »Sozialen Rebellion von El Argar«. Schematische Darstellung der miteinander verknüpften wirtschaftlichen, demografischen, ökologischen und sozialen Prozesse vor ca. 1550 v. Chr. und ihrem anschließendem Abbruch.

patterns – including the abandonment of large hilltop sites and evidence of burning episodes – together with the subsequent absence of monumental architecture, point to the loss of the political and economic centres that had taken shape in previous centuries.

These transformations do not appear to reflect a gradual reconfiguration but rather a relatively abrupt rupture in systemic organisation. The decline in productive specialisation and the increased reliance on less intensive subsistence strategies, such as hunting, suggest a reorientation toward less centralised economic forms, less dependent on large-scale surplus accumulation.

From this perspective, the »El Argar Rebellion« may be interpreted as the moment when accumulated tensions reached a critical threshold and triggered the disintegration of the preceding socio-economic model. The available archaeological, bioanthropological, and palaeoecological

evidence does not point to a single cause or isolated trigger, but rather to a convergence of forces that, acting in an inter-related manner, simultaneously affected production, social reproduction, and political organisation.

The interruption of surplus-generating mechanisms, the decline of fortified settlements as central places, evidence of burning episodes, and the transformation of subsistence strategies together configure a scenario consistent with a profound rupture of the previous order. In this sense, the »El Argar Social Rebellion« should neither be understood as a mere descriptive label nor as a complete explanation of change, but as a turning point – a hinge between two distinct social configurations.

The notion of social uprising does not exhaust the complexity of the process, but it provides a coherent framework for articulating the simultaneity of economic, demographic, environmental, and political transformations observed in

the archaeological record. Rather than an isolated episode, the »Social Uprise« functions as an explanatory category that gives meaning to the transition from a system based on productive intensification, surplus accumulation, and marked social stratification to another characterised by reduced economic centralisation and a reorganisation of social life. If this reading of the archaeological context is correct, rebellion and, possibly, revolution may have been among social and political forces behind the End of El Argar.

Rebellion on Trial: Evaluating the »End of El Argar« Hypothesis

The interpretation of the transformations observed around 1550 BC as a rebellion has been presented above as a coherent explanatory model integrating archaeological, anthropological, and paleoenvironmental data. However, the strength of such a model does not reside in its narrative appeal, but in its capacity to withstand critical examination.

For this reason, the following discussion adopts a structured evaluative framework presented metaphorically as a »trial«. The rebellion hypothesis is not assumed as a given outcome, but is instead subjected to systematic scrutiny. Each line of evidence and its previously analysed chain of inferences is reconsidered in terms of its explanatory power: does it support the hypothesis, remain compatible with alternative interpretations, or challenge it?

This procedure is not intended as rhetorical dramatisation, but as an explicit methodological exercise. By placing the hypothesis »on trial«, the aim is to clarify the degree to which the available evidence justifies interpreting the collapse of El Argar as the outcome of accumulated structural tensions culminating in social rupture.

Evidence 1: Significant increase in Grinding Stones during El Argar

A marked increase in the number of grinding stones is documented during the Middle and especially the Final phases of El Argar.

Thesis: An exceptional increase in grinding stones in central settlements, such as La Bastida, Fuente Álamo, or Gatas strongly suggests intensified cereal processing and, by implication, expanded agricultural production in the core El Argar territory. This likely involved the extension of cultivated territories and a growing reliance on barley. Such intensification implies greater extraction of labour and land resources. If agricultural production were pushed toward higher levels of dependency and reduced diversification, the system may have become increasingly vulnerable to environmental fluctuation or internal imbalance. In this reading, intensification represents not prosperity alone, but structural pressure accumulating within the productive base.

Antithesis: However, more grinding stones do not necessarily imply systemic stress. They may reflect demographic growth, dietary preference, or increased household-level production without structural crisis. Even if agricultural

territories expanded, the overall population size may have remained relatively small, and there is no **direct** evidence that such expansion caused aridification or ecological collapse.

Synthesis: Taken in isolation, the increase in grinding stones cannot demonstrate social upheaval. Yet it establishes a trend toward productive intensification that becomes significant when evaluated alongside botanical, paleoenvironmental and bioanthropological indicators (see Evidence 2–5). It defines the material conditions under which structural tension could emerge.

Evidence 2: Increasing Aridity in Botanical Records

Pollen profiles and charcoal assemblages suggest increasing aridity and woodland degradation toward the End of El Argar.

Thesis: Aridity and forest decline may be interpreted as the cumulative consequence of anthropogenic deforestation linked to agricultural expansion. If cereal production intensified (Evidence 1), the clearing of woodland to extend cultivation areas would have contributed to soil degradation and ecological fragility. In this perspective, environmental stress is not an external cause but partly the outcome of internal productive dynamics. Structural pressure would thus be embedded within the economic system itself.

Antithesis: Alternatively, botanical changes may reflect broader climatic shifts independent of human activity. No single line of evidence conclusively attributes aridity to anthropogenic causes. Moreover, independent paleoclimatic proxies do not uniformly confirm a drastic regional climatic downturn at precisely this moment.

Synthesis: Climatic and anthropogenic factors are not mutually exclusive. Even if climatic fluctuation contributed to aridity, a system already operating under intensified agricultural dependence would have been more susceptible to environmental stress. Thus, the climatic explanation does not negate the Rebellion hypothesis; rather, it reframes the question in terms of systemic resilience versus fragility.

Evidence 3: Increasing Dominance of Barley in the Botanical Record

Charred seed assemblages, particularly in the regions of Almería and Murcia, indicate a growing dominance of barley over wheat and pulses as El Argar develops. Isotopic analyses in La Bastida and Gatas suggest that during the latest phase, either the contribution of meat and dairy products or the intensity of manuring decreased.

Thesis: The increasing predominance of barley in the late El Argar phases of central settlements of the core territory may reflect progressive agricultural specialisation in a crop that is more resistant to arid conditions but generally considered less nutritionally diverse than wheat or pulses. If cereal production intensified (Evidence 1) under conditions of environmental stress (Evidence 2), reliance on bar-

ley could signal adaptive resilience but also reduced dietary diversity. A narrowing of the agricultural base may have increased structural vulnerability: a society increasingly dependent on a single staple crop becomes more exposed to fluctuation, harvest failure, or nutritional imbalance. In this reading, barley dominance may reflect both ecological adaptation and subsistence simplification, potentially contributing to deteriorating living conditions for part of the population.

The isotopic indication of reduced meat and dairy consumption or decreased manuring intensity may suggest a decline in agricultural productivity. Lower yields would have affected the capacity to sustain surplus production and, therefore, the stability of the highly centralised political and social organisation characteristic of El Argar.

Antithesis: Nevertheless, the botanical record is not necessarily representative of the overall diet. Preservation biases and depositional processes affect the composition of charred seed assemblages. Stable isotopic values do not distinguish between barley and wheat consumption and cannot determine the relative proportions of specific cereals in the diet. Moreover, the observed isotopic shifts do not conclusively demonstrate a generalized subsistence crisis, and further samples would be necessary to confirm such an interpretation.

In addition, the increasing prominence of barley is not exclusive to the Argaric territory and has been documented in other areas of the Iberian Peninsula during the Bronze Age. This broader trend suggests that the shift toward barley may reflect wider environmental or agronomic developments rather than a phenomenon specific to the internal dynamics of El Argar.

Synthesis: The social effects of barley cultivation are not likely to be the same in the large communities of El Argar as in the scattered, small settlements of the Levante and La Mancha or further north.

Evidence 4: Increase in Child Burials in Final Argar Levels

Final Argar contexts show a notable increase in child burials within settlements.

Thesis: An increase in child burials may reflect a rise in child mortality. Children are generally the most vulnerable segment of the population to nutritional deficiencies, infectious disease, and subsistence instability.

If agricultural productivity declined (Evidence 3) and cereal production became more specialised (Evidence 1–3), worsening living conditions could have disproportionately affected infants and young children. In this interpretation, the funerary record would register the demographic consequences of subsistence stress, contributing to a scenario of systemic fragility in the final phase of El Argar.

Antithesis: The possibility that the increase in child burials reflects changes in funerary selection or ritual practice cannot be dismissed. However, ritual practices do not emerge independently of the social realities experienced by a population. Even if the greater representation of children in the funerary record results partly from changing mortu-

ary choices, the question remains why children became the focus of such practices during the final phase of El Argar. Rather than excluding demographic stress, the ritualization of childhood death may itself reflect growing concern with the most vulnerable members of society. At the same time, the relative underrepresentation of adults raises further questions regarding the treatment of the adult dead and the social transformations affecting funerary behaviour.

Synthesis: Consequently, the increase in child burials cannot be taken as direct evidence of rising mortality, but neither can it be separated from the broader context of economic decline, social instability, and demographic stress.

Evidence 5: Bioanthropological Indicators of Anaemia (Cribra Orbitalia, Enamel Hypoplasia)

Skeletal analyses from Argaric individuals reveal the presence of cribra orbitalia and enamel hypoplasia, commonly associated with anaemia and physiological stress.

Thesis: These indicators may reflect chronic nutritional deficiencies or repeated episodes of physiological stress. If agricultural specialisation reduced dietary diversity (Evidence 3), and if environmental stress increased subsistence pressure (Evidence 2), bioanthropological markers could represent the embodied consequences of systemic tension. In this interpretation, skeletal stress markers provide biological corroboration of material conditions inferred from productive and ecological evidence.

Antithesis: To sustain this argument, it would be necessary to demonstrate a statistically significant increase in these pathologies between Middle and Late El Argar. At present, no comprehensive diachronic study conclusively establishes such an increase. Moreover, *cribra orbitalia* and enamel hypoplasia are multifactorial conditions and cannot be directly attributed to specific economic changes without caution.

Synthesis: While not definitive, the presence of physiological stress markers aligns with a scenario of intensified subsistence pressure. The absence of clear diachronic quantification weakens the argument but does not invalidate the possibility that structural strain affected biological reproduction.

Evidence 6: Changes in Pottery Styles and Storage Practices

Archaeological assemblages show a marked transformation in pottery types, standardisation, and storage vessel forms following the end of El Argar.

Thesis: From c. 2050 BC onwards, El Argar pottery was largely undecorated or limited to subtle burnished motifs. After the collapse, decorative traditions reappear in the so-called *Cogotas* style, likely originating in the northern Meseta. Vessel forms become less standardised, and the large storage pithoi characteristic of Argaric settlements disappear.

The reintroduction of decoration and the loss of standardisation may reflect the dissolution of centralised pro-

duction norms. The disappearance of large storage vessels – closely associated with cereal accumulation and redistribution – suggests a breakdown of the storage system that supported Argaric economic organisation. If standardised production and centralised storage were integral to elite control, their disappearance signals structural transformation.

Antithesis: Pottery decoration is not a direct indicator of social rupture. Changes in style may reflect shifting aesthetic preferences or external cultural influence rather than internal upheaval. Likewise, cereals could have been stored in perishable containers (sacks, baskets, leather), leaving no archaeological trace. The disappearance of *pithoi* does not necessarily imply the abandonment of surplus management.

Synthesis: This evidence suggests transformation in productive and symbolic practices, but does not independently demonstrate social revolt.

Evidence 7: The End of the Intramural Funerary Rite

Funerary practices changed abruptly after 1550 BC, with the near disappearance of the intramural burial system.

Thesis: The near-total disappearance of intramural burials in post-Argaric settlements marks the end of a funerary system that had persisted for approximately 650 years. During its final phase, burials – particularly of children – became more frequent. The intramural rite materialised and reinforced distinctions of age, gender, and class. Its disappearance, therefore, signals not merely ritual change but the abandonment of a long-standing ideological framework that structured social hierarchy. If funerary practice functioned as a mechanism for legitimising inequality, its abrupt termination suggests a transformation in the social relations it once sustained.

Antithesis: Funerary ritual is only one dimension of social organisation. Inequality may have persisted but been expressed through other, archaeologically less visible means. The disappearance of intramural burial does not necessarily imply the disappearance of hierarchy.

Synthesis: Unlike pottery style, funerary transformation directly affects the ideological expression of social order. While not definitive proof of uprising, it strongly suggests a reconfiguration of social relations.

Evidence 8: Abandonment and Destruction of Hilltop Settlements

Most Argaric hilltop settlements were abandoned – and in some cases destroyed by fire – around the end of the system, with little architectural continuity in subsequent occupations.

Thesis: Settlement data from the southeastern Iberian quadrant document a collapse of exceptional scale: the number of radiocarbon-dated sites decreases by over 61% at the EBA–LBA transition, and the large political centres that structured Argaric territorial organisation disappear almost entirely. Those settlements that do continue into the LBA undergo significant internal reorganisation, marked by size reduction, the disappearance of centralised storage

and specialised production, and a generalised shift toward household-scale economic self-sufficiency. New site foundations are scarce and uniformly small. Significantly, a number of settlements show clear evidence of destruction and fire horizons at the moment of abandonment, suggesting that the end of occupation was in many cases abrupt and potentially violent. Taken together, these patterns indicate not merely demographic decline, but the wholesale dissolution of the settlement hierarchy that underpinned Argaric political authority.

Antithesis: However, the settlement evidence alone does not determine the cause of this transformation. A 61% reduction in dated sites may partly reflect taphonomic bias or reduced visibility of smaller, less permanent LBA occupations rather than true demographic collapse. The shift toward dispersed, self-sufficient settlements could represent an adaptive reorganisation in response to environmental stress rather than the deliberate dismantling of hierarchical structures. Fire and destruction horizons, moreover, are ambiguous proxies: they may result from accidental events or post-abandonment processes, and their presence at a subset of sites does not necessarily imply that violence was the primary mechanism of collapse. The survival of Cabezo Redondo as a large, centralised settlement demonstrates that the material conditions for political complexity persisted in at least one location, suggesting that the disappearance of Argaric centres elsewhere was not structurally inevitable.

Synthesis: The settlement record establishes that the EBA–LBA transition involved a profound and rapid reorganisation of human occupation across south-eastern Iberia, in which the hierarchical network of El Argar was effectively dissolved. The recurrence of destruction horizons at the moment of abandonment adds a potentially conflictive dimension to this process, though it cannot alone demonstrate systemic violence. Whether the collapse resulted from external pressure, internal conflict, or environmental deterioration cannot be determined from settlement patterns alone. What the data do confirm is that the outcome was structurally uniform: political centres vanished, economic autonomy replaced redistribution, and no comparable successor hierarchy emerged. This defines the material baseline against which the remaining lines of evidence must be evaluated.

Evidence 9: Limited Foundation of New Settlements After 1550 BC

After the abandonment of Argaric sites, relatively few new permanent settlements were founded in the affected regions.

Thesis: Following the abandonment of Argaric hilltop sites, few new permanent settlements were established. This suggests a shift from sedentary, agriculturally centralised communities toward more mobile, possibly husbandry-oriented systems. Such a transformation implies not merely adaptation but the rejection of prior economic and political arrangements.

Antithesis: But climatic change toward aridity could produce similar settlement contraction. However, botanical and macrolithic evidence indicate continued cereal culti-

vation and processing. A rapid, dramatic climatic shift sufficient to explain total institutional breakdown lacks firm evidence.

Evidence 10: Increase in Wild Fauna after El Argar

Faunal assemblages from post-Argar contexts show a significant increase in the proportion of wild animal remains compared to earlier phases.

Thesis: Faunal assemblages show a significant increase in wild species after El Argar. If hunting was socially restricted under elite control – as observed in many hierarchical societies – the disappearance of elite authority may have expanded access to wild resources. In a context of reduced dietary diversity in the Late Argar phase (Evidence 1 and 3), this shift may reflect a restructuring of subsistence strategies. An increase in hunting could indicate both dietary diversification and the erosion of prior restrictions.

Antithesis: Alternatively, the rise in wild fauna may reflect demographic decline, reduced agricultural pressure, or a decrease in husbandry. Abandoned fields may have facilitated the return of wild species.

Synthesis: This last interpretation would imply that Late Argar agriculture and husbandry were more intensive than in the post-Argar phase – indirectly supporting Evidence 1. Although, fauna evidence is ambiguous, it is contextually significant and reinforces economic transformation, though not necessarily social revolt.

Evidence 11: Disappearance of Ivory, Shift from Silver to Gold and the Emergence of Hoarding

The symbolic use of precious metals changed markedly after El Argar, with silver and ivory practically vanishing, gold becoming dominant, and hoarding replacing elite burial deposition.

Thesis: El Argar expressed social distinction primarily through silver, likely sourced as a byproduct of copper mining in Sierra Morena (Linares–La Carolina). The destruction of mining centres would have disrupted silver circulation. In the post-Argar period, gold – likely from alluvial deposits – predominates. Precious metals appear in hoards rather than elite burials. This shift from burial display to hoarding represents a fundamental transformation in the social use of wealth.

If silver symbolised centralised elite control tied to mining infrastructure, and gold circulation operated differently, the change suggests reorganisation of power structures.

Antithesis: The transition from silver to gold may reflect ritual preference rather than structural change. The presence of silver vessels in the Villena hoard complicates a strict rupture model, though these may represent residual Argaric continuity.

Synthesis: This evidence touches directly on the material expression of hierarchy. It does not prove uprising, but it indicates a transformation in the mechanisms of wealth display and accumulation.

Synthetic Deliberation: Weighing the Convergence of Evidence

Individually, none of the evidentiary lines compels the conclusion of social uprising and rebellion or even revolution. Collectively, however, they reveal synchronised discontinuities across productive organisation, funerary ideology, settlement systems, subsistence strategies, and symbolic economies. The question is therefore not whether change occurred, but whether such multi-scalar transformation can be explained without invoking a rupture in the social relations that sustained the Argaric system.

The model does not demonstrate a rebellion in the strict historical sense. What it proposes is that the relatively coordinated interruption of mining activity, the circulation of silver and ivory, artisanal specialisation, and elite forms of consumption (mainly seen in the funerary record) is more coherently explained by internal social conflict than by a purely exogenous collapse. These sectors were structurally interconnected within the Argaric system; their near-simultaneous transformation suggests disruption at the level of social relations of production rather than isolated economic adjustments.

Equally significant are the absences in the record. Although an absence never constitutes evidence, some absences speak volumes. There is no clear evidence of large-scale migration into or out of the Argaric territory at the moment of collapse, nor is there compelling proof of a sudden natural catastrophe capable of independently dismantling the entire Argaric system on its own. Climatic fluctuation may have contributed to systemic stress, but it does not, on its own, account for the institutional and ideological discontinuities observed.

Recent scholarship on societal collapse has increasingly rejected monocausal and environmentally deterministic explanations, emphasising instead the complex and socially mediated nature of systemic breakdown (Middleton 2025). Collapse is no longer widely understood as an apocalyptic event triggered solely by external shock, but as a process shaped by structural tensions, institutional fragility, and historically contingent forms of inequality (Middleton 2017). In several comparative cases – including the Western Roman Empire and the Classic Maya – growing disparities in wealth and access to resources have been identified as significant structural factors preceding systemic disarticulation (Storey/Storey 2017, 219–228).

Within this broader interpretative landscape, the Argaric case does not appear anomalous. The pronounced social differentiation documented in funerary assemblages, the concentration of wealth, and the centralisation of metallurgical production suggest a system organised through marked asymmetries in access to resources and power. If such inequalities intensified over time, they may have reduced the system's capacity for adaptation, rendering it increasingly vulnerable to internal strain.

In such a configuration, any weakening in the capacity to extract, circulate, and legitimise surplus could have had cascading effects across interconnected domains. Once coordination between mining control, metallurgical pro-

duction, surplus accumulation, and hierarchical display faltered, the system may have lost the material and symbolic foundations necessary for its own reproduction. Under these conditions, collapse would not necessarily require a catastrophic external trigger; it could emerge from the cumulative erosion of the mechanisms through which hierarchy was reproduced.

If the term rebellion is to be retained, it should not be understood as a documented insurrectionary episode in the modern sense, nor as a single coordinated event unfolding within a short chronological window. Rather, it designates a process in which the hierarchical relations that structured access to resources, labour, and symbolic capital progressively lost their capacity to reproduce themselves.

This form of rupture may have unfolded unevenly across the Argaric territory, involving negotiation, resistance, opportunistic realignment, and perhaps localised violence. Its material signature would not be a battlefield, but the dismantling of the mechanisms that sustained surplus extraction and social differentiation. The burning or abandonment of storage centres, the cessation of standardised production and related long-distance distribution networks, and the transformation of wealth-display practices would then reflect not merely economic contraction, but the reconfiguration of power relations at multiple scales.

The *rebellion*, therefore, may be best conceptualised as a systemic rupture emerging from accumulated structural tensions – a transformation in which the coordinated structures of extraction, authority, and symbolic distinction were no longer sustained, producing a landscape of discontinuity rather than gradual evolution.

What remains absent in the archaeological record is direct evidence – the »smoking gun«, so to speak – of physical violence in the decades around 1550 BC. However, stratigraphic breaks, expressing temporal patterns of rupture over a relatively short period, can be clearly observed in at least two of the few extensively excavated settlements.

During the final Argaric phase (Horizon IV, c. 1775–1600/1550 BC) at the central settlement of Fuente Álamo (Almería) – a period marked by the highest concentration of means of production, workshops, and the richest elite burials – a significant rupture has been identified in the stratigraphic, architectural, and funerary record. The most prominent structure of Horizon IV was Building H, a large, possibly multi-storey construction with walls approximately 2 m thick. It likely functioned as a granary, a grain-processing facility, and a meeting place, as suggested by the concentration of a substantial number of grinding tools and of typical late Argaric chalices found in its immediate surroundings (Risch 2002, 197–201; Schuhmacher 2003). This structure was destroyed or dismantled during the transition from Layer 13 to Layer 15 (Schubart et al. 2001, 62–67).

Although the precise dating of this event remains uncertain, the presence of up to six typical El Argar cist and urn burials in Layer 14, together with the construction of Building R in Layer 15 – associated with typical late Argaric pottery – indicates that a major episode of dismantling and destruction occurred several years or decades before the end of El Argar and the onset of Late Bronze Age occupa-

tions, represented at Fuente Álamo by Layer 16. While the burials in this upper sector of the settlement remain notably rich – often including silver spirals – the simplicity of the later walls and the reduced size of Building R, especially when compared to earlier constructions, point to a decline in the economic strength (i.e. surplus) of the late Argaric elites.

This sequence closely resembles the situation observed at La Almoloya, where the entire settlement – and most notably the palatial Complex 1 – was destroyed by fire shortly after c. 1650 BC, at a time when one of the richest burials known from El Argar had been deposited in its main room or assembly hall (Lull et al. 2020). As in Fuente Álamo, this destruction did not mark the immediate end of occupation. Settlement layers continued to accumulate, and new burials were placed within the ruins and partially restored structures for several years or decades, until the site was finally abandoned around 1550 cal BC (Villalba-Mouco et al. 2022).

The causes of these substantial destruction events remain unknown. However, they are consistent with a process of increasing social unrest and uprisings against established elites and their exploitative economy, preceding a broader transformation in which the existing order was replaced by a new form of social and economic organisation, as suggested in the theoretical framework of Rosa Luxemburg.

Conclusion: The *verdict* on the archaeological detectability of rebellion

The preceding analysis has not sought to demonstrate a rebellion or a revolution in the conventional historical sense, nor to reconstruct a specific episode of collective insurrection. Rather, it has examined whether the concept of rebellion can be meaningfully used within prehistoric archaeology through the integrated analysis of material discontinuities. In this respect, the end of El Argar provides a particularly instructive case.

The transformations documented around 1600–1550 BC do not merely indicate economic contraction or environmental fluctuation. They reveal the disarticulation of institutions that had structured surplus extraction, social differentiation, and symbolic legitimisation for centuries. The hierarchical framework that sustained the Argaric system did not gradually evolve into a modified configuration; it ceased to reproduce itself in recognisable form. What emerges archaeologically is structural discontinuity rather than incremental adaptation.

Although archaeology cannot access intentions directly, it can detect when norms are no longer upheld, when institutions are dismantled, and when practices central to the reproduction of inequality are collectively disrupted. In this sense, rebellion in prehistoric contexts cannot be defined solely by explicit acts of violence, which are hard to trace in the archaeological record. The collapse of social domination almost certainly entailed conflict: the elimination of privileges and power structures held by the elite would have provoked resistance, and forms of coercion, coercive compliance, or material contestation were likely involved.

Violence here may not have taken the form of pitched battles but could have manifested through abandonment of settlements, disruption of productive centres, destruction or repurposing of symbolic objects, or targeted elimination of leadership – all of this has a place in the model.

Within this framework, the term *rebellion* functions as a heuristic device that makes the concept archaeologically tractable. Understood not as a punctual insurrectionary act but as the more or less synchronic breakdown of the mechanisms sustaining social domination, uprise functions as a cautious operationalisation of rebellion in contexts lacking written testimony. When multiple domains of evidence – productive organisation, funerary ideology, settlement patterns, and systems of surplus management – converge in revealing coordinated discontinuity, the hypothesis of an internally driven rebellion becomes analytically plausible.

The social rebellion hypothesis does not claim to recover the specific contingent events; rather, it offers a structured narrative model of the structural conditions capable of organising diverse strands of evidence into an explanatory framework open to falsification. Thus, the identification of rebellion in prehistoric contexts does not require direct evidence of intentionality or battlefield encounters, but rather the critical testing of interpretative models able to integrate economic, ideological, environmental, and settlement transformations. By effectively placing the rebellion hypothesis »on trial«, the analysis foregrounds methodological reflexivity as a central component of archaeological explanation.

In this sense, the end of El Argar does not simply illustrate a regional transformation in the Iberian Early Bronze Age. It invites reconsideration of how archaeology concep-

tualises collapse, conflict, and class struggle in societies without writing. Returning to the terms distinguished in the introduction, the end of El Argar can be interpreted as a *rebellion*: a collective process, situated in relative space and time, directed against a system of inequalities. As far as the archaeological evidence allows us to judge, this rebellion resulted in a *revolution* in the sense of Hannah Arendt, as the structural transformations represent the creation of a new social and political order, rather than mere economic adjustments. It is also revolutionary in Luxemburg's terms: the observed changes were not incremental reforms – they constitute a structural transformation, akin to the »qualitative leap« she describes, in which accumulated pressures within the social system culminated in a fundamental reorganisation, marked by the coordinated dismantling of the system's material and symbolic foundations.

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Addresses

Dr. Bárbara Bonora Soriano
 Universitat Autònoma de Barcelona
 Departament de Prehistòria
 Edifici B
 08193 Bellaterra (Barcelona)
 Spain
 barbara.bonora@uab.cat

Dr. Adrià Moreno Gil
 Landesamt für Denkmalpflege und
 Archäologie Sachsen-Anhalt
 – Landesmuseum für Vorgeschichte –
 Richard-Wagner-Straße 9
 06114 Halle (Saale)
 Germany
 agil@lda.stk.sachsen-anhalt.de

Dr. Marcello Peres
 Universitat Autònoma de Barcelona
 Departament de Prehistòria
 Edifici B
 08193 Bellaterra (Barcelona)
 Spain
 marcello.peres@uab.cat

Prof. Dr. Roberto Risch
 Universitat Autònoma de Barcelona
 Departament de Prehistòria
 Edifici B
 08193 Bellaterra (Barcelona)
 Spain
 robert.risch@uab.cat