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LOST IN THE QUEST FOR FLINT: A GRAVETTIAN HUNTING CAMP (USATEGI, BASQUE COUNTRY)

Summary. Five decades ago, Usategi Cave (Basque Country) yielded a small Gravettian series that included an Isturitz-type bone point. This paper presents the first ^{14}C dates for the assemblage and new data obtained by the study of the lithic raw materials, a high proportion of which came from north of the Pyrenees. The discussion of this new information leads to the hypothesis that the occupants of the cave were a group that travelled from the continental Basque Country across the Pyrenean mountain passes and the Ebro basin to procure flint from the nearest outcrop at Urbasa.

INTRODUCTION

Research on the Gravettian period in the Basque Country has received renewed attention in recent decades, thanks to the discovery of new sites, the revision of old sites with modern methodology, analytical advances, the increasing contribution of open-air sites and our new appreciation of the territory. This can be attested by the number of doctoral theses that have studied the technocomplex (Arrizabalaga 1995; Foucher 2004; Simonet 2009; de la Peña 2011; Bradtmöller 2014; Martínez 2015; Calvo 2019). The present paper is framed in this context: reappraising a modest and little known Gravettian sequence from Usategi Cave (Ataun, Gipuzkoa).

Upper Palaeolithic archaeology has readjusted its territorial understanding of the so-called 'Basque Crossroads' since the Tarascon-sur-Ariège Conference in 2004. That meeting altered the geographic paradigm of a linear region (with bidirectional movements between northern Iberia and Aquitaine, across the Pyrenees and Atlantic Basque regions) and replaced it by the idea of a region on a crossroads (with movements along several natural routes that are only linear where they cross the Pyrenees). As a consequence of that conference (Arrizabalaga 2007; Arrizabalaga *et al.* 2016), our view of the mobility and territoriality of hunter-gatherer groups has been revised, with a greater importance attached to the relationship that archaeological sites have with mountain passes, river networks and the outcrops of the lithic raw materials that appear in the archaeological deposits. Indeed, the analytical approach that has contributed most to this change in the conception of the territory has been the characterization of flint at the original source outcrops and the tracing of its distribution to Palaeolithic sites (Tarrío 2006; García-Rojas 2014; Elorrieta 2015; Prieto *et al.* 2016; Sánchez *et al.* 2016; Calvo 2019; García-Rojas *et al.* 2020).

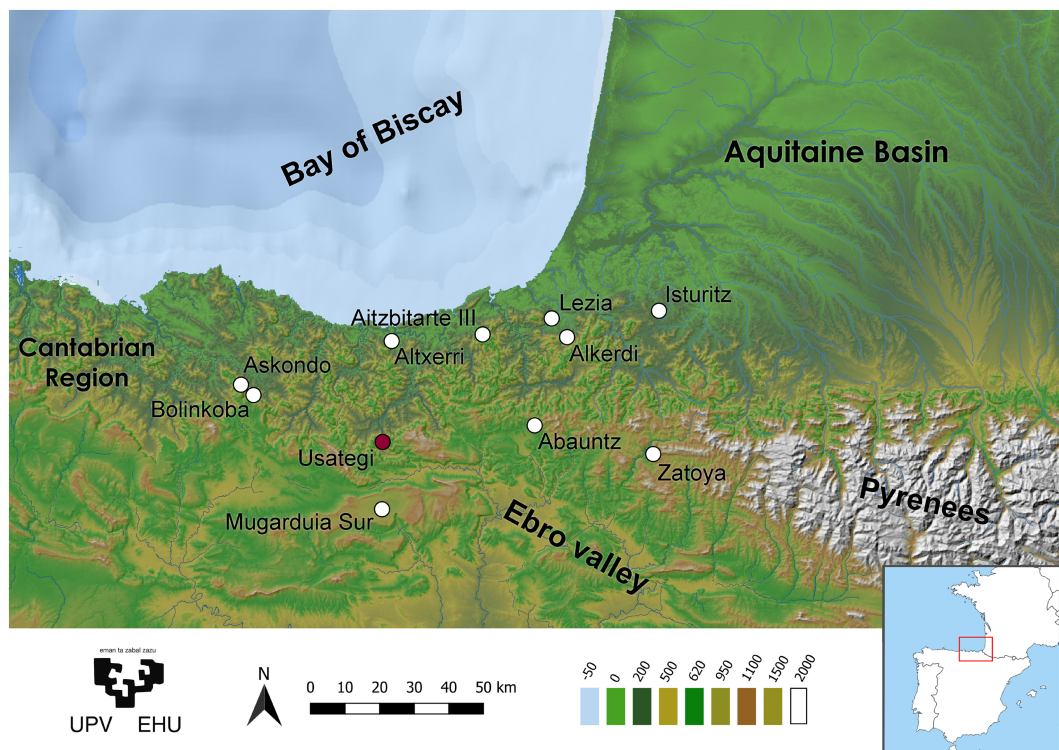


FIGURE 1

Location of Usategi Cave and other sites in the Western Pyrenees mentioned in the text (Base map: Maite García-Rojas).

From this new palaeo-geographic perspective, the location of Usategi Cave is quite striking (Fig. 1). Our current impression of the distribution of sites on the Basque Crossroads (Arrizabalaga and Iriarte-Chiapusso 2011) implies that when human groups entered the Iberian Peninsula after crossing the Bidasoa river, the main route across the area of Gipuzkoa would have run parallel to the coast. On reaching the westernmost river in Gipuzkoa, the Deba, this valley was used (together with the Arratia valley in Biscay) as the main north-south route to reach the watershed of the Ebro valley and the Mediterranean river basins in Iberia. With the exception of Usategi, at the head of the Oria valley, no other Palaeolithic sites are known in the middle or upper valleys of those rivers.

The main purpose of this paper is to provide an explanatory hypothesis of the brief occupation at Usategi, within the framework of the exploitation and distribution of lithic raw materials during the Gravettian in the Western Pyrenees.

THE SITE AND EXCAVATIONS PERFORMED THERE

The town of Ataun lies in the south-east of the Province of Gipuzkoa, near the western end of the Sierra de Aralar. Usategi Cave is about 500 m south of the town of the same name, near the entrance to a narrow gorge, at the UTM coordinates 42°59'33.1"N and 2°10'21.1"W. The cave is

over 10 m wide and 6 m high (Fig. 2), with its entrance facing south-west. The main passage is aligned south-west to north-east and is about 60 m long and 4 or 5 m wide, narrowing in a long triangular shape. This constriction gives the cave the form of two large connected chambers.

The archaeological site of Usategi (or Kobalde) was discovered by J.M. Barandiarán in 1971 (Barandiarán 1977). Excavations were carried out between 1971 and 1973. Although a square grid was established over a large surface area, only small areas were excavated: part of Rows 2, 4, 6 and 8 in the entrance, and Rows 11 and 13 inside the cave (Fig. 2). These areas each provided a stratigraphic sequence (Fig. 2), but the relationship between them is uncertain. The largest and best documented sequence is that of the inner sector of the cave. In a stratigraphic sequence of 130 cm, Barandiarán discriminated five levels. The lowest level (Level V) is archaeologically sterile, while Level IV only provided two lithic remains and a very few bone pieces. The most relevant level is Level III. Here, an Isturitz-type bone point was recovered, along with a small lithic assemblage and a fragment of deer-antler with grooving marks related to the ‘groove-and-splinter’ technique, among other less significant remains. Barandiarán refers to the existence of ‘dark zones’ with charcoal and burned bones around squares 13D and 13E (Barandiarán 1977, 202), suggesting the possible existence of a hearth or fireplace. Level II provided two objects, a knapped and partially

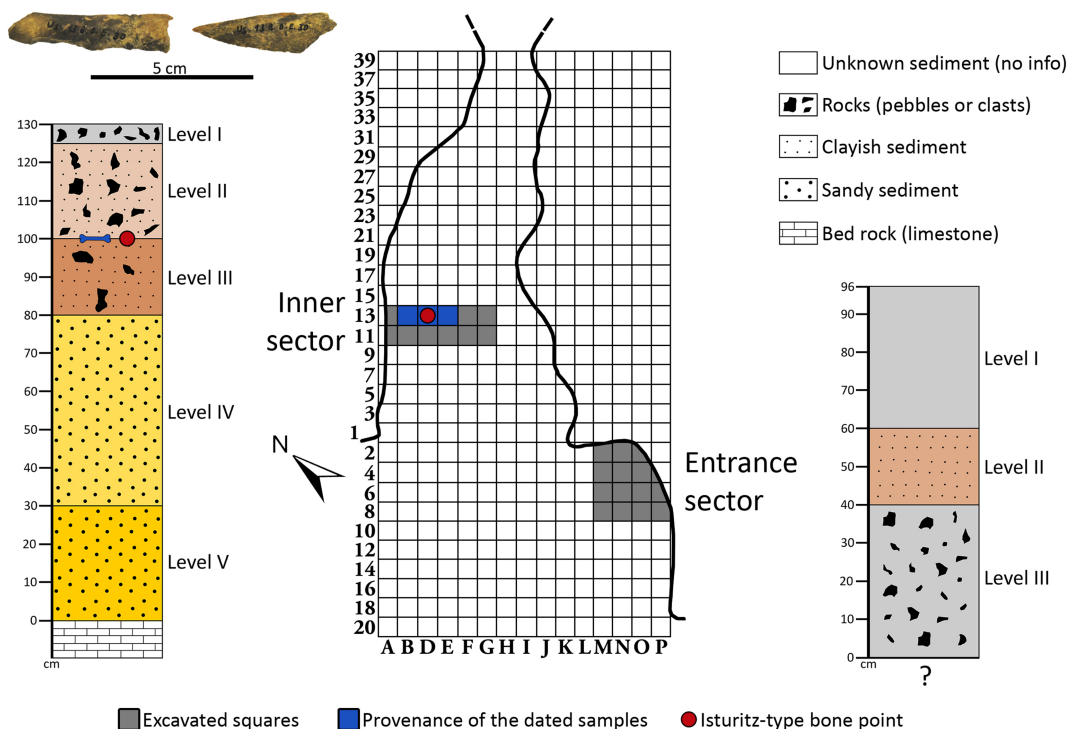


FIGURE 2

Plan of Usategi Cave indicating the excavated areas and the location of the dated samples (shown top left) and the Isturitz-type bone point (modified from Barandiarán 1977), as well as the two idealised stratigraphic sequences made following the information provided in Barandiarán’s paper.



FIGURE 3

Fragment of Isturitz-type bone point recovered in Level III of the inner sequence (Photos: A. Calvo).

polished axe on limestone and a double burin on flint. Level I is archaeologically sterile and suffered some disturbance, as evidenced by the surface finding of a bone punch. The sequence of the entrance sector is 96 cm thick and contains three levels. At the lowest level (Level III) another small lithic assemblage was recovered, as in Level II. However, in this latter level six ceramic fragments were also found. Finally, Level I is again archaeologically sterile. Barandiarán does not mention the existence of either further levels or the bed rock under Level III.

MATERIALS: DATED SAMPLES AND ANALYSED LITHIC REMAINS

Among the remains found, the only one that is chronologically diagnostic is the Isturitz-type bone point (Fig. 3) found inside the cave in Level III, and which can be related to known Gravettian examples of this type of bone point, as found in Bolinkoba, Askondo, Aitzbitarte III, Isturitz and Abri Pataud, among other sites (San Juan-Foucher and Vercoutère 2003; Goutas 2008; Ríos-Garaizar and Garate 2014). In more detail, according to its code this object was recovered in square 13D¹ at a depth of 30 cm, around the boundary zone of levels III and II, although Barandiarán considered it part of Level III. This is the case too with the lithic assemblage,

¹ Although Barandiarán states in his paper that this remain was discovered at square 13E (Barandiarán 1977, 202), its code refers to square 13D.

also referred to as being found at the same depth but as part of Level III. This description suggests the possible existence of a very thin occupation horizon at this depth, although the little information provided by Barandiarán about this issue makes it difficult to assess further. The dated samples had the same reference codes (squares 13-B-D-E, depth of 30 cm; see Fig. 2), being therefore directly associated with the Isturitz-type bone point and the lithic remains. The presence of a polished axe and ceramic fragments refers to a brief later prehistoric presence of uncertain date in the upper part of the stratigraphy. These elements seem to be intrusive, as they are associated with other finds clearly of Upper Palaeolithic type, such as a backed point (Fig. 4.3). However, we decided to include in our analysis only finds from levels that did not contain any post-Palaeolithic remains: namely, levels III and IV of the inner sequence and level III of the entrance sequence.

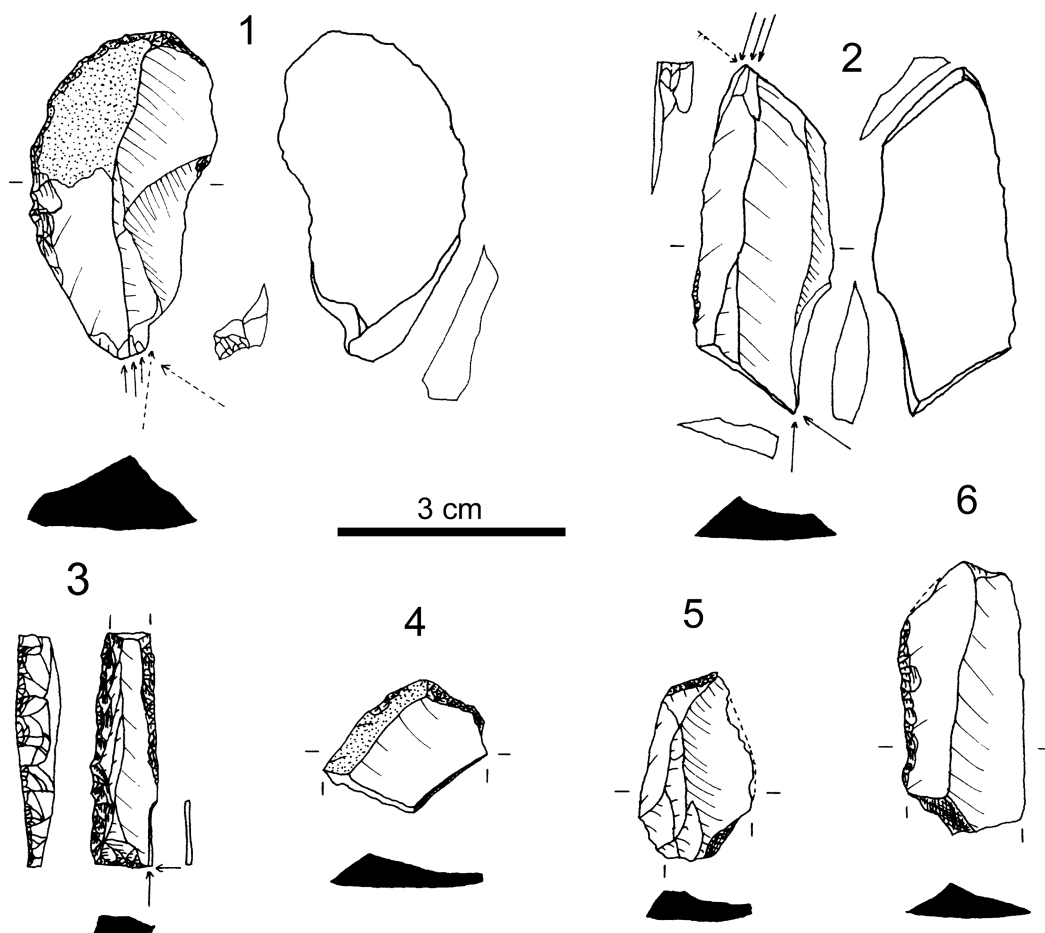


FIGURE 4

Retouched tools from Usategi Cave. 1: burin-endscraper; 2: double burin; 3: backed point; 4 and 5: truncations; 6: sidescraper (Drawings: A. Arrizabalaga).

METHODS

This study consists of two parts. First, radiometric dates were obtained for the Gravettian deposit in Usategi. The two samples were analysed by the Oxford Radiocarbon Accelerator Unit (ORAU), using a pretreatment of bone samples that includes the ultrafiltration of the collagen. This is a well-known method (Higham *et al.* 2006) with proven results in Upper Palaeolithic contexts (e. g. Wood *et al.* 2014).

Then, the lithic assemblage associated with the Gravettian occupation of Usategi was studied in detail. Although it is a small assemblage, the application of a systematic protocol (Arrizabalaga *et al.* 2014b), especially linked with the study of lithic resources (Arrizabalaga *et al.* 2014a; Calvo 2019), has achieved a new appreciation of the deposit. The analysis of the lithic raw materials followed the habitual procedure used by authors like C. Normand, A. Tarrío or M. de la Torre, among others (cf. Tarrío *et al.* 2015). This approach consists of the textural and micropaleontological analysis of lithic remains. This allowed us to determine the geological and geographic origin (outcrops or deposits) of these elements. We included a category of 'indeterminate' for those remains that could not be assigned to a particular flint type for some reason (bad preservation, small size, unknown texture or characteristics, etc.). We also registered the degree of cortex and any post-diagenetic and post-depositional alterations. In the case of cortical remains, the general macroscopic particularities of the cortex were also observed (Fernandes 2012). For these tasks we used a Kyowa SZM stereo microscope, with between 10x and 40x magnification. The collection in the *lithotheque* in the Prehistory Area at the University of the Basque Country was consulted as a point of reference. Finally, the techno-typological analysis was performed according to the parameters of Analytical Typology (Laplace 1972; García-Rojas 2010; Fernández Eraso and García-Rojas 2013).

NEW DATA

The new radiocarbon dates

As stated above, the samples were two splinters of bone in Squares 13B-D-E at a depth of 30 cm in Level III inside the cave and are directly associated with the Isturitz-type bone point (as mentioned, found in Square 13D at the same depth; see Fig. 2). They were pretreated following the ORAU standards, which involves their treatment with acid/alkali/acid, followed by gelatinization and ultrafiltration (Bronk-Ramsey *et al.* 2004). The results are given in Table 1.

Of these two dates, OxA-33766 should be considered more reliable, owing to the slight deficit of collagen in sample OxA-X-2670-51 (4.69 mg, which is a little less than the 5 mg preferred

TABLE 1

Radiocarbon dates for Level III inside Usategi Cave. The dates were calibrated with the OxCal 4.3 programme using the IntCal13 curve (Reimer *et al.* 2013)

Lab. code	Dated material	$\delta^{13}\text{C}$	Date BP	Calibrated date BP (95.4% confidence)
OxA-33766	Bone (<i>Capra pyrenaica?</i>)	-20.6	27,130 ± 250	31,435-30,814
OxA-X-2670-51	Bone (<i>Capra pyrenaica?</i>)	-19.8	26,080 ± 230	30,850-29,705

as a minimum amount). However, both dates are coherent with each other and with the supposed age of the dated level.

Lithic assemblage: techno-typological study

The number of lithic artefacts studied amounts to 29 (Table 2). Of these, 21 come from Level III in the entrance of the cave. The only product of technological preparation identified is a core blank, which does not contribute any significant technological information. However, 19 knapping products were documented. Nine of them are flakes and eight are laminar blanks, including a complete unipolar blade and a former unilateral blade-crest. The seven retouched tools are a burin with lateral facets (B31) or dihedral burin opposite an endscraper with unilateral retouch (G12) both on the same blade (Fig. 4.1); a burin with lateral-transversal facets (B32) opposite another B32 on a blade (Fig. 4.2); an angular truncation (T3) on a flake; two oblique truncations (T2), one on a flake and the other on a blade (Figs. 4.4 and 5); and a bilateral sidescraper (RR1) and a unilateral sidescraper (R1), both on blades (Fig. 4.6). Finally, two burin spalls were documented, both from resharpening. No refittings were found.

Lithic assemblage: provenance of the raw materials

All the lithic pieces are of flint (Table 3), except for one (a possible sandstone hammer). Nine of them relate to the nearby Palaeocene (middle Thanetian) outcrops in the Urbasa mountain range (Navarre), as they show the typical bioclastic texture with diagnostic benthic foraminifera (nummulitids and discocyclinids) and urchin spines, as well as the common greyish patina (Tarrío 2006; Tarrío *et al.* 2007). Another seven are consistent with the raw materials embedded in the Upper Cretaceous (Cenomanian to Maastrichtian) outcrops of the north Pyrenean Chalosse region (Landes). All show a similar texture and state of preservation (beige-yellowish patina). Their main diagnostic feature is the presence of codiaceae algae and benthic foraminifera, especially lepidorbitoids (*L. minor* and *L. socialis*). One artefact shows an eroded cortex, which probably relates either to the sub-primary or secondary deposits located on the flanks of the Audignon-Montaut anticline, originated in the dismantling of the Maastrichtian and Campanian limestone strata, or to the colluvial deposits situated at the Sensacq site, on the Bastennes-Gaujacq diaper (Normand 1986; Bon *et al.* 1996; Séronie-Vivien *et al.* 2006; Fernandes 2012). The third most frequent group of resources relates to the Pyrenean Flysch formations.

TABLE 2

Quantification of the remains in the different technological categories according to areas and levels (CPR=Core preparation/rejuvenation products; KP=Knapping products; RT=Retouched tools; CB=Burin spalls)

		CPR	KP	RT	CB	Total
Inner cave	Level III	-	2	1	1	4
	Level IV	-	1	2	1	4
Entrance	Level III	1	16	4	-	21
	Total	1	19	7	2	29

LOST IN A GRAVETTIAN QUEST FOR FLINT

TABLE 3

Quantification of the remains in the different technological categories according to flint types (CPR=Core preparation/rejuvenation products; KP=Knapping products; RT=Retouched tools; CB=Burin spalls)

	CPR	KP	RT	CB	Total
Urbasa	1	4	4	-	9
Chalosse	-	4	1	2	7
Flysch Bidache	-	3	-	-	3
Indeterminate	-	8	1	-	9
Total	1	19	6	2	28

The three artefacts show the characteristic turbiditic lamination and bioclastic texture with abundant sponge spicules, detritic quartz grains and moldic microporosity originating from the dissolution of dolomite crystals (Normand 2002; Tarrío 2006; Fernandes 2012). One find shows a flat rough primary cortex, indicating that it comes from a tabular nodule (as all three probably do, considering their very similar macro and microscopic aspect and texture). Most likely, these pieces come from the vast Upper Cretaceous (Senonian) outcrops from the region between Saint-Jean-de-Luz-Bidart and Bidache (Atlantic Pyrenees), around the lower Adour valley and its tributaries. These resources are usually encompassed in the general category of ‘Flysch Bidache’.

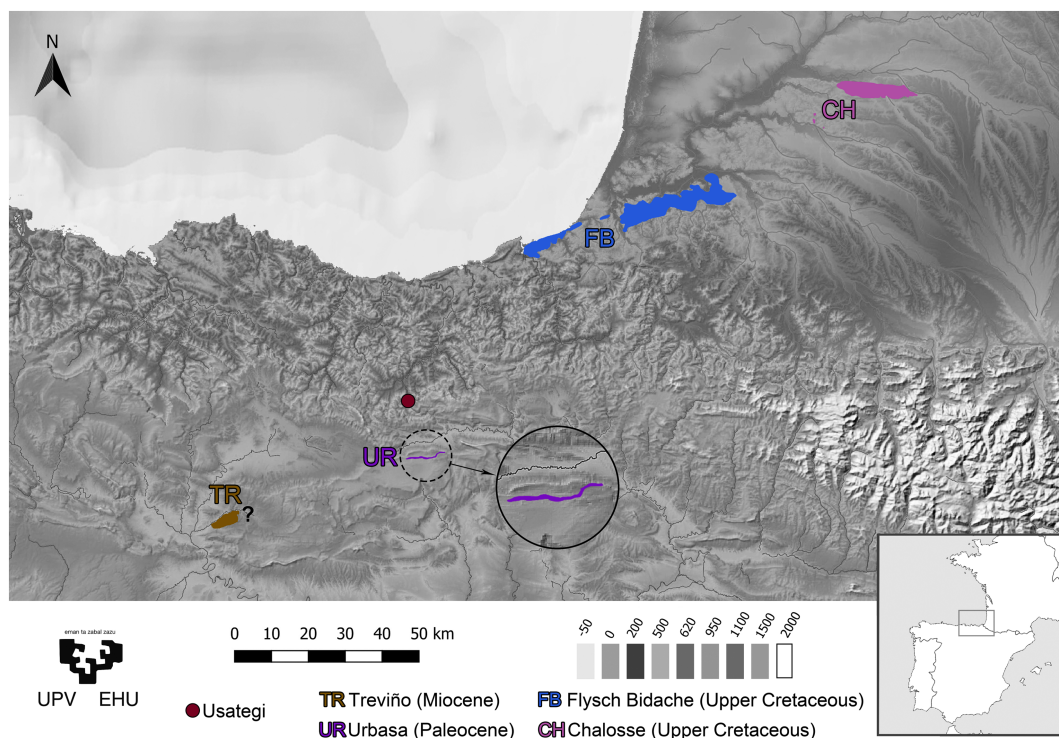


FIGURE 5

Map with the outcrops of the flint types and varieties documented (Base map: Maite García-Rojas).

This consideration is based on several observations: 1) the mentioned significance of another north Pyrenean flint (Chalosse); 2) the abundance of tabular formats (platelets) among the nodules of the Flynch Bidache type (Normand 2002; Fernandes 2012); and 3) the presence of the Isturitz-type bone point, with its clear north Pyrenean affiliation. Among the nine indeterminate pieces, seven may also come from the outcrops of Urbasa, one from those of the Chalosse region and the other from the Miocene (Aquitanian) outcrops of the Treviño area (Tarrío 2006) (Fig. 5).

The flint artefacts directly associated with the Isturitz-type bone point are two blades of Flynch Bidache flint, a burin spall of Chalosse flint and the burin-endscraper of Urbasa flint (Fig. 4.1).

DISCUSSION

The Usategi assemblage is small and, until now, was disregarded as insignificant. It was therefore rarely considered in syntheses on the Gravettian in the Basque Country. The artefact that has received most attention is the Isturitz-type bone point found in Level III in the cave interior. The two splinters of bone that have now been dated were from the same level and depth and establish a more precise chronology for the context of the point. The chrono-stratigraphic value of Isturitz-type bone points was first proposed by Sonneville-Bordes (1971), who linked this ‘bone index fossil’ with the Perigordian Vc, in a very late Gravettian phase, together with Noailles burins. Although in the limited assemblage from Usategi no Noailles burins were recorded (though there is a similar tool present), the dates obtained (with great reliability in the case of OxA-33766 and with less certainty in OxA-X-2670-51) relate the occupation to the regional Gravettian to these characteristic tools. As has been stressed elsewhere (Foucher 2004; 2013; Arrizabalaga and de la Peña 2013), sites

TABLE 4

Radiocarbon dates from levels with Isturitz-type bone points (Vogel and Waterbolk 1967; Gowlett *et al.* 1986; Mellars *et al.* 1987; Hedges *et al.* 1990; Foucher 2004; Iriarte-Chiapusso and Arrizabalaga 2015; Marín-Arroyo *et al.* 2018). The dates were calibrated with the OxCal 4.3 programme using the IntCal13 curve (Reimer *et al.* 2013)

Site	Level	Lab. code	Dating method	Dated material	Date BP	Calibrated date BP (95.4% confidence)
Bolinkoba	F (VI) 2 superior	OxA-32519	AMS	Bone	25,280±210	29,932-28,797
		Beta-426854			25,950±120	30,646-29,746
		Beta-302981			21,020±90	25,615-25,125
Gargas	6 (Cartailhac-Breuil)	Ly-1625/ GrA-19506	AMS	Antler	25,050±170	29,508-28,707
Pataud	4 (Middle_Lens) 4 (Lower_Lens) 4 (Upper_Lens)	GrN-4280	Conv.	Bone	27,060±370	31,671-30,567
		Oxa-168	AMS		26,900±1000	33,510-29,125
		Oxa-374			26,300±900	32,534-28,642
Roc-de-Combe	2	Oxa-1257	AMS	Bone	24,700±400	29,656-27,890
Abri du Facteur	10/11	Oxa-583	AMS	Bone	24,720±600	30,302-27,733
		Oxa-584			24,210±500	29,380-27,502
		Oxa-585			24,400±600	29,924-27,476
		Oxa-586		Antler	24,690±600	30,275-27,715
		Oxa-594		Bone	25,450±650	30,952-28,394
		Oxa-595			25,630±650	31,033-28,574

that have been dated with Noailles burins in the Pyrenees and northern Iberia demonstrate a chronological range from the very start of the Gravettian to late phases of the period.

Radiometric data for Isturitz-type bone points is limited to a few sites where this unusual osseous element has been found, in both parts of the Basque Country (and above all in Isturitz), the northern foothills of the Pyrenees and the Dordogne. Relatively few dates are available for levels that contained these objects (Table 4) and refer to only six sites (Bolinkoba, Gargas, Abri Pataud, Roc-de-Combe, Abri du Facteur and Usategi).

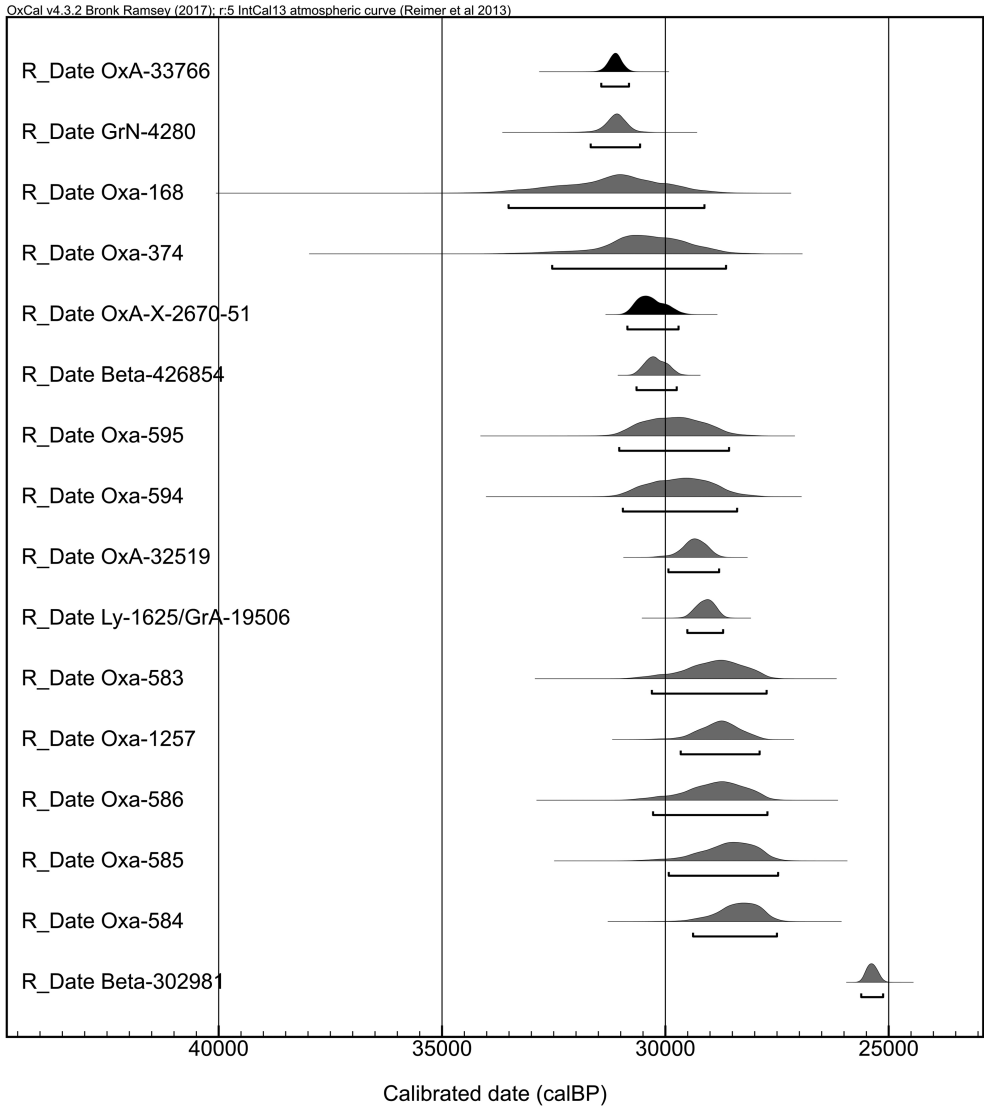


FIGURE 6

Calibrated radiocarbon dates BP (95.4%) for levels with Isturitz-type bone points. The two dates from Usategi presented here are in black.

In other cases, like Askondo, Aitzbitarte III and Isturitz, the contextual value of the dates is even less certain. In contrast, the distribution of the calibrated dates (Fig. 6) is quite significant. In south-west Europe, the Gravettian corresponds to the period between 33,300 and 25,400 cal BP. The dates for levels with Isturitz-type bone points are distributed over a long time span, covering the first two-thirds of the Gravettian period. The oldest date is one of the new determinations at Usategi (OxA-33766) at $27,130 \pm 250$ BP, between 31,441 and 30,809 cal BP. In the order of the laboratory dates, the series in Level 4 at Abri Pataud is the next oldest result, while the second date from Usategi (OxA-X-2670-51) is the fifth oldest. Although this second Usategi date is less reliable than the first one owing to the low collagen weight, the result is consistent with both the other date from Usategi and the rest of dates in the table: $26,080 \pm 230$ BP, or 30,857-29,703 cal BP. The only outlier (Beta-302981) is the date obtained in the recent excavation of a remnant of the stratigraphy in Bolinkoba (Iriarte-Chiapusso and Arrizabalaga 2015), which may not necessarily correspond to the level where the Isturitz-type bone point was unearthed eight decades earlier. However, what these dates do demonstrate is that the Isturitz-type bone points are not related to the late Gravettian, as Sonnevile-Bordes proposed, but to an early or middle phase of the technocomplex.

The most novel aspect of the present study concerns the particular makeup of this raw material assemblage. As stated above, the large percentage of resources from the Chalosse region is noteworthy as it is similar to the percentage of those from the outcrops at the Urbasa mountain range, which is in the vicinity of Usategi Cave. Furthermore, despite the heavy patina, the third most abundant resource is *Flysch* flint, probably from the Saint-Jean-de-Luz-Bidart-Bidache area. Even though the site is very close to the outcrops of Urbasa flint, this type is only slightly more frequent and is outnumbered by the two types of flint from north of the Pyrenees (Chalosse and *Flysch* Bidache), among the identified materials. This particular composition of the resources has suggested the hypothesis that is announced in the title of the paper. In no other assemblage like this Basque Gravettian one (Calvo 2019) are the north and south Pyrenean flint types so equally balanced in such a symmetric fusion between the two territories (continental Basque Country and north-west Gipuzkoa), with a dominance of continental resources and scarcity of peninsular types. This is unlike the situation in other peninsular Basque sites. We therefore propose that the groups that sporadically occupied Usategi Cave in the Gravettian came from the continental Basque Country and used the cave during an expedition to procure Urbasa flint, either because they had become lost or in connection with a hunting camp during such an expedition. At the open-air Gravettian workshop of Mugarduia South, on the main outcrop of the Urbasa flint, north Pyrenean flint types, like those from the areas of Salies de Béarn and Tercis, have been found in low percentages (about 0.2%) (Tarrío 2013). Other evidence of these procurement expeditions is seen in the Urbasa flint found in different levels in the largest deposit in the continental Basque Country at Isturitz (Tarrío and Normand 2002; Simonet 2010), which has been described as an aggregation site in the Gravettian and Magdalenian.

The location of Usategi itself supports this hypothesis. Upper Palaeolithic sites in Gipuzkoa are not distributed at random. The valleys of the main rivers are occupied in the lower courses, near their mouths in the Bay of Biscay. This has encouraged the belief in the literature that, owing to periglacial conditions, only areas at low altitudes were suitable for human occupation. In the peninsular area nearest the Pyrenees, Gipuzkoa, the only exception to this is the westernmost valley of the Deba river, which was clearly used (like the Arratia valley in Biscay) as a route to connect the north of the watershed with the Ebro valley to the south and its valuable resources. As archaeological surveying progresses, the Urola valley, to the east of the Deba, is increasingly being identified as another route towards the interior of the peninsula. However, in the case of the Oria

valley, the main river basin in Gipuzkoa, the situation has not changed in the last fifty years; only one cave with rock art (Altxerri) is known very near the modern mouth of the Oria. The other Palaeolithic site in the valley, near the head of a tributary river, is Usategi. Although further research will likely discover more sites in the future, it seems statistically unlikely that the general picture we now know (Arrizabalaga and Iriarte-Chiapusso 2011) will change substantially in the future. This means that the usual route for Palaeolithic hunter-gatherers who crossed the Bidasoa river, from the continental Basque Country to the Iberian Peninsula, followed the lower courses of the rivers in Gipuzkoa and crossed the intermediate ridges along secondary valleys, at low altitudes. When they reached the Deba river, as well as continuing towards the west and entering the modern territory of Biscay, many groups turned south and followed the river to at least two tributaries at its head (the Oñati and Aramaio rivers), which enabled them to access the Ebro valley and the Mediterranean side of the Iberian Peninsula.

In this scenario, Usategi was an exception to the ‘Oria void’, a river basin that despite occupying a large part of the territory has no known human occupation (apart from the cited caves) until the Mesolithic. However, if we consider the distribution of raw materials at Usategi and the possibility of a flint procurement expedition to Urbasa, the site might have been reached via the Ebro river basin rather than by going up the Oria valley. This means that other routes across the Pyrenees and between the Cantabrian region and the Ebro valley (perhaps used less often than the other route described above) should be considered. One of these alternative itineraries (Fig. 7), which is undoubtedly feasible, would go up the Bidasoa valley (near the Gravettian sites of Lezia and Alkerdi) to the Belate pass, and enter the Ebro basin along the Ultzama corridor, which passes by

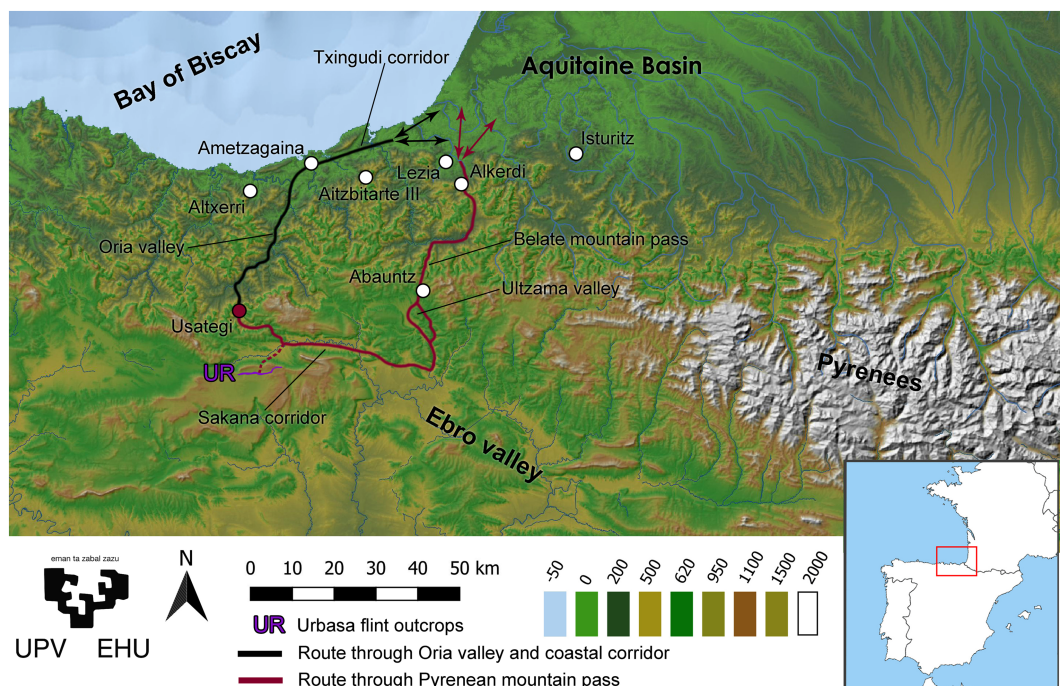


FIGURE 7

Map showing the alternative Pyrenean route proposed in this work and the itinerary that involves the main corridor between both slopes of the Pyrenees, the Txingudi corridor (Base map: Maite García-Rojas).

the Middle and Upper Palaeolithic site of Abauntz (Navarre). If this proposal is correct, it is likely that this route would have been used throughout the Upper Palaeolithic to supply north Pyrenean flint to Upper Palaeolithic sites in Navarre while also enabling Treviño and Urbasa flint to reach Isturitz and other sites in the continental Basque Country. Isturitz-type bone points themselves, of which four examples have been found in the Iberian Peninsula (Askondo, Bolinkoba, Aitzbitarte III and Usategi) (Ríos-Garaizar and Garate 2014), could be interpreted as exotic objects, found at sites associated with these potential corridors (except for Aitzbitarte III), but possibly made at the eponymous site. Zatoya Cave, located at the southern foothills of the Western Pyrenees, is another example of the significance of these mountain passes. It preserves another short occupation of possible Gravettian age in Level IIbam (Barandiarán and Cava 2001), containing a lithic assemblage in which flint remains from Flysch Bidache and Chalosse outcrops was identified, as well as pieces of Urbasa flint (Elorrieta 2015). The evidence is not limited to the geographical framework discussed in this paper, but includes the Central and Eastern Pyrenees. Although not totally confirmed, a few remains from the Gravettian assemblage at the north Pyrenean site of the Gargas Cave could come from outcrops from the Ebro basin, on the other side of the mountain range (Foucher *et al.* 2016). These relationships between both sides of the Pyrenees have also been observed in other technocomplexes, as in the case of the sites of the caves of Chaves and Caune de Belvis, among others (Sánchez de la Torre *et al.* 2020a; 2020b). In fact, a route very similar to the one suggested in this paper has recently been proposed for the populations of the Middle Palaeolithic from the lithic raw materials of the North-Western Pyrenean site of Gatzarria, among which resources from the outcrops of the areas of Urbasa and Treviño have been documented (Minet *et al.* 2021).

The hypothesis of an alternative corridor for Palaeolithic populations that crossed from the Atlantic to the Mediterranean sides of the watershed in the Iberian Peninsula, at the western end of the Pyrenees, opens new avenues of archaeological research and forces a reconsideration of some of the previous guiding principles. The site of Usategi at 460 m altitude, together with Bolinkoba (430 m altitude), are two of the highest Upper Palaeolithic sites known in northern Iberia. Both sites are located near narrow gorges that allow access to the Ebro basin, and their condition as mountain sites had been associated with that circumstance. However, if the possibility of alternative routes is proposed, like the Belate pass (848 m altitude), we should also be reassessing the deterrent effect of altitude for Gravettian groups. Our hypothesis could find support, not only concerning occasional situations of group mobility, but from continuous occupation at open-air sites, like Mugarduia South (904 m altitude) during a relatively temperate period in the Gravettian (Iriarte-Chiapusso 2013; Iriarte-Chiapusso *et al.* 2016). We again observe that mountain areas higher than 400 m have been too hastily rejected as possible places for Upper Palaeolithic occupation, a reconsideration of which would vindicate a large region on the Basque Crossroads as a potential area for archaeological surveying (Arrizabalaga *et al.* 2016). It may also allow us to re-examine the direction of access of some sites in northern Iberia, which may have been occupied from the Ebro basin and not from the north, as is proposed here for Usategi Cave.

A final aspect to be discussed refers to the functional assessment of the Gravettian occupation of Usategi as a hunting camp. The main difficulty for this or any other attribution lies in the paucity of information provided by the fieldwork in the cave, nearly half a century ago. The factors that have suggested this attribution are:

- The sporadic human occupation of Usategi Cave, both in the Gravettian and in later periods;
- The recovery of a modest, but very homogenous lithic assemblage, (in which the Isturitz-type bone point is not out of place, as explained above), with evidence of its allochthonous nature;

- The presence in the assemblage (in addition to the Isturitz-type bone point, whose functionality as a sagaie – or spear point – has been discussed; Goutas 2008) of a bilateral backed point (Fig. 4.3) that is fragmented, perhaps by an impact and with wear at its proximal end that might have been caused by its being hafted and shot as a projectile (a small burin-like lateral fracture and splintering in the narrow base).

CONCLUSIONS

Although the assemblage is small, the Gravettian occupation of Usategi Cave may be linked to a group that came from the northern side of the Western Pyrenees, possibly in the context of an expedition to procure Urbasa flint. The most plausible functionality of the occupation is that of a short-term hunting camp, and the direction of the route followed by the group to reach Usategi may have been the opposite of what is usually thought: from the Ebro valley to the north of the watershed.

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