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► **To cite this version:**

Olivier Lemerrier. The Bell Beaker phenomenon in the southeast of France: The state of research and preliminary remarks about the TGV excavations and some other sites of the Provence. Some New approaches to The Bell Beaker Phenomenon, Lost Paradise..?, Proceedings of the 2nd Meeting of the “ Association Archéologie et Gobelets ”, Feldberg (Germany), 18th-20th avril 1997, 1998, Oxford, United Kingdom. pp.23-41. halshs-00087924

**HAL Id: halshs-00087924**

**<https://shs.hal.science/halshs-00087924>**

Submitted on 27 Jul 2006

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## THE BELL-BEAKER PHENOMENON IN THE SOUTHEAST OF FRANCE

### THE STATE OF RESEARCH AND PRELIMINARY REMARKS ABOUT THE TGV-EXCAVATIONS AND SOME OTHER SITES OF THE PROVENCE

Olivier Lemerrier

In the southeast of France, especially in the Provence-Alpes-Côte d'Azur region and the middle and lower Rhone valley, numerous rescue excavations have been made during the last few years particularly in course of the important archaeological salvage project along the railroad line of the TGV-Méditerranée during which many new Bell Beaker sites have been discovered. These new discoveries, mostly being studied at the moment, in a region rich in Bell Beaker sites enables us already now to make some preliminary remarks and considerations. Nevertheless, these considerations have to be confirmed by future research.

#### GEOGRAPHICAL SETTING

The southeast of France, comprising the Provence-Côte d'Azur region, the Rhone valley and the alpine margins, is a complex geographical region. It is characterized by major communication routes and on its margins by vast isolated areas of hills, plateaux and mountainous regions. Communication routes are numerous giving access to most parts of the region. The main route is the mediterranean coastway along a west-east axis, from the Gard coast to the Estérel Massif, allowing easy circulation either on land or by sea to beyond the Italian border. The other main communication route, but in a north-south direction is the Rhone valley. Vast in its southern part, except on the height of the Donzère defile, it has been an axis of diffusion for every epoch. Other less important rivers give access to the main areas of the region: Durance, Verdon, Ardèche, Cèze, Gardon, Drôme, Isère, as well as many rivers of the Alpes-Maritimes. These vast communication routes of the southeast of France serve a huge diversity of geographical unities. The Département of the Gard and the western part of the Département of the Bouches-du-Rhône have vast plains. The Département of the Var and the eastern part of the Bouches-du-Rhône are hilly areas traversed by smaller valleys. The northern part of the Gard Département, the Ardèche area and the northern part of the Vaucluse are characterized by vast plateaus. Finally, the alpine départements are from middle to high mountain regions. But this variety and the closed character of some areas should not obscure the easy access to most of the regions due to the many valleys crossing the region in all directions. Nonetheless there still exist some marginal zones situated on the massifs and ones being less accessible.

However, an analysis of the sites shows that most parts of the region have been colonized since prehistoric times and no areas, not even the most remote ones, are excluded from human diffusion.

#### HISTORY OF RESEARCH (SUMMARY OF THE PRECEEDING EPISODES)

##### The Provence-Alpes-Cote d'Azur Region

For western Provence, it is P. Cazalis de Fondouce who noticed at the end of the 19<sup>th</sup> century for the first time Bell Beaker remains during his excavations of the hypogeums of Fontvieille (Bouches-du-Rhône) (CAZALIS 1873; 1878; LEMERCIER 1991). Only some years later, C. Bottin published two beakers from the megalithic tomb of Saint-Vallier-de-Thiery (Alpes-Maritimes) (BOTTIN 1885; 1899). During the following years further bell beaker sherds were discovered mostly in funeral contexts by E. De Pas, P. Goby, P. Cabrens (COURTIN 1974, 259). But in general, Bell Beaker pottery is discovered in Provence during this period only rarely and it differs from the numerous sets published elsewhere in Europe (DEL CASTILLO 1928). It is only in the middle of the 20<sup>th</sup> century with the advancement of prehistoric excavations that new discoveries enrich the small corpus. In 1947 M. Escalon de Fonton found bell beakers at La Couronne (Martigues, Bouches-du-Rhône) (ESCALON DE FONTON 1956) and in 1955 M. Paccard found some at the Abri 2 of Fraichamp (La Roque-sur-Pernes, Vaucluse) (PACCARD 1957) and Y. Palun excavated a cultural layer with bell beakers at La Grande Baume (Gémenos, Bouches-du-Rhône) (COURTIN/PALUN 1963). In the 1960s J. Courtin excavated in the Verdon gorges at the Grotte Murée (Montpezat, Alpes-de-Haute-Provence) and at the Abri du Capitaine at Sainte-Croix-du-Verdon (Alpes-de-Haute-Provence), and defined a new regional group ("Groupe Provençal") (COURTIN 1967; 1974). It is also in these years that the site of Escanin was excavated (Les Baux, Bouches-du-Rhône) (MONTJARDIN 1966; 1970). At the same time the old collections were restudied and J. Courtin published the tomb of Perpétairi (Mollans, Drome) (COURTIN 1962). Bell Beaker remains were then discovered at a lot of open air sites (COURTIN 1974) and in 1964/65, the excavations in the old part of

Avignon yielded a copper Age site with lots of bell beakers (GAGNIERE/GRANIER 1965; GAGNIERE 1967).

Since the 1970s, with the development of open-air sites' excavations and due to the endeavours of J. Courtin, G. Sauzade and later H. Barge-Mahieu and A. Müller, many Bell Beaker open-air sites and tombs have been excavated in the Provence. J. Courtin dug the Camp de Laure (Le Rove, Bouches-du-Rhône) (COURTIN 1975; 1978), the Fortin du Saut (Chateaufort, Bouches-du-Rhône) (COURTIN/ONORATINI 1977) and some megaliths. Megalithic tombs, excavated everywhere in this region, yielded Bell Beaker remains like the dolmen of Villard (Le Lauzet, Alpes-de-Haute-Provence) (SAUZADE 1991), l'Agriottier at Roquebrune-sur-Argens (Var) (COURTIN 1984, 403) and Les Adrets 4 at Brignoles (Var) (JACOB ET AL. 1988). Recently, sites such as Les Calades (Orgon, Bouches-du-Rhône) (BARGE 1986; BARGE-MAHIEU 1987; 1987b; 1988; 1989; 1992) and the Col Sainte Anne (Simiane-Collongue, Bouches-du-Rhône) (BOCQUENET 1991; 1995; 1996; MULLER 1989) yielded important remains. At the same time, the excavations of open air sites show that a lot of copper age sites contain bell beaker remains as well: at Brémonde (Buoux, Vaucluse) (COURTIN 1974), Les Lauzeries (Lourmarin, Vaucluse) (COURTIN ET AL. 1985), Les Fabrys (Bonnieux, Vaucluse) (COURTIN 1974), Château-Wirant (Lançon de Provence, Bouches-du-Rhône) (LAFRAN ET AL. 1983) and at Les Barres (Eyguières, Bouches-du-Rhône) (BARGE-MAHIEU 1992; BARGE-MAHIEU; MAFFIEU 1990; 1992). A lot of other sites have been excavated where less important Bell Beaker remains have been found.

During the last years, new discoveries of bell beakers have been made in the Abri de Pendimoun (Castellar, Alpes-Maritimes) (BINDER 1990) at Le Mourre de la Barque (Jouques, Bouches-du-Rhône) (RENAULT 1996), Usine Chiris (Grasse, Alpes-Maritimes) (GASSIN 1997) and at the Dolmen des Blaquières (Vence, Alpes-Maritimes) (MULLER ET AL. 1996; MULLER/SAUZADE 1997). Until now, 147 Bell Beaker sites have been uncovered in the Provence-Alpes-Côte d'Azur region (LEMERCIER 1996).

#### **The Rhone valley and the Alpes**

Concerning the right banks of the Rhone, the discoveries in the Ardèche and Gard Département are important. The inventory of the Ardèche is at present not complete. J.-L. Roudil specified 11 sites only 10 years ago (ROUDIL 1989). Since then, about 20 sites have been specified by R. Montjardin (1991). In contrast, the Gard Département is well studied and very

rich in Bell Beaker sites, which made it possible to list about 50 sites in 1980 (GUTHERZ/HUGUES 1980). Since this time, several sites have been discovered and studied. Eight years later X. Gutherz specified 10 more sites (GUTHERZ 1988). The most recent summary concerning this Département comes from J.M. Roger (1995). The Rhodanian and alpine corpuses are not equally important. The Drôme Département yielded, partly due to the TGV-Méditerranée excavations, 28 Bell Beaker sites, whereas for the Isère Département only a few sites are known. The publications of A. Bocquet identify about 7 Bell Beaker sites (BOCQUET ETAL. 1987).

Research in these Départements started early and continues to yield a lot of discoveries.

#### **RECENT EXCAVATIONS**

In the 1990s, during rescue excavations, several interesting Bell Beaker sites have been discovered.

#### **Forcalquier-La Fare**

The site of Forcalquier-La Fare in the Alpes-de-Haute-Provence Département, excavated by A. Müller and myself since 1991 (LEMERCIER/MULLER 1992; 1993; 1996; in press; MULLER/LEMERCIER 1993-1997) is the only individual Bell Beaker tomb in Provence known at this time. It is situated some kilometers from the Durance valley (a main circulation route), located on the top of a plateau dominating from its 150 meter height the neighbouring valleys. It was occupied several times from the late Neolithic until the Roman epoch. The late Neolithic occupation is characterized by a double enclosure with trenches fortified by walls and palisades which have been completed and rebuilt several times (fig. 2).

The ceramic remains of this occupation are characterized by languedocian influences on a local substrat typical of the region with a variety of formes, numerous horizontal cordons, pushed-out knobs and thick knob applications.

A second, later occupation belongs to the Rhone-Ouvèze group (MULLER ET AL. 1986) with a very original inventory that shows again a strong languedocian influence. It could be considered as an extreme eastern facies of Fontbousse having several closed forms and open pots with a low carination and sometimes with vertical cordons as ornaments or thin incisions.

This site yielded an individual tomb in a pit, about 3m diameter, covered with earth and stones, showing a structure at its southern end. The subject (analysis of C. Bouville) is a male adult of the alpine type (brachycéphale), positioned in the eastern part along

roughly a north-south orientation, head to the north and face turned to the east (fig. 3).

The remains associated with this inhumation comprise several objects, among which three pots found on a banquette under the entrance of the monument. It is a bell beaker with S-profil and with a very marked carination, all over ornamented with alternating hatched horizontal zones, made with a comb and limited by lines of cord impressions, separated by undecorated zones which are transected by a horizontal cord impression.

It is associated with two small carinated bowls with a flat bottom, both undecorated and with a less refined manufacture. There are grip elements in the form of prismatic lugs on one, and ten small lugs or short vertical cordons distributed on both sides of the carination on the other.

A tongued dagger with one hole, four notches and a trapezoidal section made of copper with high arsenic and nickel traces, was lying beyond the cranium. A bone button was discovered near the face. Furthermore, a piece of antler and a small segmented bone bead were found.

This inhumation yielded a very old datation, by dating the charcoal which comes from the filling of the ornamented beaker: Ly-6551: 4210±100 BP, 3065-2530 BC cal.

The association of this inhumation with one of the occupation phases of the site is not yet clear but might be made specified by F. Convertini's petrographical analyses of the pottery.

#### **The archaeological Salvage project of the TGV-Méditerranée line**

The archaeological rescue excavation of the sites along the TGV-Méditerranée line between Valence, Avignon and Marseille, as well as between Avignon and Nîmes, lasted from the beginning of 1995 until the end of 1996. This operation, financed by the SNCF and conducted by the "Association pour les Fouilles Archéologiques Nationales", made possible the discovery and the location of several prehistorical and historical sites. 16 sites yielded Bell Beaker material. They are located mainly in the Rhone valley (fig. 5;6), except two sites that were excavated in the region of Aix-en-Provence (fig. 7). These sites are in general rather small. They were surveyed and archaeologically tested by four persons during one to three months. Only a few sites could be excavated, such as Le Serre (Roynac, Drôme) where a stratigraphy from the Neolithic to the Early Bronze age was found, and the site of Les Petites Bâties (Lapalud, Vaucluse), especially marked by its occupation in the early Neolithic, and Les Juilleras (Mondragon, Vaucluse) which yielded settlements and inhumations from the Late Neolithic to the late Bronze

Age. The other sites were only excavated over a small surface, which yielded only a small amount of archaeological remains but could furnish many data to the question of the Bell Beaker Phenomenon in the South-East of France.

These sites show different bell beaker styles known in this region and their ratio.

According to these data, sites that yielded bell beakers with comb decoration in the international style or the transitional style are rare (3 sites). The sites belonging to the Rhodano-Provençal group as defined by J. Courtin (COURTTN 1967), characterized by a variety of forms with incised/stamped ornaments, are more numerous (11 sites). Finally, 6 sites yielded pottery with a barbed-wire decoration.

The site of Juilleras (Mondragon, Vaucluse) has been surveyed and excavated (LEMERCIEER ET AL. 1997; in press; LEMERCIER/TCHEREMISSINOFF in press). This site is located on the west banks of the Rhone valley, at the confluence of the Ardèche river, near Mondragon. It is situated on equal distance (about 3 km), between the river and the hills of Mondragon. It yielded a structured settlement belonging to the Bell Beaker Period/Early Bronze Age, characterized by preserved soil and several pit structures. Nevertheless, it could be excavated only on a small surface (fig. 4). The prehistoric surface is characterized by layers more or less rich in archaeological remains, from which emanate different structures arranged in groups. In the northern area, several small pits full of archaeological remains do not show any visible organization. In the central area four small hearths, marked by flat reddish pits, are located in a zone without any other structure. In the southern part of the excavation, an east-west alignment of six oval structures, filled with stones, allows us to reconstruct the location of a construction (palisade, enclosure...) of about 12 m length. Immediately to the south, a set of pits filled with char is found, of which three form a north-south alignment. Finally, east of these structures a small cemetery extends over a more or less rounded area. The remains found on the surface or in the domestic structures are rather abundant but very fragmented. The undecorated pottery comprises jars with one or two cordons under the rim, with cordons decorated with fingerprinted impressions or with small vertical impressions or orthogonal cordons under the rim. The small vessels are undecorated beakers and fragments of handled vessels. Most of the vessels have flat bottoms and flattened rims. Handles are of varied forms with different types of knobs and buttons, band-handles as well as huge horizontal lugs in a tongue shape and with small cordons on their surface.

The decorated ware comprises several distinct styles. Many fragments have comb ornaments with hatched horizontal zones, triangles, parallel lines and composite motifs. Some fragments have incised or incised/stamped ornaments, but most of the vessels have a barbed-wire decoration of different types. Numerous pieces of ornaments as well as a small set of stone artefacts comprising mainly flakes and flake based artefacts, were associated with this pottery. The inhumations, studied in cooperation with Y. Tchérémissinoff, comprise 9 graves. 7 of them are individual inhumations but the two remaining ones represent multiple inhumations: one of them yielded two children, the other 4 children and one adult. Of the 14 subjects 12 are infants or young infants. The infants' tombs are oriented east-west, with the head to the east or west but with the face always looking to the south. The adults orientation is more or less north-south, head to the north and face looking to the west. The architecture of these tombs is difficult to reconstruct due to their bad preservation. However, anthropological observations give hints to a decomposition in an empty space and the presence of a surrounding stone structure in the upper part of the pit might give a clue for a pit-construction with a bank and a plateau for a covering, which might have been sufficient, given the compactness of the sediment, to conserve the pits without a sedimental filling during the entire decomposition period of the corpses and even longer. However, the regularity of the pit's soil, as well as the absence of lateral constraints on the skeletons, might indicate the use of coffins of perishable material.

Only one single grave yielded fragments of a coffin made of limestone plates.

No grave goods were associated with these inhumations, but in the filling covering the corpses some homogenous remains were discovered (fragments of nacre and of epicampaniforme vessels). Beakers with comb stamped decoration, considered to be older, are rarely discovered and beside the site of Juilleras only two other sites yielded this kind of pottery.

The site of Le Chêne (Lamotte-du-Rhone, Vaucluse) where only a test excavation was conducted by S. Rimbault yielded one sherd ornamented with triangles of comb impressions. This fragment was associated to a set of pottery resembling very closely those found in the structures of the final Neolithic occupation of Juilleras (Mondragon, Vaucluse), situated some hundred metres to the south (RIMBAULT 1997). The rock shelter Abri des Fours (Mion, Aix-en-Provence, Bouches-du-Rhône), excavated by A. Vignaud, yielded goods belonging to the final Neolithic Couronnian and fragments of bell beaker pottery with comb

decorations in a rather mixed context (VIGNAUD 1997a).

Sites characteristic of the Rhodano-Provençal style are, in contrast, very numerous. Associated with the ornamented vessels they yielded an abundant domestic ware defined as specific to bell beakers (BESSE 1996). At the site of Beaume (Châteauneuf-sur-Isère, Drôme) a test excavation was conducted by N. Valour on an important medieval site. A colluvial layer yielded a characteristic material of the Rhodano-Provençal group with pottery of the incised-stamped ornamentation style and one fragment of a vessel with a smoothed cordon under the rim and perforations in a horizontal line, which suggests a neighbouring site (LEMERCIER/MELLONY 1996c). At the site of Les Vignarets at Upie (Drôme), surveyed on a huge surface under the direction of J.M. Lurol, remains of an extended Bell Beaker settlement have been discovered, marked by the presence of a „forest" of pestholes. This site yielded an important set of pottery characterized by incised/stamped decoration but also by comb ornaments in a homogeneous Rhodanian style. The smoothed ware comprises thickened rims, vessels with smoothed cordons and ones with perforations in a horizontal line. An important set of stone artefacts is also associated with this material. At the site of Saint-Martin 2 (Chabrilan, Drôme), surveyed under the direction of Y. Billaud, some ornamented and smoothed pottery remains belonging to this period have been discovered in a context disturbed by modern trenches (LEMERCIER/MELLONY 1996d). At the site of Lalo near Espeluche (Drome), where an excavation was conducted under the direction of A. Beeching, Mesolithic and Neolithic layers were found. On top of this stratigraphy a layer was discovered that can be attributed to the Rhodano-Provençal bell beaker style.

The site of Barral at Marsanne (Drôme) has been surveyed only during the diagnostic phase under the direction of M. Goy. It yielded some bell beaker material. At Malalones (Pierrelatte, Drôme) an important early neolithic occupation was excavated under the direction of M. Linossier. On the border of this operation, due to the installation of an electric pylon, over the small surface of a deep drilling an occupation layer has been discovered that yielded pottery of incised/stamped decoration associated with domestic wares comprising vessels with undecorated cordons and flat bottoms as well as stone material.

The most important site of Petites Bâties at Lamotte-du-Rhône (Vaucluse), excavated by D. Binder and L. Jallot yielded some pottery remains with incised/stamped decoration typical of the Rhodano-Provençal style and moreover, in the filling of a trench,

remains of complete or reconstructable epicampaniform bell beakers showing very interesting decorations (BINDER ETAL. 1997).

On the site of Bartras at Bollène (Vaucluse) over 30 hectares have been surveyed archaeologically under the direction of C. Markiewicz. An important occupation surface was discovered that yielded an important serie of domestic ware comprising vessels with flat bottoms and smoothed cordons, having a triangular section, thickened rims, and small cups. The few decorated wares comprise vessels with incised/stamped ornamentation and one vessel with fingerprints. An important stone sample was discovered in these layers. This site was conserved, not being destroyed by the construction of the TGV line (LEMERCIER/ MEL-LONY 1996a;b).

At Ribauds (Mondragon, Vaucluse) a test excavation was conducted under the direction of X. Margarit. In a layer, where a concentration of gravel was found showing the effects of a wall and a supporting structure, ceramic material decorated in the Rhodano-Provençal style and a winged arrowhead was discovered. Further on this layer yielded the distal part of a big blade of blond flint showing sickle shine. Its origin could be determined as the Grand-Pressigny region (determination N. Mallet) situated at 400 km from the site (MARGARIT 1997a).

For the epicampaniform style, characterized by its barbed-wire ornamentation, in addition to the sites of Mondragon-Les Juilleras and Lamotte du Rhône-Les Petites Baties, some other excavated sites yielded interesting elements.

The site of Clos Marie Louise at Aix-en-Provence (Bouches-du-Rhône), located on the top of a small spur dominating the Arc valley, yielded a ceramic ware characteristic of the Early Bronze Age associated with ornamented bell beakers (VIGNAUD 1997b). During X. Margarit's survey of the site of Le Due at Mondragon (Vaucluse) the discovery of a Neolithic site yielded in the upper layers two small sherds with an epicampaniform decoration (MARGARIT 1997b). An important site dated to the Early Bronze Age was excavated at Saint-Martin 3 (Chabrilan, Drome) under the direction of S. Rimbault. Numerous pits yielded important pottery remains and burial deposits. Two ornamented sherds have barbed-wire decorations that might be attributed to the epicampaniform style (oral communication S. Rimbault).

An important stratigraphy from the Neolithic to the Bronze Age was excavated under the direction of J.Vital at Roynac-Le Serre (Drôme). Two distinct layers were attributed to a late and final bell beaker occupation. They yielded a very characteristic pottery (oral communication J. Vital).

## ESTIMATION OF KNOWN DATA AND INTEGRATION OF NEW FINDINGS

### The Origin of the Bell Beaker Phenomenon in south-eastern France

First estimation, proposed by A. Gallay according to the work of J. Guilaine: The bell beaker complex is totally intrusive in southern France (Gallay 1981). In his thesis, J. Courtin (COURTIN 1974) discusses the possible Bell Beaker origins, maintained at that time (south-west of the Iberian peninsula or Bohemia-Moravia) and Sangmeister's theory (SANGMEISTER 1963) of a first expansion from Portugal by maritime circulation along the Atlantic coast, followed by a reflux ("Ruckstrom") departing from Germany and going through the Rhone valley. J. Courtin is unable to determine whether the early vessels of the rare international style in Provence came from the reflux or from a direct expansion off the Iberian peninsula. Sangmeister's theory, which considered all the available data at that time, is now rejected by numerous authors like G. Camps (CAMPS 1989) who qualifies it "*Un peu fumuse et romantique, et aujourd'hui dépassée*". J.N. Lanting and J.D. van der Waals argued from their work in the Netherlands that the most ancient bell beakers developed from the Corded Ware Culture (PFB) and that this evolution took place in the Lower Rhine Basin and in the Netherlands (LANTING/VAN DER WAALS 1976; VAN DER WAALS 1984). This theory is the most accepted one in western Europe today. Whatever the correct model of diffusion of the early bell beakers (AOC and international) might be, as we are dealing with a phenomenon of diffusion, and even a rapid one, most authors today seem to accept the view of R.J. Harrison (HARRISON 1986) and A. Gallay (GALLAY 1981), who estimate that the bell beakers arrived in southern France along the Rhone valley, after departing from the Rhine region (a thesis derived from the work of J.N. Lanting and J.D. van der Waals discussed at the Bell Beaker Symposium of 1974: LANTING/VAN DER WAALS 1976): "*La mode de la poterie campaniforme gagna le golfe du Lion par la vallée du Rhône et il est probable qu'elle trouve son origine dans les pays du Rhin moyen et superieur...*" (HARRISON 1986). This thesis was adopted by F. Treinen-Claustre (TREINEN-CLAUSTRE 1989) and by H. Barge-Mahieu (BARGE-MAHIEU 1992). It is easily confirmed by the presence of bell beakers, considered as the most ancient in the Rhodanian zone of Provence and not elsewhere. Today, this affirmation must surely be nuanced, as beakers with the ancient international decoration and even with corded decoration have since been discovered even at sites remote from the Rhone valley. But these results do not affect this theory, which remains surely the most valid one.

The diffusion of this type of goods was very rapid and widespread, crossing the Languedoc, to the Pyrenees and the Aude basin. It seems that in Provence the diffusion is not limited to the Rhodanian valley (Escanin, Les Calades, Les Barres), but is also found further in the Basse-Provence (Col Sainte-Anne) or in the Haute-Provence (La Fare). Furthermore, the goblets of the phase II, derived from the international style but considered as quite ancient, are distributed from the Rhone valley (Avignon) over the whole Provence to the Alpes Maritimes. A better knowledge of the pottery attributed without distinction to phase I or II because of the extreme fragmentation of decoration might certainly increase the amount of pottery belonging to the phase I. These early bell beakers should represent the „bell beaker package" that A. Gallay interprets as a "complexe fonctionnel" that is distributed in two "phases et reseaux" according to the Dutch sequence. The first phase, "réseau 1" corresponding to the diffusion along the Rhine-Saone-Rhone axis of the AOC beaker, is rather uncommon in the Provence but well represented in the South of France. Then the second phase, "réseau 2", corresponds to the diffusion of the maritime beakers along the same axis from which they would have expanded widely in the South being well known in the Provence. These two phases could hardly be distinguished from each other, and both comprised only isolated elements that fitted into the strictly local contexts (GALLAY 1981).

The absence of sites along the Mediterranean TGV-line that might be attributed to the early phases in the conventional chrono-typology, is not a determining element. Their very small number in the southeast of France in comparison to the number of sites of later phases might be sufficient to explain this absence. But the absence of sites in the plain might also be due - according to certain theoretical schemes - to the function of the Bell Beaker sites or material during these phases.

The inhumation of Forcalquier-La Fare represents an exception with its datation as well as its unique and isolated character of this kind of structure and of the material of the site. The bell beaker is found isolated on a site of the local late Neolithic and in a sepulchral context associated with other valuable objects (dagger), supporting the assumption of „prestige items", attributed to the most ancient bell beaker objects in the southeast of France.

#### **The „transitional phase": the group of complex comb decorations**

J. Courtin does not distinguish phase II (transitional phase or middle phase) from the rest of the early phase. Phase II is described by F. Treinen-Claustre, as abundant at the mouth of the Rhone and in the

Mediterranean zone to the west of the one described here, and almost wholly absent in the extreme southeast (TREINEN-CLAUSTRE 1989). The same author then describes it as a period of the first regionalization of forms and ornamentations (TREINEN-CLAUSTRE 1992).

In Provence, phase II seems to be quite well distributed. It is well known from the mouth of the Rhone, at the sites of Avignon, and those of Alpilles and La Crau but it is also known much further in the east (cf. distribution map of BARGE-MAFFIEU 1991, 17) in Lower Provence (Col Sainte-Anne) to the Alpes Maritimes (the beaker of La Baume Claire at Vence is much similar to those of the sites of Avignon...). The stylistic identity of this phase, well characterized by a variety of forms and ornamentations, that nevertheless conserve the ancient techniques, is evident. Its nature, however, is more difficult to grasp. Stylistic similarities may be seen in southern France. But, is this fact an evolution on one point with a similar diffusion as in the phase I (noting the concentration of objects of phase II at the crossing of the Languedoc and the Provence, in the Rhone valley), or is it due to different adaptations and local evolutions, in the course of a first regionalization, of which the similarities were only due to convergences? Its chronological identity remains also difficult to specify. The association of this ceramic style with items characteristic of the "régional" phase cannot be explained only by taphonomic phenomena and hints probably from the open and not exclusive character of the traditionally accepted chrono-stylistical system.

#### **The Rhodano-Provençal group**

Phase III is characterized in Provence by the "groupe Provençal" or "groupe Rhodano-Provençal", worked out by J. Courtin since his first excavations at the Gorges du Verdon. The richness and the variety of forms and decorations cannot obscure the similarities between all the vessels belonging to this group from the Alpes-Maritimes to the Gard Département. J. Courtin drew parallels from this group to that of the Pyrenees: the relationships and the simultaneity are certain, as they are for both these two groups with those of the Iberian peninsula (COURTIN 1974). He saw this group as the result of the convergence of centre European influences (vessels with smoothed ribs, flat bottoms, jars with handles) and of Iberian influences (decorations). J. Courtin then saw in the settlements of this group indications of a strong integration into the local chalcolithic culture and excluded the thesis of an arrival of an already well established group of people in Provence.

Ten years later, with the publication of the beakers from the site of Lauzieres (Lourmarin, Vaucluse)

(COURTIN ET AL. 1985), which gave occasion to the authors to summarize the knowledge of the Provençal group, this thesis is nuanced, due to the numerous findings that had been made in the meanwhile. The authors distinguish for this phase two kinds of settlements that differ according to the place the bell beaker occupy. The provençal Bell Beaker sites are either really specific or they are local copper age sites that yielded only some fragments or a few ornamented beakers. This thesis might be valid - depending on the author - for phase I where it accords well with the theory of a „Package“, as well as for the later phase where some authors wanted to see an integration of the bell beakers into the local culture, thus creating a real regional bell beaker culture. It seems then that the provençal group of the bell beakers might correspond, for some of the sites, to a package, as during the ancient phase: a set of characteristic goods that might be found on a site of the local culture, but to which it is foreign. This fact has been reported from different sites, recently from Eyguières-Les Barres (Bouches-du-Rhône) where H. Barge-Mahieu excavated a late Neolithic site of the Rhone-Ouvèze type in which in only one area were bell beaker remains found. However, it might be that this fact was due to a reoccupation, as has been proposed for the recently reexamined site of La Couronne-Le Collet Redon, first excavated by M. Escalon de Fonton between 1947 and 1982. Its reveals a Couronnian layer containing bell beakers with a Rhodano-Provençal style, isolated from all specific domestic ware. The status of the homogenous Bell Beaker sites thus poses a serious problem: the sites of a strange particular group or autochthonous people having special functions...

For F. Treinen-Claustre, the groups of this phase were a local development resulting out of the older phases under different influences. The relationship of the provençal group, extending over the whole region into the eastern part of the Languedoc and along the Rhone valley, with certain objects of the Iberian peninsula seems to be evident. The western part of the Languedoc and the Pyrenean zone that separates these two groups geographically with its particular pyrenean style, has also an obvious relationship with the Iberian peninsula. This style is also known as exceptional e in Provence with its specific decorations, and it reveals relations or interactions between these different groups, and this even as far as the western part of the Iberian peninsula with the wide diffusion of metal types like the “Palmela-Point”.

The most important development of this phase is the occupation of the whole space. The transection caused by the TGV-work allows us only to mark the density of the occupation of the alluvial plain and the borders of

the Rhone valley, little known until the excavations of the site of Montelimar-Le Gournier by A. Beeching at the end of the 80s. The existence of sites on the plain, which contain for the regional phase characteristically decorated vessels and a specific domestic ware, in such areas as the low plain of the Tricastin, considered as very fertile by the geologists, marks an important territorial exploitation by the Bell Beaker Phenomenon that might be considered in this region and for this phase as a complete prehistoric culture. In short, whereas the identity of the Rhodano-Provençal group and its contemporaries is clear, and even if its origin should be found in an local evolution under influences from far-away regions, its status and its relationship with the copper age substratum is still problematic (D'ANNA 1995a; 1995b; LEMERCIER in press).

#### **The Epicampaniform group**

The last phase of the bell beaker called epicampaniform is well known in Provence. Discovered on several sites in southern France (BILL 1973; 1977), identified at the Camp de Laure by J. Courtin (COURTIN 1975; 1978), this last bell beaker phase is now identified in several regions.

An origin beyond southern France with northern influences has been claimed to explain the appearance of new forms and new decorations (ROUDIL 1972), called “Rhône Culture” (GALLAY 1976). This hypothesis has been questioned since then by several researchers, and even by A. Gallay himself (GALLAY 1996), in favour of a local origin of this type of pottery in southern France.

The work of S. Souville (SOUVILLE 1994) defines three different stylistic types and concludes with the distinction of at least two “stylistically, geographically and chronologically” distinct phases:

- The phase called “du sillon cranté”, exclusively languedocian, should be clearly of bell beaker affiliation. The basis of this ornamentation is bell beaker specific.
- The barbed-wire phase with the “Camp de Laure” style distributed mainly in the Provence and the Bouches-du-Rhône should be chronologically later. According to S. Souville its origin could be placed in the rhodano-provençal type, but this affiliation is not so clear. The decorations are adopted on specific Early Bronze Age forms and only the abundance and the disposition of the decorations may be related to the beakers. For Provence the origin of the Camp de Laure style still remains to be determined. The beaker of Lauzières, with its decoration, might



be related to the epicampaniform style, as is claimed by the authors. According to the work of S. Souville, the decorations evoke strongly the one that she defines as "sillon cranté", a style derived from the bell beakers' ornamentation. Its association, at Lauzières, with a typical rhodano-provençal vessel, might show - if this association is assured - an interesting affiliation. This kind of association seems to be more and more frequently noticed as on the site of Mondragon-Les Juilléras, where once more taphonomic phenomena cannot explain everything. Nevertheless, the pottery with barbed-wire decorations does apparently not represent a sole reality, but has to be reexamined in order to differentiate geographical and chronological subdivisions (JALLOT ET AL. 1996).

#### CONCLUSIONS AND RESEARCH PERSPECTIVES

The southeast of France, in its defined limits, comprises actually nearly 270 sites with bell beaker pottery (LEMERCIER 1996; 1997). Ancient researches have allowed us to proclaim the basis for a schematical explication of the Bell Beaker Phenomenon in this region, where the state of research and the advances of recent work allow us now to envisage a synthetical summary. Beyond the collecting of the data to specify the chronology, as well as the characters of the known stylistic groups, the approach should put more emphasis on the historical aspect in order to define the place of the Bell Beaker Phenomenon in relation to the late Neolithic cultures and to the transition to the Bronze Age...

To be continued...

## Bibliography

- BARGE H. 1986. Les cabanes campaniformes des Calades à Orgon (Bouches-du-Rhône). *Bulletin de la Société Préhistorique Française* 83/8, 228-230.
- BARGE-MAFFIEU H. 1987. L'habitat campaniforme des Calades à Orgon (Bouches-du-Rhône), Découverte d'un nouveau décor céramique en Provence. In: WALDREN W.H./KENNARD R.C. (eds.), *Bell Beakers of the western Mediterranean, Définition, Interprétation, Theory and new site Data*, The Oxford International Conference 1986, B.A.R. International séries 3 31,483-493.
- BARGE-MAFFIEU H. 1988. Réflexions sur le campaniforme provençal. Contribution de l'habitat des Calades (Orgon, Bouches-du-Rhône). In: BEECHING A. (éd.), *Le campaniforme: Rencontres Néolithiques Rhône-Alpes* 5, 52-63.
- BARGE-MAFFIEU H. 1989a. L'habitat campaniforme des Calades, Orgon (Bouches-du-Rhône).
- BARGE-MAFFIEU H. 1989b. L'habitat perché et les cabanes campaniformes des Calades (Orgon, Bouches-du-Rhône). In: D'ANNA A./GUTHERZ X. (eds.), *Enceintes, Habitats ceinturés, sites perchés, du néolithique au bronze ancien dans le sud de la France et les régions voisines. Actes de la table ronde de Lattes et Aix en Provence (1987)*, 231-237.
- BARGE-MAFFIEU H. (éd.) 1992. *Le Campaniforme dans le Midi de la France, Origine et identité culturelle*.
- BARGE-MAFFIEU H./MAHIEU E. 1990. Eyguières, Les Barres, Habitat de plein air chalcolithique. *Notes d'Information et de Liaison. Direction des Antiquités de la Région PACA* 7, 86-89.
- BARGE-MAFFIEU H./MAHIEU E. 1992. Eyguières, Les Barres. *Bilan Scientifique de la Région PACA* 1991,91-93.
- BESSE M. 1996. *Le Campaniforme en France, Analyse de la céramique d'accompagnement*. British Archaeological Report. International Séries 635.
- BILL J. 1973. *Die Glockenbecherkultur und die frühe Bronzezeit im französischen Rhonebecken und ihre Beziehungen zur Südwestschweiz*.
- BILL J. 1977. La céramique du début du Bronze ancien dans le Midi de la France. In: *Congrès Préhistorique de France, XXème session (Provence 1974)* 34-39.
- BINDER D. 1990. Castellar, Abri Pendimoun. *Gallia-Informations* 117-119.
- BINDER D./JALLOT LVTFFIEBAULT S. 1997. *La motte-du-Rhône: Les Petites Bâties. Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1996, 153-154.
- BOCQUENET J.P. 1991. Une cabane épicanpaniforme sur le site perché du Col Sainte-Anne (Simiane-Collongue, Bouches du Rhône). *Mémoire de diplôme, EHESS Toulouse*.
- BOCQUENET J.P. 1995. Espace domestique et structures d'habitat épicanpaniformes au Col Sainte Anne (Simiane-Collongue, Bouches-du-Rhône). In: GUILAINE J./VAQUER J. (eds.), *L'habitat néolithique et protohistorique dans le sud de la France, Séminaires du Centre d'Anthropologie, EHESS Toulouse*, 49-55.
- BOCQUENET J.P./LEMERCIER O./MÜLLER A. 1996. L'occupation campaniforme du site perché du Col Sainte-Anne (Simiane-Collongue, Bouches-du-Rhône) Séries céramiques, structures d'habitat et espaces domestiques. In: *The workshops and the posters of the XIII International Congress of Prehistoric and Protohistoric Sciences (Forli 1996) Abstracts* 2, Section 10, 304.
- BOCQUET A. ET AL. 1987. Nouveaux témoins de la civilisation campaniforme dans les Alpes françaises du Nord. *Bulletin d'Études Préhistoriques Alpines* 19, 9-22.
- BOTTIN C. 1885. *Mémoire sur neuf tumuli de la période néolithique. Annales de la Société des Lettres, Sciences et Arts des Alpes-Maritimes* 10, 426-442.
- BOTTIN C. 1899. *Découverte et fouille de neuf tombes aux environs de Saint-Vallier-de-Thiery. Annales de la Société des Lettres, Sciences et Arts des Alpes-Maritimes* 16,319-328.
- CAMPS G. 1989. *La Provence préhistorique. In: La Provence des origines à l'an mil*. 55-167.

- CAZALIS DE FONDOUCE P. 1873. Les temps préhistoriques dans le Sud-Est de la France, Allées couvertes de la Provence.
- CAZALIS DE FONDOUCE P. 1878. Les temps préhistoriques dans le Sud-Est de la France, Allées couvertes de la Provence (second mémoire).
- COURTIN J. 1962a. Recherches sur la Préhistoire de Haute Provence: la Grotte Murée de Montpezat (Basses-Alpes). *Cahiers Ligures de Préhistoire et d'Archéologie* 11/2, 248-256.
- COURTIN J. 1962b. La sépulture chalcolithique du Perpétairi à Mollans (Drôme). *Gallia-Préhistoire* 4, 192-205.
- COURTIN J. 1967a. La culture du vase campaniforme en Provence, note préliminaire. *Cahiers Ligures de Préhistoire et d'Archéologie* 16, 27-36.
- COURTIN J. 1967b. Datations de la culture du vase campaniforme en Provence. *Bulletin de la Société Préhistorique Française* 4, 49-51.
- COURTIN J. 1974. Le néolithique de la Provence.
- COURTIN J. 1975. Un habitat fortifié du Bronze ancien en Basse-Provence: Le Camp de Laure, commune du Rove (BdR). *Bulletin du Muséum d'Histoire Naturelle de Marseille* 35, 218-240.
- COURTIN J. 1978. Quelques étapes du peuplement de la région de l'Etang de Berre au Post-glaciaire. *Bulletin Archéologique de Provence* 1, 1-36.
- COURTIN J. 1984. Informations archéologiques, circonscription de PACA. *Gallia-Préhistoire* 27/2, 385-403.
- COURTIN J. ET AL. 1985. La céramique campaniforme du site des Lauzières, Lourmarin, Vaucluse. *Bulletin Archéologique de Provence* 15, 5-9.
- COURTIN J./PALUN Y. 1963. La caverne de la Grande Baume (Commune de Gémenos, Bouches-du-Rhône). *Gallia-Préhistoire* 5/1, 145-157.
- COURTIN J./ONORATINI G. 1977. L'habitat campaniforme du «Fortin du Saut» Châteauneuf-lès-Martigues (Bouches-du-Rhône). In: *Congrès Préhistorique de France, XXe session (Provence 1974)*, 109-121.
- D'ANNA A. 1995a. La fin du Néolithique dans le Sud-Est de la France. In: CHENORKIAN R. (éd.), *L'Homme Méditerranéen, Mélanges offerts à Gabriel Camps*. 299-333.
- D'ANNA A. 1995b. Le Néolithique final en Provence. In: VORUZ J.L. (ed), *Chronologies néolithiques: de 6000 à 2000 avant notre ère dans le Bassin Rhodanien, Actes des Rencontres néolithiques Rhône-Alpes, (Ambérieu-en-Bugey 1992)*, 265-286.
- DEL CASTILLO YURRITA A. 1928. La cultura del vaso campaniforme (su origen y su extension en Europa).
- ESCALON DE FONTON M. 1956. Préhistoire de la Basse-Provence. *Préhistoire* 12.
- GAGNIERE S. 1967. Informations archéologiques, *Gallia-Préhistoire* 9, 2.
- GAGNIERE S./GRANIER J. 1965. Les fouilles du quartier de la Balance à Avignon. *Guide illustré de la Foire d'Avignon*.
- GALLAY A. 1976. Origine et expansion de la Civilisation du Rhône. In: BOCQUET A. (éd.), *Les Ages des métaux dans les Alpes, IXe Congrès de PUISPP, Colloque XXVI, Prétirage. (Nice)* 5-26.
- GALLAY A. 1981. Le phénomène campaniforme: une nouvelle hypothèse historique. *Archives Suisses d'Anthropologie Générale* 43/2, 1979, 231-258.
- GALLAY A. 1996. Le concept de culture du Rhône: Repères pour un historique. In: MORDANT C./GAIFFE O. (éd.), *Cultures et Sociétés du Bronze ancien en Europe. Actes du 117e Congrès National des Sociétés Historiques et Scientifiques (Clermont-Ferrand 1992)* 271-286.
- GASSIN B. 1997. Grasse: Usine Chiris. In: *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur 1996*, 51-53.
- GUILAINE J. 1976. La civilisation des gobelets campaniformes dans la France méridionale. In: GUILAINE J. (éd.), *La Civilisation des vases campaniformes. IXe Congrès de l'UISPP, Colloque XXIV (Nice)* 197-213.
- GUTHERZ X. 1988. Le Campaniforme du Languedoc oriental. In: BEECFING A. (éd.), *Le Campaniforme. Actes des Rencontres Néolithiques de Rhône-Alpes* 5, 64-77.

GUTHERZ X./HUGUES C. 1980. La culture du vase campaniforme dans le département du Gard (France). *Bulletin de l'Ecole Antique de Nîmes* 15, 5-26.

HARRISSON R.J. 1986. L'Age du cuivre, la civilisation du vase campaniforme.

JACOB J.-P. ET AL. 1988. Informations archéologiques Provence-Alpes-Côte-d'Azur, *Gallia Informations* 1987-1988, 185-343.

JALLOT L. ET AL. 1996. Un nouveau site à céramique à décor barbelé dans le Gard (Aven Roger, Saint-Jeand-Marujols-et-Avéjan). Etat de la question dans le midi de la France. In: MORDANT C./GAIFFE O. (eds.), *Cultures et Sociétés du Bronze ancien en Europe. Actes du 117e Congrès National des Sociétés Savantes (Clermont-Ferrand 1992)* 339-348.

LAFRAN P. ET AL. 1983. Château-Virant (Lançon de Provence). Lieu de culte, habitat chalcolithique, proto-historique, médiéval, *Bulletin des Amis du Vieux Saint-Chamas* 6.

LANTING J.N./VAN DER WAALS J.D. 1976. Beaker culture relations in the Lower Rhine-Basin. In: *Glockenbechersymposium (Oberried 1974)* 1-80.

LEMERCIER O. 1991. Les monuments mégalithiques de Fontvieille, Seloun. *Bulletin de la Société de Recherches Archéologiques et Historiques de Salon*.

LEMERCIER O. 1996. La céramique des niveaux campaniformes des terrasses I et XI du site du Col Sainte-Anne (Simiane-Collongue, Bouches-du-Rhône) étude spatiale et culturelle et le Campaniforme en Provence. *Mémoire de Maîtrise, Université de Provence, Aix-en-Provence*.

LEMERCIER O. 1997. Le phénomène campaniforme et la transition du Néolithique final au Bronze ancien dans le sud-est de la France: Problématique générale, définition du cadre géographique et inventaire complémentaire Gard, Ardèche, Drôme, Isère, Aix-en-Provence. *Mémoire de DEA, Université de Provence, Aix-en-Provence*.

LEMERCIER O. in press. Place et statut du phénomène campaniforme parmi les cultures du Néolithique final dans le Sud-Est de la France: remarques

préliminaires. *Bulletin de la Société Préhistorique Française* (in press).

LEMERCIER O./MELLONY P. 1996a. Les Bartras sites 04 et 14 (Bollène - Vaucluse) lot 21, étude du mobilier céramique chalcolithique, rapport pour C. MARKIEWICZ, dactylographié.

LEMERCIER O./MELLONY P. 1996b. Les Bartras site 03 (Bollène - Vaucluse) lot 21, étude du mobilier céramique chalcolithique, rapport pour C. MARKIEWICZ, dactylographié.

LEMERCIER O./MELLONY P. 1996e. Beaume (Chateauneuf-sur-Isère) lot 11, étude du mobilier chalcolithique, rapport pour N. VALOUR & K. MOKADDEM.

LEMERCIER O./MELLONY P. 1996d. Saint-Martin 2 (Chabrilan - Drôme) lot 12, étude du mobilier néolithique et chalcolithique, rapport pour Y. BILLAUD, dactylographié.

LEMERCIER O./MULLER A. 1992. Forcalquier - La Fare: Sauvetage urgent. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1991, 32.

LEMERCIER O./MULLER A. 1993. Le site néolithique final/chalcolithique de La Fare (Forcalquier, Alpes-de-Haute-Provence), Seloun, *Bulletin de liaison et d'information de la Société d'Archéologie et d'Histoire du Musée de Salon et de la Crau*.

LEMERCIER O./MULLER A. ET AL. in press. Le site néolithique final/chalcolithique de La Fare (Forcalquier, Alpes-de-Haute-Provence) Premiers résultats 1991-1993, In: *Préhistoire de l'espace habité en France du sud, Actes des premières rencontres méridionales de préhistoire récente (Valence-sur-Rhône 1994)*

LEMERCIER O./MULLER A./BOUVILLE C. 1996. Le site Néolithique final/Chalcolithique et la sépulture campaniforme de La Fare (Forcalquier - Alpes-de-Haute-Provence - France) Premiers résultats. In: *XIII International Congress of Prehistoric and Protohistoric Sciences (Forli, 1996) Abstracts 1, Section 10: Age du cuivre au Proche Orient et en Europe*, 290.

LEMERCIER O. ET AL. 1997. Mondragon: Les Juilleras. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1996, 159-161.

LEMERCIER O./TCHEREMISSINOFF Y. in press. L'occupation du site Campaniforme - Bronze ancien de Mondragon - Les Juilléras. In BUISSON-CATIL J./VITAL J. (eds), *L'Age du Bronze en Vaucluse*, *Notices d'Archéologie Vauclusienne* 4.

LEMERCIER O. ET AL. in press. Le site néolithique final / bronze ancien des Juilléras (Mondragon - Vaucluse), *Secondes Rencontres Méridionales de Préhistoire Récente* (Arles 1996).

MARGARIT X. 1997a. Mondragon: Les Ribauds In: *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur*, 1997, 162-163.

MARGARIT X. 1997b. Mondragon - Le Duc. *Bilan Scientifique de la Région PACA* 1996, 161-162.

MONTJARDIN R. 1966. Le gisement néolithique d'Escanin aux Baux de Provence (Bouches-du-Rhône), *Cahiers Rhodaniens* 13, 5-103.

MONTJARDIN R. 1970. Le gisement néolithique d'Escanin, les Baux de Provence (Bouches-du-Rhône), *Cahiers Rhodaniens* 15, 5-152.

MONTJARDIN R. 1991. Le Chalcolithique dans l'Ardèche. In: AMBERT P. (éd.), *Le Chalcolithique en Languedoc, ses relations extra-régionales*, *Colloque International Hommage au Dr Jean Arnal* (Saint-Mathieu-de-Trévières 1990) *Archéologie en Languedoc* 1990-1991, 227-242.

MULLER A. 1989. L'habitat perché du Col Sainte Anne (Simiane-Collongue). In: D'ANNA A./GUTHERZ X. (eds.), *Enceintes, Habitats ceinturés, sites perchés, du néolithique au bronze ancien dans le sud de la France et les régions voisines*. *Actes de la table ronde de Lattes et Aix en Provence* 1987, 225-230.

MULLER A./D'ANNA A. 1986. Le gisement de plein air de la Plaine des Blancs à Courthézon, Vaucluse, *Bulletin de la Société Préhistorique Française* 83, 11-12, 470-483.

MULLER A./LEMERCIER O. 1993. Forcalquier - La Fare: Sauvetage urgent. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1992, 30-31.

MULLER A./LEMERCIER O. 1994a. Forcalquier - La Fare: Sauvetage urgent. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1993, 17.

MULLER A./LEMERCIER O. 1994b. La Fare, un site de l'Age du cuivre au pays de Forcalquier, Haute-Provence. *Magazine* 53, 20-23.

MULLER A./LEMERCIER O. 1994e. Le site néolithique final/chalcolithique de La Fare à Forcalquier (Alpes-de-Haute-Provence). *Bulletin de la Société Préhistorique Française* 91/3, 187-189.

MULLER A./LEMERCIER O. 1996. Forcalquier: La Fare. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1995, 27-29.

MULLER A./LEMERCIER O. 1997. Forcalquier: La Fare, *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1996, 23.

MULLER A./SAUZADE G./LAVERGNE D. 1996. Vence, Dolmen des Blaquières. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1995, 121-122.

MULLER A./SAUZADE G. 1997. Vence, Dolmen des Blaquières. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1996, 59-60.

PACCARD M. 1957. Etude d'un peuplement de vallée du Néolithique ancien au Ile Age du Fer; le Vallon de Fraischamp (commune de La Roque-sur-Pernes, Vaucluse). *Cahiers Ligures de Préhistoire et d'Archéologie* 6, 112-154.

RENAULT S. 1996. Jouques: Le Mourre de la Barque. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1995, 154-156.

RIMBAULT S. 1997. Lamotte-du-Rhône: Le Chêne. *Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur* 1997, 155-156.

ROGER J.-M. 1995. Du Chalcolithique au Bronze ancien dans le Gard: Rupture ou continuité? Une question de faciès. In: VORUZ J.L. (éd.), *Chronologies néolithiques: de 6000 à 2000 avant notre ère dans le Bassin Rhodanien*. *Actes des Rencontres néolithiques Rhône-Alpes* (Ambérieu-en-Bugey 1992) 287-306.

ROUDIL J.-L. 1972. L'Age du bronze en Languedoc oriental.

ROUDIL J.-L. 1989. Les céramiques campaniformes de l'Ardèche. *Ardèche Archéologie* 6, 26-28.

SANGMEISTER E. 1963. La civilisation du vase campaniforme. In: *Les Civilisations Atlantiques du Néolithique à l'Age du Fer, Actes du Premier Colloque Atlantique (Brest 1961)* 25-56.

SAUZADE G. 1991. Le mégalithisme dans les Alpes. In: *Archéologie dans les Hautes-Alpes*, 93-100.

SOUVILLE S. 1994. La céramique à décor barbelé du Bronze ancien dans le midi de la France, Mémoire de DEA, Toulouse.

TREINEN-CLAUSTRE F. 1989. L'évolution des Campaniformes. In: MOHEN J.-P. (éd.), *Le Temps de la Préhistoire*, t. 1, SPF, Archéologia, 409-412.

TREINEN-CLAUSTRE F. 1992. Médor, Ormaisons (Aude) et le campaniforme pyrénéen. In: BARGE-MAHEEU H. (éd.), *Le Campaniforme dans le Midi de la France, Origine et identité culturelle*. 63-67.

VAN DER WAALS J.D. 1984. Bell Beakers in Continental Northwestern Europe. In GUTLAINE J. (éd.): *L'Age du Cuivre Européen*. 3-35.

VIGNAUD A. 1997a. Aix-en-Provence : Mion, l'Abri des Fours. Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur 1996, 69.

VIGNAUD A. 1997b. Aix-en-Provence: Le Clos Marie-Louise. Bilan Scientifique de la Région Provence-Alpes-Côte d'Azur 1996, 69-70.

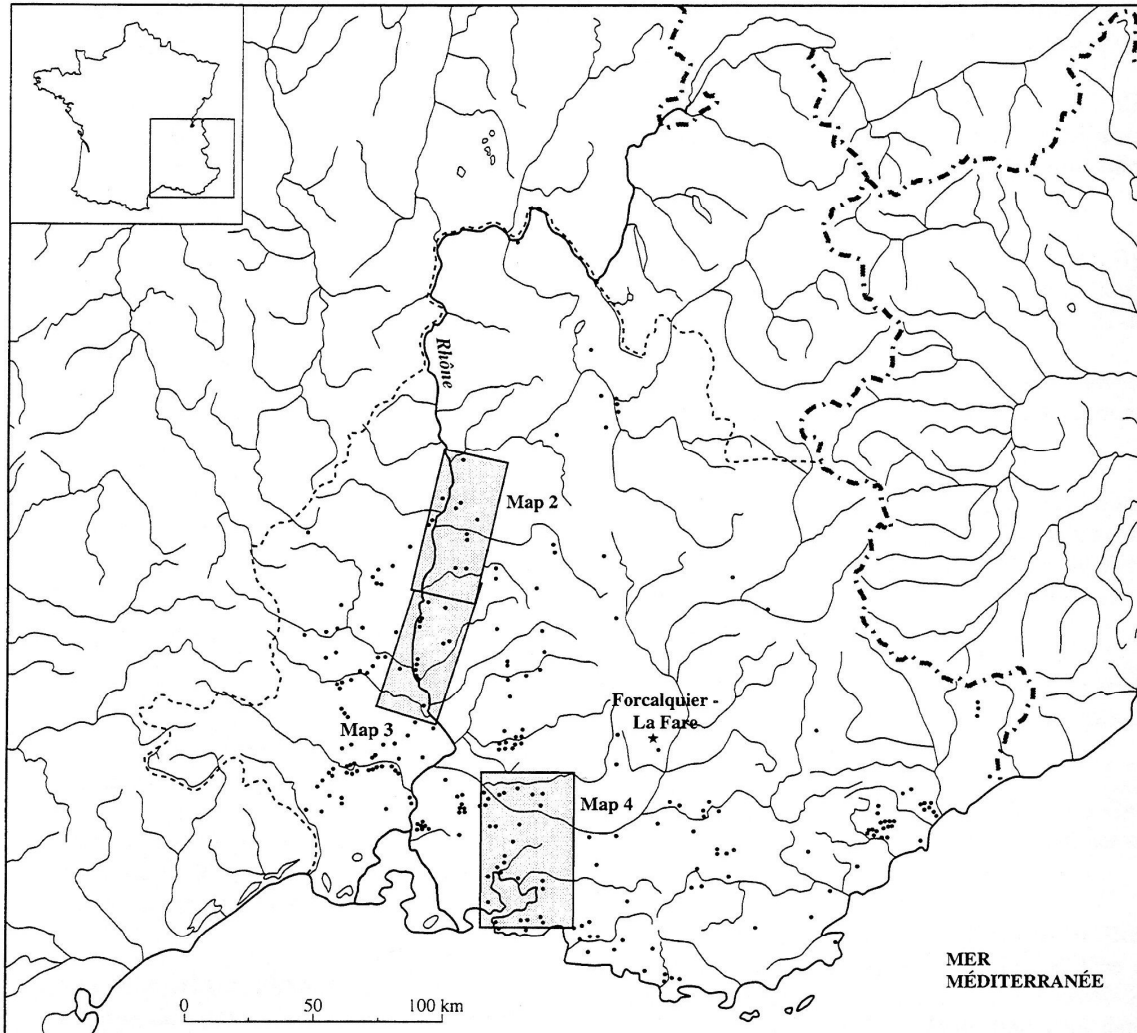


Fig. 1: Location of main Bell Beaker sites in Southern France.

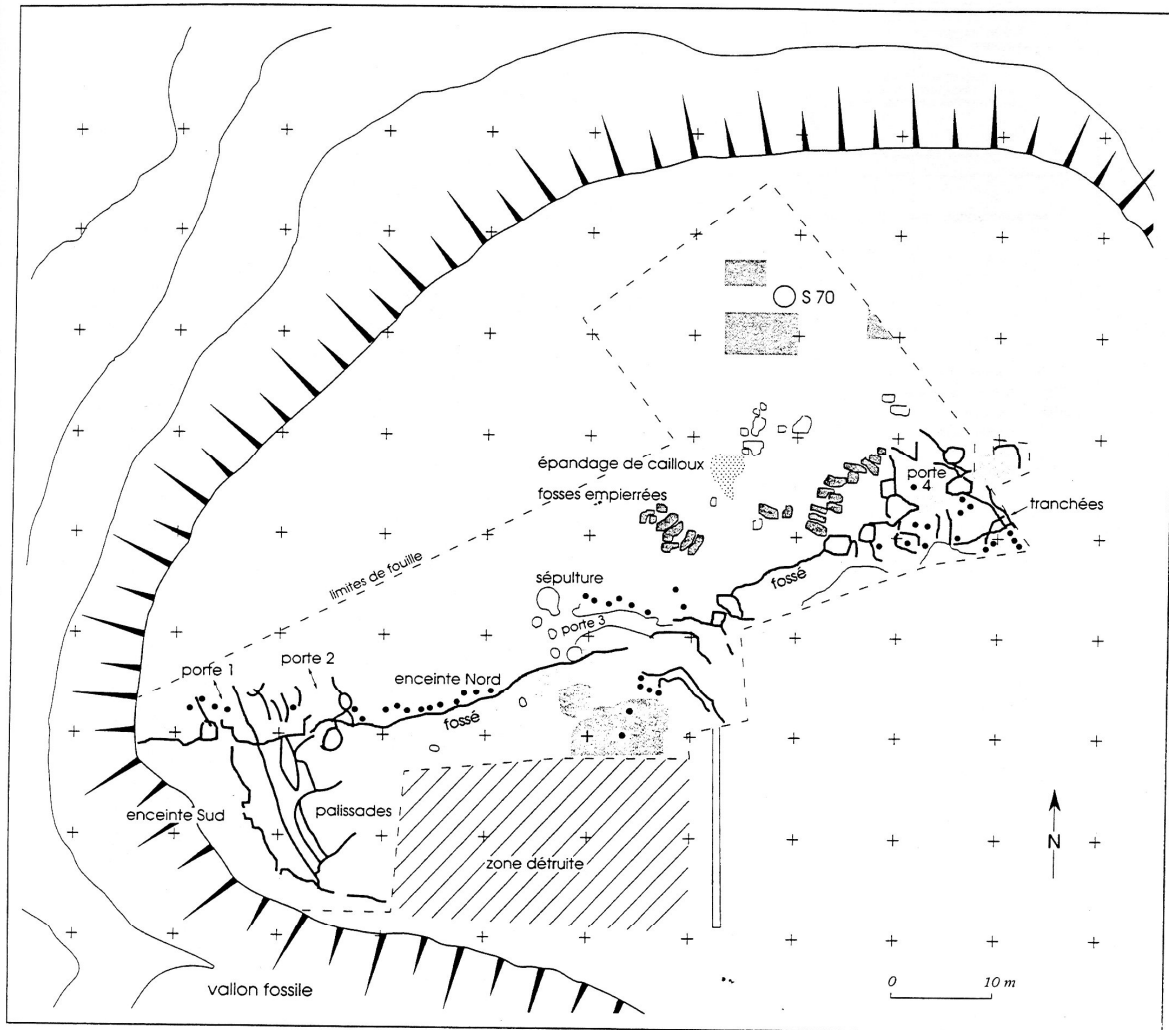


Fig. 2: Forcalquier, La Fare (Alpes-de-Haute-Provence). Topographical map with structures (state of research 1995)



Fig. 3: Forcalquier, La Fare (Alpes-de-Haute-Provence).  
Burial S14





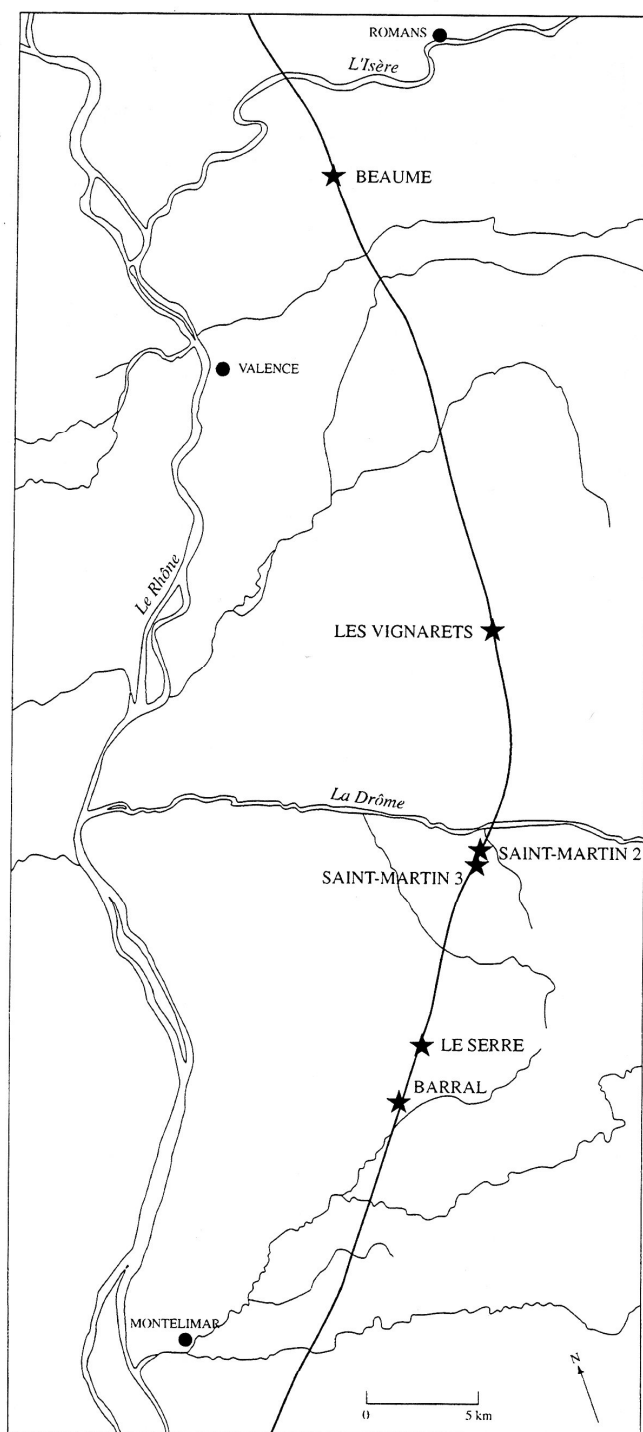


Fig. 5: Location of Bell Beaker Sites uncovered along the planned TGV railroad line. Drôme sector (map 2).

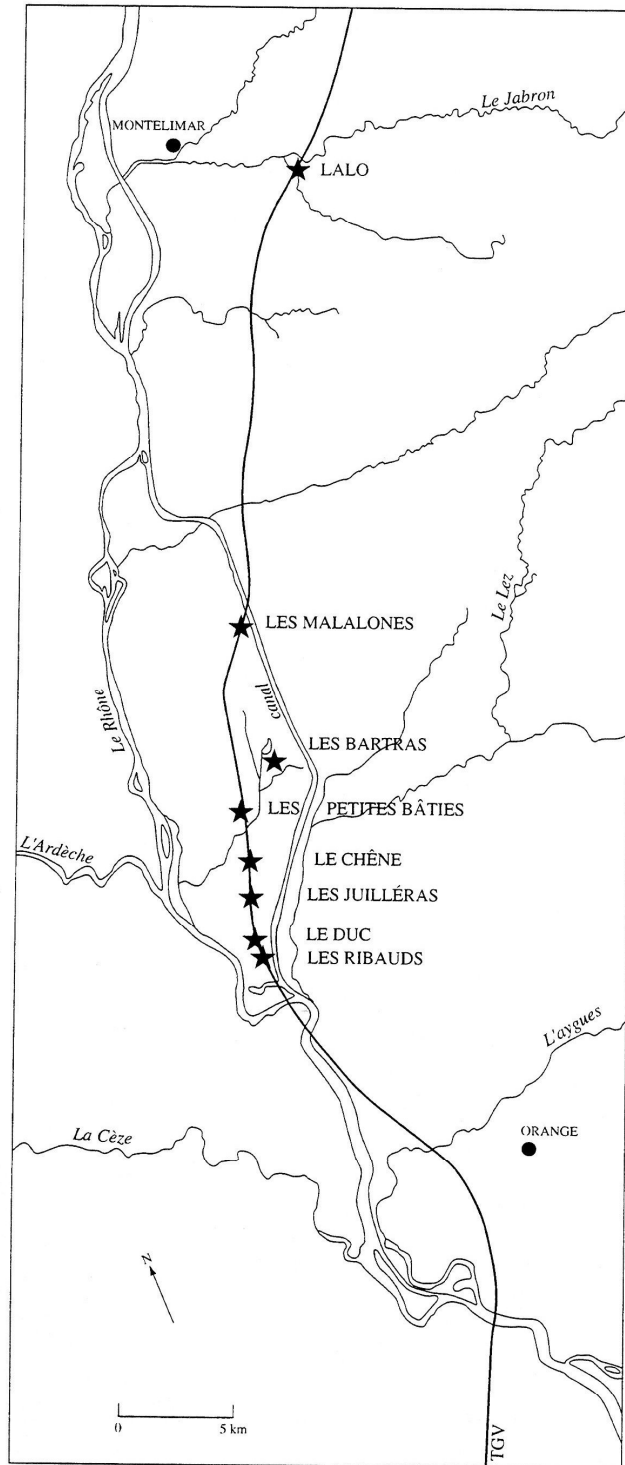


Fig. 6: Location of Bell Beaker Sites uncovered along the planned TGV railroad line. Northern Vaucluse sector (map 3).

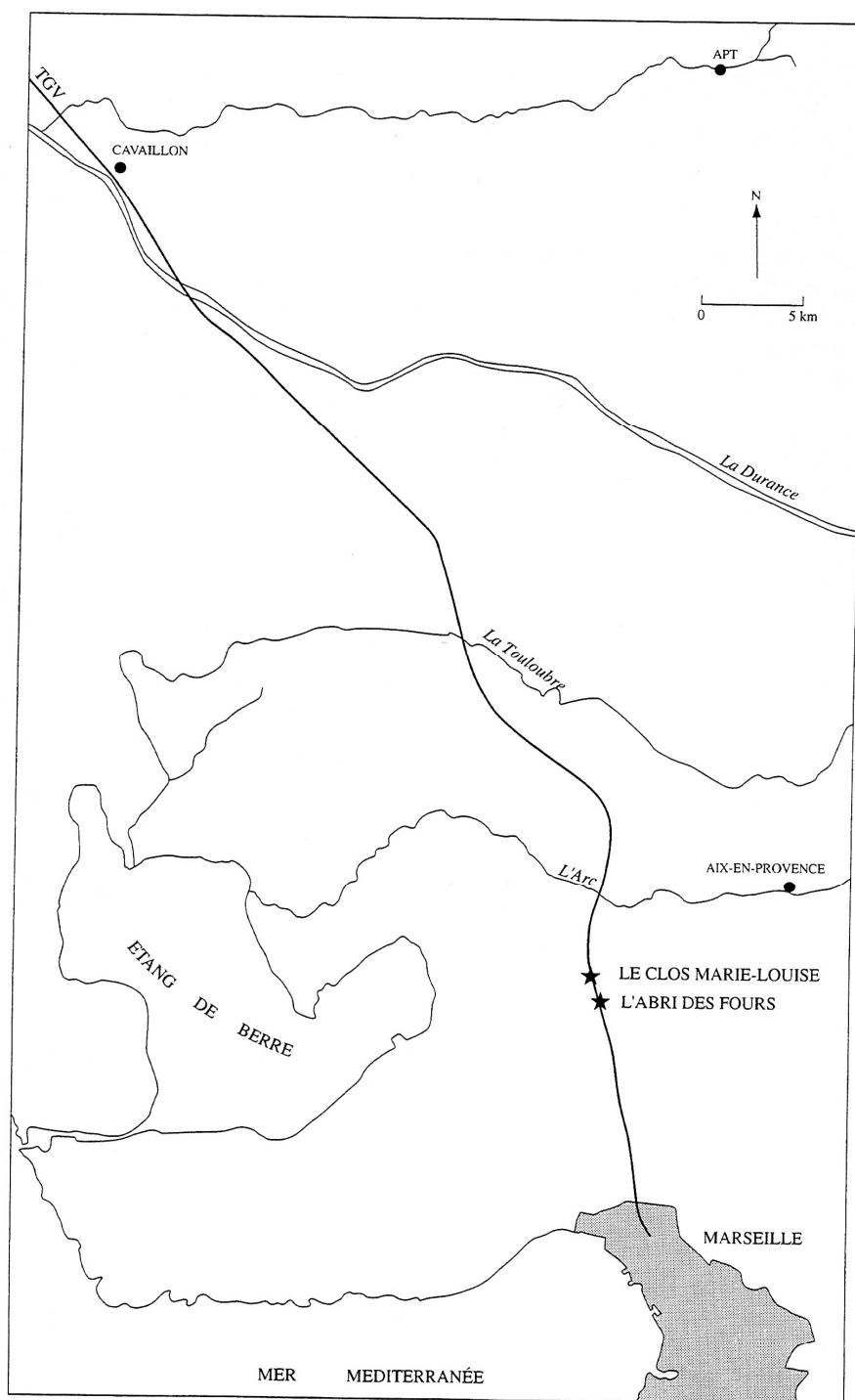


Fig. 7: Location of the Bell Beaker Sites uncovered on the TGV railroad line. Bouche-du-Rhône sector (map 4).