



Towards a philosophy of dwelling

A comparative analysis between timber framed traditions of the Iron Age and the Medieval periods

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Introduction

The timber-framed buildings depicted on open-air panels around the medieval settlement of Paspardo and within other areas of the Valcamonica offer a unique insight on economic, political and social organisation during the Iron Age. The use of these buildings though, is not clear. However, their location on the rock-art panel, the way they were carved and the detail of each structure gives the specialist an insight on construction methodology, scale and possible social organisation. Similarly, the timber-framed tradition in medieval England is a unique and well-represented archaeological resource. Based on the construction methodologies employed during the medieval period in England and north-western Europe, the carpenters and craft specialists of the Iron Age in Valcamonica appear to have used a similar tried and tested architectural template. Based on the rock-art, variations to this template appear to have created distinct local and regional traditions of timber-framing within the valley and beyond.

This paper will assess the common links between the two traditions and suggest that the social and political infrastructure around the village of Paspardo and other areas within Valcamonica was indeed complex and that certain philosophical rules concerning building methodology and carpentry detail were strictly observed. Further, I will also compare the carved images of the Valcamonica with high status buildings in medieval England and suggest that a hierarchical system of construction was present during the Iron Age. This specialised craft is indelibly expressed within the rock-art around present day Paspardo.

The village of Paspardo stands on the eastern side of the valley at around 800m above sea level and it is around this settlement that the *Cooperativa Archeologica Le Orme dell'Uomo* has undertaken extensive fieldwork and research.

The Data-set

Valcamonica has within its bounds a number of core areas that contain high concentrations of carved rock-art (petroglyphs; in Italian *incisioni*). The rock-art contained mainly within the valley was designated a World Heritage site by UNESCO in 1979. It is estimated that there are between 140,000 and 300,000 petroglyphs making this the largest prehistoric rock-art area in Europe. Over the past 50 years most areas of the valley have been investigated (Arcà 2004; Arcà & Fossati 1995; Anati 1964, 1975, 1979; Brunod, Ramorino & Gaspani 2004; Delano Smith 1982, Fossati 1993, 1998, 2002; Priuli 1983, 1992, 2002). The majority of the petroglyphs are carved onto polished smooth sandstone and schist rock-outcropping located on the intermediate slopes of the valley, to an altitude of *c.* 1000 m above sea level. The earliest rock-art probably dates to the Upper Palaeolithic, whilst the most recent dates to the medieval period.

Generally, this vast assemblage is divided into six major typological categories that include: cervids, domesticity, geometric/curvilinear forms, horses, ploughing scenes, and warriors/warfare scenes. These categories are further sub-divided. Domestic scenes include topographic images such as fields and enclosures,



dogs, ploughing scenes, and free-standing structures (including grain storage houses, huts, dwellings and temples). These figures, along with the vast majority of the Valcamonica assemblage date between the Late Bronze and Iron Ages; within the 1st millennium cal. BC (e.g. Arcà 2000; 2004; Arcà & Fossati 1995). Some domestic figures are related to mappiforms such as the complex map panel at Bedolina, located on the western side of the valley above the settlement of Capo di Ponti. The mappiform at Bedolina is constructed of a series of fields and enclosures, inter-linked by pathways. Surrounding the fields and linked by the pathways are a number of timber-framed structures which have been interpreted as dwellings; the scene representing a Camunian village (Anati 1964).¹

Until recently, little attention had been specifically paid to the development and utilisation of these timber-framed structures, which incidentally number around 1,570, the largest concentration located on the eastern side of the valley (Savardi 2007, 433). It has been previously considered that some represent lake-dwellings (Keller-Tarnuzzer 1955, 178). However the palaeogeomorphological history of this section of valley shows no lakes existed here during later prehistory (Brusadin 1961). Savardi (2004, 89) extends this point further though and suggests that the water-courses would have been prone to periodic seasonal flooding; therefore these areas were unattractive to settlement. However, it is more than likely that these buildings were located on the lower sections of the intermediate slopes of the valley, away from potential flooding areas. Based on the Bedolina I map, the house structures appear to be clustered (on the lower section of the panel). In terms of geography, the houses are possibly strategically positioned at either the lower or upper parts of the valley. Given the topography and altitude, Fedele (1988) has suggested that the dwelling representations are similar to contemporary alpine farmhouses that currently occupy the upper slopes of the valley.

Tognoni (1992) undertook general classification and crude assessment of these structures, with later discussions by Marretta (2004) and Savardi (2004, 2007). Tognoni (1992, 177–80) has identified seven generic types based on their construction complexity. She considers the structures to represent grain stores and date to the first phase of the Iron Age. This hypothesis is based on the remains of grain store structures identified in Switzerland (e.g. Cittadini 1996, 6–8). The floor plan and post-hole arrangements from these Swiss sites in-

dicates that house structures in the Valcamonica were similar (Savardi 2004, 90); although there are local and regional variations. From Tognoni's analysis a number of the generic types have been identified and include:

- type 1. Simple square and triangle with central vertical line;
- type 2. Two-storey jettied structure with pitched roof; with central vertical timber;
- type 3. Two-storey jettied structure with pitched roof; with multiple vertical timbers;
- type 4. Two-storey structure with extended jetty and spiked pitched roof;
- type 5a – 5c. Two-storey structure with narrow tody, pitched roof and base plinth;
- type 6. Two-storey jettied structure with curvilinear roof and vertical internal timbers;
- type 7. Two-storey structure with pitched and curvilinear roofs and internal timbers.

Savardi has simplified Tognoni's typology to four main types that include grain stores with plinths to simple box-frame superstructures with a pitched roofs (2004, 84, *fig. 4*). He has also suggested that a limited number of structural elements are missing from a number of house representations and therefore proposes that these structures may not have existed and did not represent structures that once stood in the valley below. He considers these structures to be symbolic, associated with birth, death or with rites of passage. However, the Valcamonica rock-art is largely a representative assemblage and figures and structures are usually without clear perspective or dimension; therefore the imagery can be interpreted as representative of the Iron Age and its people.

A more general visual and empiricist-based typological classification system has been promoted by Priuli (1992) who excludes many designs that have been systematically recognised by Tognoni. In terms of dating, dwellings and associated topographic images have been broadly placed within the middle to late [southern European] Iron Age. However, they also occur during the Roman and medieval periods and arguably, but in a more simplistic and stylistic form, are present during the Neolithic (*c.* 3,500 cal. BC). Accompanying the Iron Age structures and usually carved on the same panel are aves, axes, caprids, cervids, domesticates (including dogs), field systems and warriors. Dogs and human figures are sometimes superimposed by these structures suggesting a possible chronological sequence (e.g. Rock No. 35 at Naquane). Interestingly and probably deliberate, the artist has positioned the body of the house over certain figures in order to portray both images as one scene (e.g. Rock No. 35 at Naquane). However, despite superimposition, it is not clear if

1 Conversely, immediately down-slope are the numerous panels of the Seradina complex, some of these panels display scenes that involve the hunting of red deer (e.g. Rocks 12 & 18).



Plate 1. Jack's House (Photograph: J. Pilkington)



Plate 2. A reconstruction of a grain store from the St Fagens Welsh Folklore Museum, Cardiff, dated roughly to the same period as Jack's house (Photograph: Nigel Randell)

these figures, pre- or post-date the structures. I would suggest that all figures are roughly contemporary and were added within a generation or two of the initial imagery; thus any changes in ideology. Political, symbolic or otherwise could have been understood. Applying this assumption the imagery from the Bedolina I panels the imagery was probably carved in one or two sessions of phases, possibly within living memory of the original artist. It is considered that this complex scene may represent a topographic map of the valley floor below (e.g. Zubrow & Daly 1998). Whether or not the scene from Bedolina is representative or portraying an

encoded grammar of an ideal state of things remains debatable.

Tognoni (1992, 148) and recently Savardi (2004) have included within their discussions a construction methodology in which both scholars have identified certain structural timbers that form part of the superstructure or frame. Construction methodology was further enhanced by the artist Jack Belmondo in 1996-7 by reconstructing a grain store. This structure was based on an image present on a number of rock panels including Rock No. 6 within the Naquane National Park (Plate 1). A similar reconstruction based on post-hole arrangements from British Iron Age settlement sites (Plate 2). These structures are less sturdy and smaller. However, based on the complexity of many of the carvings, the construction diagrams used by Tognoni, Jack's house can be considered simplistic and structurally unsuitable for a two or three timber-framed building. The reconstruction does suggest though that the ground floor may have been open and on a series of stilts or structural posts.

Based on my fieldwork and observations I have come to the conclusion that the majority of these structures function as free-standing dwellings, although I do not rule out that some structures may represent huts and grain stores or even religious buildings. Structures usually comprise two or three storey jettied buildings that have complex timber-framing. The superstructure or body supports a pitched roof. This imagery is sometimes accompanied by pecked ladders, animals and human figures; the latter imagery usually the result of superimposition. Smaller, less complex structures comprising a single storey supporting a pitched roof can be considered huts or grain stores (Tognoni's Type 1). One of the largest and most complex panels that contain both types of dwelling is Bedolina I, referred to as the Bedolina Map (e.g., Anati 1994).

In medieval England (and elsewhere in medieval Europe) the timber-framed building tradition is considered to be the principal structure that extends broadly across the social, political and economic spectrum; from peasant hovel to manorial hall. The method of construction, i.e. building a structure using a series of refabricated frames also crosses this spectrum and the tradition or vernacular roughly spans 600 years, from AD 1200 to 1800.² Within the medie-

2 Recognised within this time span are four generic types: box frame, cruck, post-and-rafter and truss (Brunskill 2004)



val tradition, carpentry, philosophy and construction ethics are largely understood (e.g. Alcock *et al.* 1996; Harris 1986 and Brunskill 2004).

Arguably, the method of construction for both the Valcamonica and medieval England are roughly similar and as suggested earlier; Tognoni (1992, 148) and Savardi (2004, 81) have identified principal timbers that appear to be standardised on much of the dwelling imagery. It is quite clear from the Valcamonica data set that apart from construction methodology, the ethics of space also had an influence of building design in that the dwelling not only housed a nucleated family but also their livestock. Similarly, in medieval England (and elsewhere) the dual purpose of housing for both family and livestock was not uncommon, especially within the rural and village landscape. In Wales at around the same time, the Welsh longhouse was in use. This single-storey building, also referred to as the *byre* was constructed of stone and supported a flagstone tiled roof. This building was usually divided into two sections; one section for the family, the other for livestock. In some cases, byres were constructed over streams, providing both a fresh water supply and a means of discharging animal waste. Within the roof space, cattle feed would have been stored and used during winter months. Within the alpine regions of southern Europe and at roughly the same time, cattle would have been put out to pasture during the spring, summer and early autumn months. It is more than probable and based on the carvings from Capo di Ponte and Naquane that a similar economic system existed during the Iron Age in the Valcamonica and elsewhere in alpine Europe.

The value of dwelling

Based on the archaeological record, the dwelling fulfils a number of basic human needs. In terms of free-standing structures depicted on rock-art from the Valcamonica, dwellings can offer security from the natural elements as well as from human aggression. If there is more than one house depicted such as those on Rock 57 in Naquane, dwellings can also offer collective security as well as a sense of community. Groups of dwellings probably represent the *village*, or what I would term *community scenes*. The varying size and shapes of each of the dwellings depicted may have expressed status; the greater the size of the dwelling, the wealthier the owner.

In addition to size and shape, the artist has also added to the generic superstructure gestures of elaboration; marking his or her personal or family insignia. A number symbols such as the wheeled cross and the sun disc have, in the case of the house on Rock 73 at Capo di Ponte been added to the roof overhangs (figure 1).

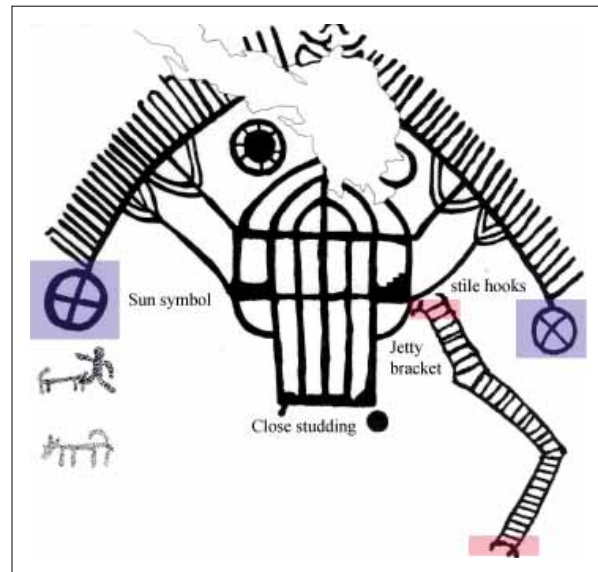


Figure 1. Two storey dwelling with complex roof and classic later prehistoric symbols from Rock 73, Capo di Ponte (after Priuli 1992, fig. 256)

These symbols, carved on rock outcropping throughout Bronze Age and Iron Age Europe may have expressed further status to the owner or may have even been used to entice or ward-off evil spirits. However, elaborate house designs such as those at Capo di Ponte are, not surprisingly limited in number. It may well be that these structures are not dwellings but represent special buildings associated with the ideology associated with the celestial bodies such as the sun and moon.

Dwelling size, shape and elaboration may have also influenced the surrounding landscape. This criterion may have determined how the landscape was divided and who owned what. The association between dwelling and fields is further enhanced by the presence of pathways. These three components appear to express a socially complex landscape that is dominated by pastoral harmony rather than conflict, although warrior figures engaged in combat are sometimes present (but not necessarily contemporary).

The dwelling also establishes comfort, in particular warmth. Assuming that the first floor was either supported by stilts or was used as a cattle stall, it is unlikely though that these structures contained internal hearths. Many depictions show that the occupied parts of the dwelling were the upper floors. In the spring, summer and early autumn months the outside evening temperature would be probably tolerable to warrant no internal hearths. However, during the winter months the average evening temperature could be as low as minus 5 degrees centigrade. It is probable that during these months the ground floor, occupied by domesticates provided heat which would have risen through and penetrated the dwelling area.

As stated earlier, many dwelling representations ap-



Plate 3. Bedolina, Timber-framed dwelling with a ladder



Plate 4. The closeness of the medieval street, Market Pitch, Weobley (Photos: G.H. Nash).

pear to display varying degrees of status. The social organisation of the house space includes the family unit occupying the first floor and roof space (e.g. Plate 3). Part of this status package includes ladders. These accessories were used in order to access the upper storey of the house. Based on the limited assemblage, access was via the side elevation (Plate 3). Some medieval buildings appear to be designed similarly with access into buildings via shuts or alleyways that led off from the main street (Plate 4³).

The doorway is usually hidden and constructed within the dark recesses of the side elevation, sometimes located to the rear of the property. This access to the building appears to offer control as well as hiding the display and wealth of the owner.⁴

Superstructure

The superstructure of the building is probably the most single important carved component. In structural terms, the superstructure offers stability, robustness and family security. The superstructure usually comprised three physical components: the body, the roof space and access components (such as ladders and roof awnings). The preferred perspective is always one dimensional, face-on view, showing the body of the dwelling and the pitch of the roof. Each carved line usually represents a structural [principal] timber and although house-design varies from panel to panel, usually the building template remains the same, always comprising two vertical lines representing the storey [corner] posts. The view expressed for each dwelling is usually symmetrical. Internally, the body of the dwelling sometimes has one or more vertical lines that represent structural posts, possibly representing a complete frame. The vertical studding is sometimes present on the first floor and between each of the timber posts wattle and daub⁵ panels may have been used as infilling.

It is not clear how timber-framed structures within the valley were assembled. However, in medieval England, prefabricated frames would have been constructed and assembled off site, usually within the carpenter's yard or *framing ground* (Harris 1986,

- 3 Note the buildings from both Plates 3 and 4 show box-framed constructions and were each constructed as a series of wall frames.
- 4 It was not until the later medieval period that doorways were symmetrically placed onto the façade of medieval buildings. Likewise within the medieval village form in Paspardo, the doorways to most houses is via a side entrance or gated courtyard, suggesting an early date.
- 5 Mixed with mud, cattle dung and straw.



Plate 5. Assembly marks from a 15th century roof collar timber from Rothwell, Leeds (Photograph: G.H. Nash)

15). In order to ensure that the timbers from a prefabricated frame matched, carpenters would carve at the end of each principal timber an assembly mark (Plate 5). Each assembly mark would have been sequentially numbered in order to reassemble or connect separate frame sections on-site.

Based on the size and complexity of each structure, jointing rather than the lashing of timbers would have been the preferred technique. Jointing, in the form of lap joints, mortice and tenon joints and scarf joints, all present in medieval house construction would have probably been used during the Iron Age, especially on those buildings that were constructed of two or more storeys. Jointing would have assisted in keeping the panel and frame sections rigid. The lashing of timbers using fibrous material such as grass, reed or timber would have resulted in periodic replacement and potential collapse. The load-bearing stresses placed on structural timbers such as floor and ceiling joists would require a more permanent solution. Based on the rock-art imagery, dwellings are substantial and the timbers used would have to have been sturdy enough to support the probable activity associated with day-to-day family life and therefore jointing would have been a necessary component. Lashed timbers may have been sufficient for smaller buildings such as single storey huts and grain stores.

Many carved dwellings, including probable grain stores appear to be constructed on raised rectangular foundation blocks or plinths. This is feature forms an integral part of the timber-framing tradition for most of medieval Europe. Fedele (1988) has promoted the idea that the plinths were probably of stone. The [stone] plinth and house foundations would have prevented adverse ground water conditions penetrating the internal floor of the dwelling as well providing secure foundations in which to construct a building.

The majority of carved structures present on rock-

art are depicted as two-storey dwellings. The first floor is usually jettied. The shape and the angle of the roof pitch are between 40 and 60 degrees, indicating that the roof was probably thatched. On the upper face of the roof there are usually a series of short carved lines that may represent wooden slates or more probably, staves that would have been partially driven into the thatch, probably to hold the thatch bails to the roof timbers.

Although there is a generic theme occurring throughout; to include the three basic elements – body, roof and access, there are idiosyncratic nevertheless variations to each element that could represent a different building type such as a grain store or hut. However, it is more than probable that two storey buildings represent dwellings or what Anati sometimes refers to as temples (1994, 13). Status can be partly attributed based on the degree of elaboration to the superstructure in particular possible personal insignnia present on the roof apex and in form of stylised anthropomorphic figures and other symbols (Tognoni 1992, 267; Savardi 2007, 441, fig. 2) (figure 2).

Although Savardi focuses on anthropomorphic, Tognoni has extended the apex insignnia assemblage to include [timber] beams, bird shapes, tridents and shields.⁶ Irrespective of the insignnia type, it is probable that each family unit or clan possessed a recognisable symbol; a type of totem or heraldic emblem. One can witness a similar form of elaboration afforded to medieval buildings in form of ornately carved barge-boards (Plate 6). These timber planks are usually fixed to the A-frame at the gable-end and a variety of repeated symmetrical designs are used. During the medieval period such accessories to a building would have resulted additional costs to the construction of the building. One can consider that generally, the more elaborate the carving the more status the building and owner possessed. One can also consider that the attempt of externally display such an accessory indicates a social hierarchy for building stock of a village such as

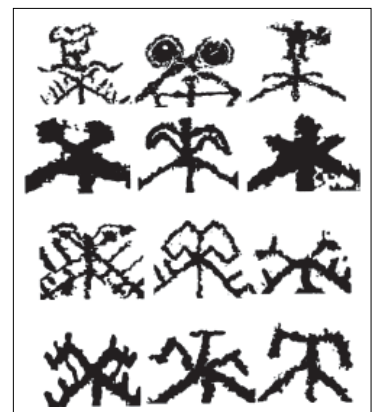


Figure 2. Ridge decoration: Anthropomorphic figures possibly representing personal insignnia and thus representing Clan/family identity (after Savardi 2007)

⁶ See *Motivo ornamentali delli travi di colmo* [apex motifs], p267.



Plate 6. A carved medieval barge-board from a 15th century status dwelling in Weobley, Herefordshire (Photograph: G.H. Nash)

Weobley (Plate 6).

1. Jettied dwellings

Within the medieval towns of England and Western Europe, plot space was at a premium and as result the organic development of the medieval town form forced



Plate 7. Ornately carved bressumer jetty from a building in Watergate, Chester (Photograph: G.H. Nash)

many carpenters to construct two, three and sometimes four storey buildings. Many of these individual units were abutted rather than tied into their neighbours and therefore the variations of the generic design occur, producing a busy and disorganised streetscape. In some cases, stone walls were constructed between buildings in order to establish clear boundary ownership (Harris 1986, 56). This plot designation would have allowed carpenters to experiment and design variations, in particular, with jetties. The jetty is a cantilevered overhang of a storey or gable (referred to as a gabled jetty) that overlies a lower floor level; usually the ground floor (Alcock *et al.* 1996). In the case of carvings within the Valcamonica the gable is shown to be usually jettied which is probably continuous, occupying all four wal-

ls. Tognoni's Building Types 2 to 7 displays many idiosyncratic changes to a generic theme and depending on size of the overhang of the jetty and the number of stories, buildings are classified based on status.

Both Tognoni (1996) and Savardi (2004) have identified certain key timbers. Despite their structural integrity there has been a tendency to consider them as part of the construction methodology incorporated either huts or grain stores. If this were the case these structures would have been small-scale and similar to the size of hut afforded to the Naquane reconstruction (see Plate 1). I make the assumption though that a nucleated family unit occupied the upper section of the house and therefore these structures were substantial. This being the case, the

philosophy of the timber-framing of the hut or grain store to the dwelling changes considerably.

In most examples, a single beam - referred to in an English context as a jetty bressumer - delineates individual stories. Dependent on the load-bearing from the floor above, this timber would have been further supported at either end by a jetty bracket (Alcock *et al.* 1996, *figure* F14,2e). Not unexpectedly, both timbers are frequently incorporated into the carved designs such as the two structures on Rock 6 at Foppe di Nadro. It is conceivable but unproven that both sets of timbers may have been ornately carved; similar to their counterparts during the medieval period (Plate 7).

2. Roof spaces

In contemporary alpine village society the roof space has been traditionally used for storing winter feed and firewood. The uppermost floor is usually occupied and forms the living area for the family. During the Iron Age, the roof space may have served a similar role. On many panels the artist has attempted to exaggerate this area of the house using a variety of carving techniques and accessories.

In terms of what is viewed on the rock-art panel, the roof and roof space usually comprises a single A-frame that is supported by a single tiebeam that extends from eave to another. Usually extending vertically from

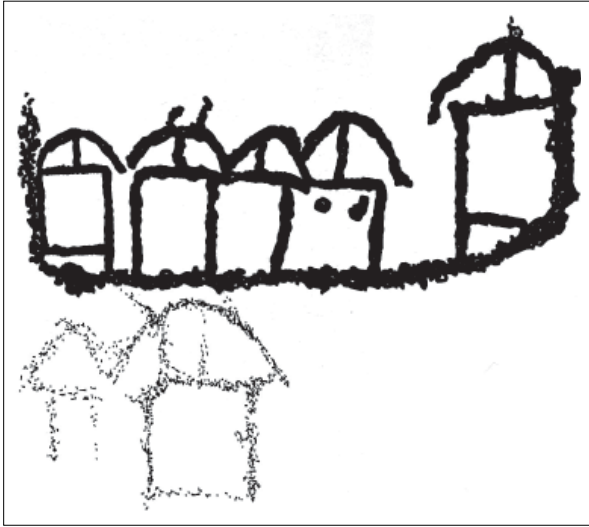


Figure 3. Curved roof-lines belonging to a three-dwelling terrace from Rock No. 27, Foppi di Nadro. Note the tiebeam and king post on each building (after Priuli 1992).

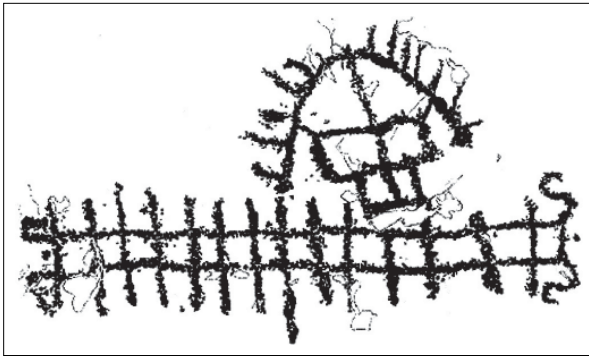


Figure 4. Two storey dwelling and hooked ladder (after Priuli 1992)

the tiebeam to the ridge of the roof is a *king post*, a single structural timber that provides greater rigidity to the roof. It is probable that this timber-framed arrangement was repeated throughout the roof section of Iron Age houses. House representations also show the roof pitch varying between 45 and 60 degrees indicating that they were more than likely thatched. Obviously the greater the pitch the more likely snow in the winter months would not settle. If the pitch was less than 45 degrees a greater weight strain would be placed on the roof and subsequently the superstructure. The angle of the pitch of the roof is also important concerning water-run-off. If the pitch was less than, say, 45 degrees, rain water would have penetrated the thatch. Although many roof-lines are straight-pitched, there are a number of carvings that have dome-type roofs (e.g. figure 3). This type of roof-line would have possessed similar qualities to that of the straight pitched roof and it is more than likely that both types form traditions are chronologically or locally separated. The roofing materials would have originated from the valley floor and the lower slopes of the valley and it is conceivable that a woodland management scheme would have been in operation in order not to exhaust timber supplies.

Attached either side of many dwellings is a [rigid] ladder, probably constructed from wood. Based on the number of rungs carved, ladders can average between 2 and 4 metres in length. However, the house on Rock 73 at Capo di ponte has 31 rungs that belong to three continuous ladder sections. Based on the standard dimensions of a modern ladder, the distance between each rung may have been *c.* 0.30m, therefore this structure would have extended ten metres. At the upper end of many carved ladders artists have carved hooks on each stile, whilst at the base are stabilisers; both components would have provided fixing points as well as stability (figure 4). It is probable that ladders were semi-permanent features that could have been moved on a daily basis.

Dwellings in context

As stated earlier, dwellings do not usually appear in isolation. They are carved onto panels that either support earlier figures, creating superimposition or occur with contemporary figures such as topographics. Further, later figures and motifs can also be added or superimposed over houses. However, irrespective of their introduction to the panel composition, the house design appears to be an important figure. In many examples the artist feels strongly and compelled to strategically place each house image rather than haphazardly carve it in the middle of complex hunting scenes for example. Some houses occur as single figures on a panel such as the two-storey jettied building on the Seridina complex

Until recently little or no statistical analysis had been undertaken concerning the spatial distribution of dwellings on rock-art in the Valcamonica. However, attempts to discuss these structures interpretively and within a wider context had been promoted by Arcà (2000, 2004 & 2005) and to some extent by Savardi (2004). It is clear that there are direct associations between dwellings/grain stores and what Arcà refers to as *topographics*. There are other carved images that can be linked but are sometimes not present on the same panel such as plough scenes and the presence of domesticates including dogs. Alexander (unpublished) has, in my view successfully applied a network analysis to pathways that are present on Bedolina map. His analytical approach examined the linkages between fields and other features within the Bedolina curtdledge. Alexander, concluded that the probability of most of the fields and dwellings being interlinked by an intricate series of pathways was over 44%. The network matrix for the Bedolina panel was indeed complex. The linking of dwelling to fields and enclosure suggests that the communication network.

Towards a philosophy of dwelling

The edited volumes of Chippindale & Taçon (1998), Chippindale & Nash (2004b), Nash (2000) and Nash & Chippindale (2002) have recently discussed the concept of looking beyond the purely descriptive interpretations associated with rock-art. These approaches have been locally supported and enhanced, in particular, by Acrà (2000, 2004 & 2005), Fossati (1998 & 2002) and Frachetti & Chippindale (2002). From these key texts a genitive grammar involving landscape and its relationship with image has been analysed and promoted.

This paper has so far described and discussed the architectural traits of dwellings that are present on the rock panels in the Valcamonica. I have attempted to make a comparison between the carvings and the timber-framed buildings of medieval England. Such distinct representations are absent elsewhere in prehistoric Europe and therefore they can be considered a unique cultural resource. It is probable that based on the classification system promoted by Tognoni (1992), three types of structure exist; grain stores, huts and houses; the majority are free standing. Based on my fieldwork, each of these structures can be further sub-classified, based on:

- the proportion (in relation to other figures on the panel);
- the internal structural complexity (the intricacy of the timber-framing); and
- the physical relationship between structure and, in particular human figures

As stated earlier, no two designs are the same and the size of each structure varies. However, the size variable may not represent the actual size of a building in relation to the figures around it (e.g. Frachetti & Chippindale 2002, 116). For example, and based on comparative size, the human figure standing next to a free standing timber-framed dwelling on the Bedolina I panel could clearly not physically live in such a building (figure 5). It is probable that either the dwelling or the human figure are purely representative and for the artist, comparative scale is not an issue. One could also consider the concept of perspective whereby the size of the human figure in relation to the dwelling is based on physical distance between each carving and the artist (Janik *pers. comm.*). On the same section of the Bedo-



Figure 5. Four dwellings creating a three-dimensional place (from Bedolina I, after Anati 1997, figure 45)

lina I panel are a collection of four dwellings (figure 5) and it is more than likely that in reality these structures were roughly the same size, however, the artist has attempted to create a sense of perspective between each building. Based on other sections of the Bedolina I panel each dwelling would have stood within its own garden plot and each would have been accessed via a series of interconnecting pathways.

Based on the size of many dwellings in relation to the figures that surround them, they can be considered as dominating a panel narrative. This strikingly visual entity is central to the narrative. It would appear that the house is fundamental to the social well-being of the community and as stated earlier it offers both family and community security. The four walls of the dwelling can conceal the intimacy of family life (i.e. what goes on behind closed doors), but at the same time promote and display wealth, status and members within the village. Based on the comparative size of clusters of dwellings on the Bedolina I panel, there appears to be a hierarchy rather than the artist creating perspective (i.e. one building being further away than another and therefore smaller).⁷ Within the medieval town clear distinctions were made concerning the wealth and status of buildings that included where one lived and what type of building one lived in. The size of the dwelling and complexity of the timbers appears to determine the status of the building; obviously the more timber used, the larger the house. Based on the intricacy of a number of house carvings the timber-framing would have been complex and it is more than likely that complete frame

⁷ See Chippindale 2004.



and house sections were constructed prior to erection. Constructing a dwelling may have required co-operation whereby sections of the community would have added their skills and time. This above all would have created a sense of community, collective security and social obligation (e.g. Mauss 1990).

In terms of house space Ian Hodder has discussed the meaning of *domus*, the principle of hearth-and-home in relation to early and middle (Linearbandkeramik [LBK] and Trichterrandbecher [TRB]) central European Neolithic houses (1990, 44-5). In his synthesis Hodder who was partially basing his ideas on fieldwork in southern Sudan established the concept of *domus*. This concept was not attributed entirely to domestic activities of the household such as food preparation but in abstract terms it also had symbolic connotations in controlling the social relations of power. In other words, the house becomes a symbol of power. Once inside the house, beyond the threshold and within the domain of the hearth, the space is tamed with various spaces are engendered (Bevan 2000, 103). If two storey structures such those depicted on the rock-panels around Paspardo and Capo di Ponte for example, living space must have been limited and one can therefore suggest that a strict protocol would have been in place whereby men's and women's house space was strictly divided and not encroached.

Apart from size, dwelling location can be considered important especially when considering status and village hierarchy. It appears that during the medieval and post-medieval periods, areas of the town form were specifically chosen based on social and economic status. Low status families associated with the town trades usually occupied the town centres. The social conditions were cramped, sullied and life expectancy short. In the more prosperous areas buildings and their respective plots were larger. Elaboration of carved barge boards and external beams would also display status and wealth. Likewise, within the Iron Age intricate decoration of roof ridges for example may have played a similar role. It is more than probable that such buildings were constructed away from the *busy* areas of the village, thus displaying exclusivity.

Despite the size of this assemblage (accounting for less than 0.4% of the rock-art in the Valcamonica), the status of these structures can be assessed on size, elaboration and position within the rock-art narrative.

Remarkably, what is clear is that pastoralists occupying the valley 2,500 years ago possessed the craft specialisation and engineering knowledge to build substantial timber structures, some 1,700 years before such buildings were constructed in medieval England (and elsewhere in Europe). Furthermore, and associated with the social and political organisation of settlement

was the established infrastructure to organise, co-ordinate and execute such building projects.

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Bibliography

- ALCOCK, N.W., BARLEY, M.W., DIXON, P.W. & MEESON, R.A. 1996. *Recording Timber-framed Buildings: An illustrated Glossary*. Practical Handbook in Archaeology No. 5. CBA.
- ALEXANDER, C. (*unpublished*) The Bedolina Map – an Exploratory Network Analysis.
- ANATI, E. 1964. *Camonica Valley: A Depiction of Village Life in the Alps to the Birth of Christ as Revealed by Thousands of Newly Found Rock Carvings*. London, Jonathan Cape.
- ANATI, E. 1975. *Evoluzione e Stile nell'Arte Rupestre Camuna*. (Archivi 6). Capo di Ponte (BS), Edizioni del Centro.
- ANATI, E. 1979. *I Camuni: Alle radici della civiltà europea*. Jaca Book.
- ANATI, E. 1994. *Valcamonica Rock Art: A New History for Europe*. (Studi Camuni Volume XIII). Capo di Ponte (BS), Edizioni del Centro.
- ARCÀ, A. 2000. Agricultural landscapes in Neolithic and Copper Age engravings of Valcamonica and Mt. Bégo Rock Art" In G. Nash (ed.). *Signifying Place and Space: World Perspectives of Rock Art and Landscape*, (BAR International Series 902). Oxford, Archaeopress, 29-40
- ARCÀ, A. 2004. The topographic engravings of Alpine rock-art: fields, settlements, and agricultural landscapes. In C. Chippindale & G. Nash (eds.). *The Figured Landscapes of Rock-Art: Looking at Pictures in Place*, Cambridge, Cambridge University Press, 318-350.



- ARCÀ, A. 2005. Archeologia rupestre in Valcamonica: Dos Cüi, un caso di studio. *Rivista di Scienze Preistoriche* **40**, 323-384.
- ARCÀ, A. & FOSSATI, A. 1995. *Sui Sentieri Dell'arte Rupestre: Le rocce incise delle Alpi Storia, ricerche, escursioni*. Edizioni Cda, Torino.
- BEVAN, L. 2000. Women's Art, Men's Art: Gender Specific Image Selection in the Rock Art of Valcamonica. In G. Nash (ed.). *Signifying Place and Space: World Perspectives of Rock Art and Landscape*, (BAR International Series **902**). Oxford, Archaeopress. 103-109.
- BRUNOD, G., RAMORINO, A. & GASPANI, A. 2004. *Bedolina: La città ritrovata. 5000 anni di vita in Val Camonica incisi sulla roccia*. Nöster Mond.
- BRUNSKILL, R.W. 2004. *Timber Building in Britain*. Victor Gollancz: London.
- BRUSADIN, D. 1961. Figurazioni architettoniche nelle incisioni rupestri di Valcamonica, *Bullettino di Paleontologia Italiana*, n.s. 13, Roma, 33-112.
- CHIPPINDALE, C. 2004. From millimetre up to kilometre: a framework of space and of scale for reporting and studying rock-art in its landscape. In C. Chippindale & G. Nash (eds.). *The Figured Landscapes of Rock-Art: Looking at Pictures in Place*, Cambridge, Cambridge University Press, 102-17.
- CHIPPINDALE, C. & NASH, G. 2004a Pictures in place: approaches to the figured landscapes of rock-art. In C. Chippindale & G. Nash (eds.). *The Figured Landscapes of Rock-Art: Looking at Pictures in Place*, Cambridge, Cambridge University Press, 1-36.
- CHIPPINDALE, C. & NASH, G. (eds.) 2004b. *The Figured Landscapes of Rock-Art: Looking at Pictures in Place*. Cambridge, Cambridge University Press.
- CHIPPINDALE, C. & TACON, P.S.C. (eds.) 1998. *The Archaeology of Rock-art*. Cambridge: Cambridge University Press.
- CITTADINI, T. 1996. Insediamenti camuni dell'età del Ferro: ipotesi di ricostruzione, *BCN*, Capo di Ponte, pp. 6-8.
- DELANO SMITH, C. 1982. The Emergence of 'Maps' in European Rock Art: A Prehistoric Preoccupation with Place. *Imago Mundi*, Vol. 34, 9-25.
- FEDELE, F. 1988. *L'uomo, le Alpi, le Valcamonica: 20.000 anni al Castello di Breno*, Catalogo Mostra fotografica, Boario Terme.
- FOSSATI, A. 1993. *Il mondo dei Camuni: l'arte rupestre della Valcamonica*. (Valcamonica Preistorica 4). Cervero, Edizioni della Cooperativa Archaeologica Le Orme dell'Uomo.
- FOSSATI, A. 2002. Landscape representations on boulders and menhirs in the Valcamonica-Valtellina area, Alpine Italy. In G. Nash & C. Chippindale (eds.). *European Landscapes of Rock-Art*, London, Routledge, 93-115.
- FRACHETTI, M. & CHIPPINDALE, C. 2002. Alpine imagery, Alpine space, Alpine time; and prehistoric human experience. In G. Nash & C. Chippindale (eds.). *European Landscapes of Rock-Art*, London, Routledge, 116-143.
- HARRIS, R. 1986. *Discovering Timber-framed Buildings*. Shire Publications.
- HODDER, I. 1990. *The Domestication of Europe*. London: Blackwell Press.
- KELLER-TARNUZZER, K. 1955. Le raffigurazioni di palafitte in Valcamonica, *Sibirium*, 2, Varese, pp. 175-8.
- MARRETTA, A. 2004. Foppe di Nadro riscoperta: la roccia 7 e le più recenti novità, A. Marretta (ed.) *Foppe di Nadro Sconosciuta: dalla cartografia GPS alle analisi più recenti*.
- MAUSS, M. 1990 (1923). *The Gift: The Form and Reason for Exchange in Archaic Societies*. London: Routledge.
- NASH, G. (ed.) 2000. *Signifying Place and Space: World Perspectives of Rock Art and Landscape*. (BAR International Series **902**). Oxford, Archaeopress.
- NASH, G. & CHIPPINDALE, C. 2002. (Eds.) *European Landscapes of Rock-Art*. London, Routledge.
- PRIULI, A. 1983. *Incisioni Rupestri nelle Alpi*.
- PRIULI, A. 1992. *Incisioni rupestri della Val Camonica*.
- PRIULI, A. 2002. *Valcamonica: Valley of Prehistory*. Didactic Museum of Prehistoric Art and Life.
- SAVARDI, E. 2004. Le raffigurazioni di capanna a Foppe di Nadro: tipologia e distribuzione, A. Marretta (ed.) *Foppe di Nadro Sconosciuta: dalla cartografia GPS alle analisi più recenti*, 81-93.
- SAVARDI, E. 2007. *Le raffigurazioni di "capanna" nell'arte rupestre camuna*, in Rock art in the frame of the Cultural Heritage of Humankind. XXII Valcamonica Symposium 2007, 433-450.
- TACON, P.S.C. & CHIPPINDALE, C. 1998. An archaeology of rock-art through informed methods and formal methods. In Chippindale, C. & Tacon, P.S.C. (eds.). *The Archaeology of Rock-Art*, Cambridge, Cambridge University Press, 1-10.
- TOGNONI, E. 1992. *La Roccia 57 del Parco Nazionale di Naquane e le rappresentazioni di capanne nell'arte rupestre camuna*, Tesi di Laurea, Università degli Studi di Milano.
- ZUBROW, E.B.W. & DALY, P.T. 1998. Symbolic behaviour: The origin of a Spatial Perspective, in C. Renfrew and C. Scarre (eds.) *Cognition and Material Culture: the Archaeology of Symbolic Storage*. Cambridge: McDonald Institute Monographs, 57-174.