Evidence in Favor of the Palaeolithic Continuity Refugium Theory (PCRT): 'Hamalau' and its linguistic and cultural relatives

Part 1

Roslyn M. Frank
University of Iowa

[…] the word does not forget where it has been and can never wholly free itself from the dominion of the contexts of which it has been part. (M.M. Baktin 1973: 167)

Everybody says, 'After you take a bear's coat off, it looks just like a human'. And they act human: they fool, they teach their cubs (who are rowdy and curious), and they remember. (Maria Johns, cited in Snyder 1990: 164)

Every language is a vast pattern-system, different from others, in which are culturally ordained the forms and categories by which the personality not only communicates, but also analyzes nature, notices or neglects types of relationship and phenomena, channels his reasoning, and builds the house of his consciousness. (Benjamin Whorf 1956: 252)

1.0. *Introduction*

In the first chapter of this study we examined the linguistic and structural linkages holding between Sardinian performers called *Mamuthones* (*Mamutxones*) and their Basque counterparts, e.g., the *Momutxorros* (Frank 2008b). That examination included a review of the cosmology associated with the well-docu-

mented belief among Basques that humans descended from bears. In addition, it was asserted that the name of the prototypical half-human, half-bear ancestor, called Hamalau in Euskera, provides a semantic anchor for exploring other cognitive artifacts belonging to this same cultural complex, one infused with the belief in ursine ancestors, and a cosmology that clearly antedates any Neolithic mindset. Stated differently, I alleged that the animistic nature of this belief system where the identity of human beings is fused with that of bears harkens back to the mentality of hunter-gatherers, and hence to the Mesolithic: it is not consonant with the mindset of a population of pastoral-agriculturalists. In this sense, the cognitive artifacts and social practices under analysis could date back ultimately to practices and beliefs of the hunter-gatherers who inhabited the same zone in times past and whose ursine belief system was not entirely obliterated by the gradual imposition of the socio-cultural norms of a Neolithic pastoral and agriculturally-based society.

In the final section of the previous study I pointed out the importance of recent work in the field of molecular genetics dealing with the genetic makeup of populations of European descent, particularly investigations concerning the frequencies of certain Y-chromosomes (which are transmitted through the male line) and mitochondrial DNA or mtDNA (which is transmitted through the female line). The results of these research initiatives suggest that at the end of the Last Glacial Maximum, there was an expansion of populations out of the Pyrenean-Cantabrian refugium. Investigations carried out by teams of geneticists and archaeologists also indicate that these groups gradually moved north and east to repopulate territory that had been depopulated during previous glaciations. For example, the patterns of repopulation proposed by Torroni et al. (1998: 1148) and based on the distribution of haplogroup V, radiate out of the geographical zone defined as the Pyrenean-Cantabrian refugium. Here we shall use the term Palaeolithic Continuity Refugium Theory (PCRT) to refer to the general approach developed by researchers who subscribe to this interpretation of the genetic and archaeological data.

The limits of the refugium homeland, in turn, coincide closely with boundaries of the geographical extent of the historical Basque-speaking zone as best it can be reconstructed for the first century A.D. (*Fig. 2*).

Upon closer examination, the map of Torroni et al. (1998:1148) implicates a larger geographical area than is suggested by the phraseology of the expression: Pyrenean-Cantabrian refugium. For this reason, our analysis will include representative samples of linguistic and ethnographic artifacts drawn from this larger geographic area. Stated differently, the area sampled should include Catalunya,
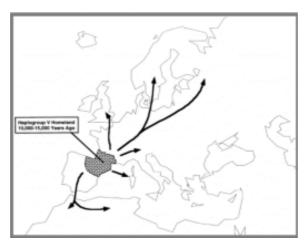
Fig. 1. Map of Europe depicting the most likely homeland of haplogroup V and its pattern of diffusion. Source: Torroni et al. (1998: 1148).

Fig. 2. Basque-speaking Zone, first century A.D. Source: Salvi (1973); Bernard & Ruffié (1976).

extend westward across Cantabria and, as we did in the first part of this study (Frank 2008b), bring into focus Sardinian materials. Furthermore, linguistic and ethnographic survivals relating to the ursine cosmology in question are not confined to this zone but rather show up in other parts of Europe, for example, in Germanic-speaking regions of Western Europe, as will become evident in sections 6.0 and 7.0 of this study when we begin to sample ethnographic and linguistic artifacts from that region.

2.0. *Questions concerning the linguistic landscape of Europe in prehistory*

As is well recognized, until the 1990s studies dedicated to modeling the linguistic landscape of Europe in prehistory concentrated mainly on the problem of locating the homeland of the «Indo-Europeans» (i.e., the putative population that once spoke Proto-Indo-European (PIE) or dialects of an early stage of it) and determining the pathways they followed. According to this narrative, these speakers moved westward across Europe and in the process transmitted their Indo-European language(s) to the indigenous populations that they encountered along the way. The traditional model used by Indo-European linguists argued that Proto-Indo-European dates back to 4000 BC, and, for most scholars, e.g., those who subscribed to the Bronze-Age Kurgan theory of Marija Gimbutas, the migration pattern assigned to the original Indo-European speakers had them moving across Europe from east to west (Gimbutas 1973). Subsequently, in the 1980s Colin Renfrew introduced a different scenario which moved the time frame back to the Neolithic and linked the introduction of Indo-European languages to the migration of farmers who brought, along with their knowledge of agricultural techniques, their knowledge of Indo-European languages (Renfrew 1987).

   More concretely, by shifting the time frame backwards, Renfrew's scenario proposed a migration route that brought groups of Neolithic pastoral-agriculturalists into contact with Mesolithic hunter-gatherers. Since Renfrew's theory has the Proto-IE speakers moving out of Anatolia, once again the path of migration is by necessity from east to west. It should be noted, also, that in coming up with his theory, Renfrew was attempting to integrate genetic evidence concerning the Near Eastern component encountered in European populations, as set forth earlier by Ammerman and Cavalli-Sforza (1984). In short, Renfrew traces the Near Eastern genetic component –the Near Eastern cline identified among modern populations of European descent– back to a cohesive population of Proto-IE speakers and their descendants, moving across Europe from east to west.

However, in both versions of the narrative, the scenario put forward by Gimbutas as well as by Renfrew, the Basques themselves play no explanatory role: they are silent bystanders. And until recently they did not attract much attention from anyone. Yet when considering the importance of these Mesolithic populations of Europe, we find that «the Basque region, which was an outlier in the PC [Principal Component] analyses of both mtDNA and classical markers, has the lowest Neolithic component, at around 7%. The Basque outlier status may therefore be partly the result of reduced Neolithic penetration, as well as considerable genetic drift due to isolation and small population size» (Richards 2003: 153). Hence, we might view them as more representative of the earlier stratum, that is, the Basques may be viewed as a kind of Mesolithic relict, more so than any other European population.

What is perhaps most intriguing about all of these attempts at revising the traditional IE research paradigm is the way that the most recent findings of molecular genetics are impacting them; the way that the directional orientation of these «migrationist» scenarios might be affected by the genetic data. On the one hand we have the traditional IE explanatory narrative and its modern variants, e.g., as proposed by Gimbutas and Renfrew, where the direction of migration is consistently westward with the western and northwestern parts of Europe being affected last. Renfrew's model attempts to link a hypothetical transmission of IE linguistic artifacts to the progressive Neolithization of these zones and, therefore, to the archeological record which demonstrates the spread of agriculture from Anatolia. That expansion period dates back to between 8.000 and 9.500 years ago.

On the other hand, more recently we have the findings of molecular genetics which set up a counter-movement. The latter movement is estimated to have taken place toward the end of the Late Glacial Maximum and consisted of a population expansion into Western Europe that emanated out of the Pyrenean-Cantabrian refugium, fanning northward and eastward from the refugium zone (Gamble et al. 2005; Torroni et al. 1998). Because of the time depth assigned to these waves of out-migration (and contraction) or «pulses», they antedate the hypothetical westward movement of IE speakers out of Anatolia and eventually into the western extremes of Europe by only a few thousand years (i.e., as in the thesis put forward by Renfrew). More remarkably perhaps is the fact that the initial stages of agricultural dispersal out of Anatolia coincide in time with the last «pulses» of the population expansions out of the western refugium. Stated differently, we have evidence of two migration streams – two types of demic and cultural diffusion – moving in essentially opposite directions.

Although the significance of the findings of genetics is multifaceted, in the context of this chapter there are specific aspects of the research that need to be highlighted. As I mentioned earlier, the Near Eastern genetic component, associated by many investigators with processes of demic diffusion, is no longer considered to be as statistically significant as it was when Ammerman and Cavalli-Sforza (1984) first published their results. Instead, the genetic makeup of Europeans is now viewed as having two main components, one older than the other. Moreover, as noted, investigators argue that a major population expansion occurred in Western Europe during the Late Glacial (c. 11-16.000 years ago) as the ice sheets retreated and unglaciated areas further north became available for re-settlement.

> Phylogeographic analysis using molecular evidence assigns 60% of European mitochondrial DNA lineages (Richards et al. 2000), and an even higher proportion of Western European Y-chromosome lineages (Semino et al. 2000), to a population bottleneck prior to an expansion from southwest to northern Europe (Achilli et al. 2004; Pereira et al. 2005; Rootsi et al. 2004; Torroni et al. 1998; Torroni et al. 2001). (Gamble et al. 2006)

Gamble et al. (2005: 209) sum up the implications of these genetic studies for Renfrew's Anatolian model:

> The growing evidence that the major signal in European genetic lineages predates the Neolithic, however, creates serious problems for the agriculturalist perspective. If western Europe was, to a large extent, repopulated from northeast Iberia [Pyrenean-Cantabrian zone] then, since place-name evidence suggests that people in this source region spoke languages related to Basque before the advent of Indo-European, the obvious corollary would seem to be that the expanding human groups should have been Basque speakers.

If we take this last statement by Gamble et al. seriously, it elicits to two inter-related questions. The first was formulated recently by the geneticist Richards (2003: 135), namely, who are the «Europeans»? The second one was posed initially in the nineteenth century: who are the «Indo-Europeans»? From one point of view, the first question has no linguistic counterpart. But keeping in mind the recent findings concerning the Pyrenean-Cantabrian refugium, there is a hint that the Basque language could shed light on these deeper time depths. In the case of the second question, for most researchers today the term «Proto-Indo-European» is no longer conflated with some unified linguistic system; nor is it equated with some cohesive population of reified speakers, dating back to the Bronze Age or beyond. For example, Zvelebil and Zvelebil (1988) have emphasized that

«Indo-European» should be considered to be a construct, not a demonstrable reality for it is nothing more than a convenient abstraction referring to a set of features that are assumed to be held in common by IE linguistic systems, a fact that cannot be stressed enough in the context of this study.

In sum, «both prehistoric archaeology and, subsequently, classical population genetics have attempted to trace the ancestry of modern Europeans back to the first appearance of agriculture in the continent; however, the question has remained controversial» (Richards 2003: 135). As we have noted with respect to evolution of Renfrew's model,

> [c]lassical population geneticists attributed the major pattern in the European gene pool to the demographic impact of Neolithic farmers dispersing from the Near East, but archaeological research has failed to uncover substantial evidence for the population growth that is supposed to have driven this process. Recently, molecular approaches, using non-recombining genetic marker systems, have introduced a chronological dimension by both allowing the tracing of lineages back through time and dating using the molecular clock. Both mitochondrial DNA and Y-chromosome analyses have indicated a contribution of Neolithic Near Eastern lineages to the gene pool of modern Europeans of around a quarter or less. This suggests that dispersals bringing the Neolithic to Europe may have been demographically minor and that contact and assimilation had an important role. (Richards 2003)

In conclusion, there appear to be two narratives with slightly different casts of characters. In one of them the main characters are the putative Indo-Europeans who conquer (or colonize) essentially all of Europe, at least linguistically.[1] And in that scenario the Basques are viewed as unimportant, as nothing more than outsiders. In the other narrative, supported in particular by the recent findings of molecular genetics, the Basques – or more precisely those populations ancestral to modern day Basque-speakers who resided in the Pyrenean-Cantabrian zone – become major players. In one narrative we have reified Indo-Europeans invading or homesteading their way across Europe from east to west; whereas in the other narrative – whose assigned time-depth antedates that of first narrative by several millennia – the migration pattern moves from west to east. Until now, the linguistic implications of the reorientation of the axis of migration – from west to east – as well as the much deeper time-depth associated with the narrative have not been explored.

---

[1] This statement refers to the PIE narrative itself rather than to a finer grained analysis of the linguistic map of Europe, one that would need to take into consideration the documented survival of non-IE languages as well as Finno-Ugric languages (cf. Frank in prep.; Robb 1993; Zvelebil and Zvelebil 1988).

2.1. *Paleolithic Continuity (PC): A third narrative*

The possibility that the two narratives are more interwoven than they might appear at first glance is highlighted by the fact that there is a third competing narrative that emphasizes the contributions of hunter-gatherers to the linguistic landscape of prehistoric Europe. Here I am referring to the work of the Italian linguist Mario Alinei and his colleagues, members of the Working Group on Palaeolithic Continuity theory (Alinei 2004a, b, 2006; Costa 2001, 2004). First, I would note that the position endorsed by these researchers does not take into consideration the possible linguistic and cultural significance of the western Pyrenean-Cantabrian refugium for their model. Rather they address the need to assign a far greater time-depth to IE languages and in the process they establish a narrative that calls for a much more *in situ* explanatory framework for the development of IE languages, as opposed to one that relies solely on demic and/or cultural diffusion, such as is the case with Renfrew's model.

In this respect, I would emphasize, along with Richards, that in the past «the assumed model of surplus-driven population growth and expansion led both groups [of researchers, geneticists and archaeologists alike] to tend to play up the role of the Neolithic newcomers at the expense of the indigenous Mesolithic peoples. After all, it was the newcomers who had won in the end» and that at «the deepest level, as Zvelebil (1996) argues, this amounted to a founding myth for European culture and civilization that placed extraordinary emphasis on the Neolithic – a myth that idolizes farmers at the expense of hunting and foraging ways of life» (Richards 2003: 135).

After reviewing criticisms that have been leveled at Renfrew's Anatolian theory, e.g., in terms of the over emphasis on the Neolithic transition in Europe (Alinei 2004b; Costa 2001; Zvelebil 1995a, b, 1996, 2002; Zvelebil and Zvelebil 1988, 1990), Alinei, one of the leading proponents of the *Teoria della Continuità*, makes the following observations:

> Su questa base due archeologi (Häusler 1998; Otte 1994, 1995) e un lingui-sta (Alinei 1997, 2000), tutti e tre l'uno indipendentemente dall'altro, hanno propost un'altra teoria delle origini IE, secondo la quale gli Indoeuroepei non sarebbero arrivati né dall'Ucraina come guerrieri né come coltivatori dal Medio Oriente, ma sarebbero gli eredi delle popolazioni che si trovano in Europa da sempre, cioé da quando, nel Paleolitico Medio, *Homo sapiens sapiens*, prove-nendo dall'Africa, si è diffuso nei vari continenti, del Vecchio Mundo. ['On this basis two archaeologists (Häusler 1998; Otte 1994, 1995) and a linguist (Alinei 1997, 2000), all three independently of the other, have proposed another theory of IE origins, according to which the Indo-Europeans would not have arrived from the Ukraine as warriors or as farmers from the Middle East, rather they

> would be descendents of populations that were always found in Europe, that is, since, in the Middle Palaeolithic, *Homo sapiens sapiens*, coming from Africa, dispersed across various continents of the Old World'.] (Alinei 2001)[2]

He goes on to express an autochthonous thesis for the development of IE languages that in turn appears to define these putative «Indo-Europeans» as the indigenous inhabitants of Europe.

> Si assume quindi che gli Indoeuropei siano popolazioni autoctone dell'Europa e dell'Asia, cosi come si ammette che gli Africani lo siano dell'Africa, i Cinesi della Cina, gli Aborigeni australiani dell'Australia, e così via dicendo. Di conseguenza, i primi coltivatori del Neolitico provenienti dall'Asia occidentals sarebbero invece non-IE, e il loro contributo linguistico sarebbe stata l'introduzione di influenze non-IE sulle lingue IE autoctone. ['One assumes, therefore, that the Indo-Europeans were autochthonous populations of Europe and Asia, as it is admitted that Africans are of Africa, the Chinese of China, the Australian aboriginals of Australia, etc. Consequently, the first farmers of the Neolithic coming from western Asia would be, instead, non-IE, and their linguistic contribution would have been the introduction of non-IE influences on the autochthonous IE language'.] (Alinei 2001)

Although there are different versions of the *Teoria della Continuità* – or as it is referred to in English, the theory of Paleolithic Continuity (PC) –, the unifying thread is one that stresses continuity: that the archaeological and genetic record of Europe does not demonstrate abrupt transitions or evidence of the intrusion of a cohesive population so significant that it left a deep imprint in the genome of Europeans. Rather the theory of Palelolithic Continuity, as its name implies, argues for archaeological and genetic continuity across time with no significant ruptures so that the last significant incursion of a new population into this geographical zone from the east would date back to 40.000 BP[3] or even somewhat earlier to the appearance of modern humans, *H. sapiens sapiens*.

As a result, the foundational premise of PC theory has a corollary that confronts and challenges several aspects of the canonical IE narrative, particularly with respect to the time depth assigned to it. Some proponents of the PC model argue that in order for IE languages to have achieved the level of differentiation that they already demonstrated early on (e.g., Sanskrit), a much deeper time depth needs to be assigned to them. That is, for the languages to have differentiated as much as they already had by the time we encounter documented evidence for them, i.e., as demonstrated in the earliest attested sources, at a minimum the clock needs to be set back not merely to the Early

---

[2] Unless otherwise indicated, all translations of quotations are my own.
[3] BP stands for «Before Present».

Neolithic as in Renfrew's narrative, but rather to the Mesolithic, while the PC approach alleges that some linguistic features could date back to the Upper Paleolithic (Alinei 2004b; Costa 2001). In short, the PC narrative argues for an essentially *in situ* development of IE and for linguistic continuity between these earlier stages and later ones.

By setting up an *in situ* evolution for IE languages, a curious thing happens with respect to Western Europe: the Basque language can no longer be classed as «pre-Indo-European», but rather must be seen as evolving alongside IE languages. Naturally, it is not possible to date the Basque language itself. Nonetheless, most geneticists would argue that there is every reason to assume that there has been genetic continuity within the Pyrenean-Cantabrian zone, and therefore, that, as Gamble et al. (2005) have proposed, at this juncture it might be appropriate to put forward the following hypothesis: that the language(s) spoken in this zone in prehistory might well have been those that are ancestral to modern Basque.

In Table 1 we can see how the time-scales of the traditional IE narrative and that of Renfrew relate to Alinei's model of development, specifically as it applies to Italy and more indirectly to the development of the Romance languages. At the same time, this model makes no mention of the possible linguistic influence of languages spoken in the Pyrenean-Cantabrian refugium zone on the development of Proto-IE or the Romance languages.

Periodo	Teoria tradizionale	Teoria di Renfrew	Teoria della continuità
Paleolitico	Pre-IE	Pre-IE	PIE
Mesolitico	Pre-IE	Pre-IE	Protoitalico
Neolitico	Pre-IE	PIE e protoitalico	Protolingue italiche; latino, venetico, osco-umbro, etc.
Età del Rame	PIE e protoitalico	Protolingue italiche; latino, venetico, osco-umbro, etc.	Dialetti
Età de Bronzo	Protolingue italiche	Dialetti	
Età del Ferro	Latino, venetico, osco-umbro, etc.		
1 millennio D.C.	Dialetti		

Table 1. Three theories concerning the development of Proto-Indo-European (Alinei 2001: 16).

Although proponents of PC often make reference to the expression «palaeolithic continuity» in their investigations, their research is far from homogeneous in terms of the time depth assigned to Indo-European languages, that is, there are significant variations in the way that the origins of this language

family are discussed.[4] Among the various proponents of PC theory there are those who explicitly push the IE migrationist scenario back in time – that is, the initial spread of Indo-European languages. For example, there is the case of Adams and Otte (1999) who focus attention on the possible impact of climate changes associated with the Younger Dryas and the Holocene on the dispersal of IE languages, and, consequently, on establishing the time period in which the expansion of these speakers might have taken place. The period of the Younger Dryas, 12.500 ± 200 years ago, shows a transition to a cold and dry climate, followed by a transition to a warm and moist climate characteristic of the onset of the early Holocene, 11.500 ± 200 years ago:

> If one takes Renfrew's view that linguistic dating of language history is unreliable, then an earlier divergence relating to hunter-gatherer recolonization after the Younger Dryas may be more plausible for a spread of Indo-European language by this type of mechanism [i.e., a population expansion associated with warming conditions during this period]. […] There is also a possibility […] that the population increase causing the initial spread of the Indo-European languages occurred at the earlier warming event at the end of the Last Glacial Maximum (about 14.500 years ago), with the onset of the Younger Dryas itself, or perhaps at an even earlier event. (Adams and Otte 1999: 75)

These researchers go on to elaborate the following hypothetical series of events: «An initial early Holocene sparse-hunter-gatherer wave spread of the Indo-European languages might have been followed by a period of relatively long-distance cultural and linguistic exchange (with the possible spread of innovations in the language, continually updating aspects of the general substratum of Indo-European languages […] by relatively mobile hunter-gatherer groups and later farming and warrior groups» (Adams and Otte 1999: 75). As is obvious, these remarks are based on the assumption that there was once a unified Proto-IE language spoken by a relatively homogeneous group of hunter-gatherers who, for reasons not explained, spread across Europe (from east to west) during the early Holocene. Once again, this model represents a continuation of the earlier explanatory paradigm: the characters of the earlier IE narrative remove their Bronze Age or Neolithic clothing and reappear dressed as a cohesive group of Upper Palaeolithic/Mesolithic hunter-gatherers.

In short, while the PC hypothesis is intriguing, it is still controversial for a number of reasons. For example, in its current formulation one of the frequent criticisms leveled against it, and quite appropriately, is the fact that there seems

---

[4] For a critique directed towards Alinei's PC work on Romance languages, especially in the Italian Peninsula, cf. Adiego (2002).

to be no objective way to cross-check whether or not a PIE item belongs to a Mesolithic lexical set. In that sense, it suffers from some of the same defects that have been pointed out by others in the case of attempts to reconstruct Proto-IE society and culture (Arvidsson 2006). Likewise, as Arvidsson observes, reconstructions proposed in the nineteenth and early twentieth centuries, were often totally contradictory, e.g., the reified IE people were first portrayed as noble, industrious and peaceful farmers, i.e., sedentary agriculturalists; later on their society was redrawn to make them patriarchal chariot-driving warrior nomads, etc. Most of us are familiar only with the most recent (re)constructions of Proto-IE society and culture and the debates surrounding them (e.g., the twentieth century competition between the models of Gimbutas and Renfrew).[5] Therefore, we are less familiar with the details surrounding the way that reconstructions of etymons relating to one domain or another were used in times past as evidence for identifying and assigning one concrete feature or another to Proto-IE society and culture in the period before the so-called «Indo-Europeans» (extrapolating once again from «language» to «race») began to expand out of their putative homeland. Similarly, over the past several hundred years, this homeland has been sedulously repositioned by investigators and as a result has ended up in quite different locations (Koerner 2001; Mallory 1997).

Yet all of these attempts to reconstruct the deepest chronological layers of the putative Proto-IE society and culture are grounded in fundamentally the same kind of proofs: linguistic ones. A lexical item found across several different branches of IE languages is viewed as a good candidate for these reconstruction efforts, even more so if the semantic item in question could have referred to an element found in the conceptual toolkit of Bronze Age peoples, or, in the case of the PC model, to an item encountered in the conceptual toolkit of Mesolithic or Upper Palaeolithic hunter-gatherers. However, in both cases the proof is based on a reconstruction, a putative etymon, which is assumed to correspond to a cultural conceptualization of significant antiquity (most especially if the etymon in question can be linked to material remains found in the archaeological record and/or ecosystems existing at the particular time period in question).

In this sense, the research models share a common denominator: that over significant periods of time the meaning of the reconstructed etymon remained

---

[5] For example, in the review article by Diamond and Bellwood (2003) which includes significant discussion of genetics, the only models mentioned with respect to Indo-European are those of Gimbutas and Renfrew.

stable. Moreover, the assumption that the meaning assigned to the reconstructed item was similar, if not identical, to its meaning(s) in historically attested IE languages can be regarded as a theoretical and methodological cornerstone of the IE model. This approach to the data reflects the background assumption according to which stability and orderliness are seen as natural or given properties of the meaning-making process (Frank 2008a). In this respect, we need to keep in mind the following: that the time frame assigned to the reconstructed item is 4000 BC, according to the traditional IE paradigm, or thousands of years earlier, according to the PC model. In either case, this kind of dating of the original object of inquiry requires the investigator to make a judgment call concerning what happened to the semantic item during a period of several thousand years for which there is literally no written evidence. Thus, the underlying assumption is that during this period of time the meaning of the term was so stable that meanings associated with it thousands of years later can be used reliably to reconstruct its much older original meaning.

Although this approach, one that is intrinsic to the methodology of historical linguistics, is not fundamentally flawed when it is applied to reconstructions, particularly to those for which we have a great deal of data and do not pretend to speak to great time depths, when it is applied to the task of reconstructing elements from a Mesolithic lexicon, at a minimum there needs to be some other kind of external anchor by means of which the lexical data can be grounded.[6] Ideally this grounding would be accompanied by some non-linguistic means to access, cross-check or otherwise document the nature of the much earlier Mesolithic world-view. More concretely, we need to bring into play a methodological approach that will allow the lexical data to be linked to a Mesolithic mindset and validated by it.

2.2. *PCRT hypothesis: Linguistic and ethnographic evidence*

Until now the PCRT approach which favors an alternative narrative based on postglacial colonization out of the Pyrenean-Cantabrian refugium, has been buttressed primarily by genetic and archaeological data. PCRT researchers explicitly subscribe to an interdisciplinary approach to solving the prob-

---

[6] In other words, I do not believe that the methodology of historical linguistics is flawed in and of itself, rather only when it is applied – without further supporting extra-linguistic evidence – to reconstructing at deep time depths where, by necessity, one is left to speculate concerning the stability of the etynom's original meaning.

lems with which they are confronted. As a result, researchers working within this framework have come together from a variety of fields, e.g., genetics, especially molecular evolutionary genetics, geography and more recently phylogeography, evolutionary and population biology and ecology, evolutionary psychology, archaeology and its subfield of cognitive archaeology. However, until now the fields of historical linguistics and ethnography have not been brought into play in support of the PCRT narrative. That is, so far evidence from these fields has not been applied directly on the PCRT model in order to validate its central hypothesis concerning early population expansions out of the Pyrenean-Cantabrian refugium. Consequently, given that the ursine cosmology under discussion here could date back to a Mesolithic mindset, a careful analysis of the distribution of artifacts relating to it – both linguistic and ethnographic in nature – could become an additional mechanism for charting postglacial colonization routes emanating out of the proposed Pyrenean-Cantabrian zone.

Hence, the task of identifying and documenting the locations where ursine performance art and associated beliefs have survived is particularly important especially in the case of the more elaborate forms of such performances encountered in the Pyrenean-Cantabrian zone and locations immediately adjacent to it, e.g., zones in which Catalan is spoken today. Furthermore, the cultural artifacts under study can also be compared to those found in Sardinia which is the second genetic «outlier» (Sanna 2006: 142; Semino et al. 2000: 1159). From this perspective, the current investigation deals with the recuperation of what appears to be an earlier worldview, dating back possibly to the Mesolithic, a cosmology that still today is deeply entrenched in European performance art and a variety of related the socio-cultural practices (Frank 2008b).

When attempting to reconstruct the normative concepts that undergird this belief system we are aided by the fact that concrete linguistic evidence can be extracted, namely, from an analysis of the semantic field of the term *hamalau* «fourteen» along with the dialectal variants of this expression found in the geographical region of Euskal Herria. Here we are talking about locations that coincide with the western refugium where Euskera is still spoken as well as zones where the language has died out, but leaving behind recognizable phonological variants of the term *hamalau*. In other words, there is a trail of linguistic and ethnographic clues that point us in the direction of what appears to be an ursine cosmology rooted in a worldview characteristic of hunter-gatherers, rather than pastoralists and farmers.

3.0. *Methodological issues and instruments of analysis*

At first glance we might assume, erroneously, that these residual linguistic data and related social practices are restricted only to this refugium zone of Western Europe. However, such an assumption would be false. As was demonstrated in the first chapter of this study (Frank 2008b), the striking level of structural and linguistic correspondences between Basque and Sardinian cultural artifacts suggests that there is a commonality of belief underlying the performance art encountered in both locations. And while there is little question that Euskal Herria is the zone having the densest network of reflexes of the term *hamalau*, i.e., phonological variants of the term, similar reflexes can be found outside what is today the Basque-speaking zone, a topic that will be taken up in detail in the next section of this study.

Furthermore, as we begin to examine these reflexes, we need to keep in mind that the ursine cosmogony itself antedates the implantation of Neolithic agricultural practices. Thus, we are confronted with a set of interrelated methodological problems.

– How do we go about determining the original location of the linguistic and cultural artifacts in question?

– What evidence is there, if any, that would allow us to chart the pathways taken by these cultural artifacts as they moved out of the initial western refugium?

– Does the diffusion of the linguistic and cultural artifacts related to the ursine cosmology allow us to map the development of the cultural complex over time?

The instruments of analysis that will be marshaled in order to probe these deeper cognitive layers will be the linguistic and cultural artifacts themselves, specifically those that are linked directly to the ursine cosmology. Tracing these artifacts across space and time will allow us to explore the linguistic and cognitive pathways laid down by them. In other words, the linguistic data will guide us as we attempt to reconceptualize the dialectal variants of the ursine cosmology encountered in the geographical region defined by Pyrenean-Cantabrian refugium, as well as in zones adjacent to this region. By tracing the diffusion of this data set and its variants across space and time we should be able to develop a better grasp of the way these variants developed and, likewise, how the study of the socio-cultural entrenchment of these artifacts might allow us to reconstruct, albeit hypothetically, different components of this earlier symbolic regime.

In order to bring into clearer focus the various components of the ursine cultural complex we will employ the cross-linguistic and cross-cultural approach that was discussed briefly in the first chapter of this investigation, namely, a

methodology that emphasizes the transformation of the cognitive processes under analysis. In summary, as noted in the first part of this study (Frank 2008b), the results drawn from such cross-cultural and cross-linguistic comparisons could have remarkable implications: they could shed light on preterit patterns of cognition, cultural conceptualizations and perhaps even social organization and socialization practices that until now have been invisible or at least inaccessible to us. In short, this approach could serve as a means of recuperating complex patterns of behavior, cultural and social processes that could allow us to reconstruct, albeit hypothetically, much earlier patterns of belief.

3.1. *The semantic field of Hamalau*

In order to gain access to the cultural conceptualizations associated with the earlier cosmology, our investigation will focus on the semantic field generated by name of the bear-like creature known as *Hamalau* «Fourteen» (a compound composed of *hama(r)* 'ten' and *lau* 'four'). This expression will act as a valuable tool of inquiry as we begin tracing and anchoring the linguistic and cultural artifacts under discussion and exploring their socio-cultural embedding.[7] As has been explained, the term *hamalau* is a multifaceted concept that plays a central role in Basque traditional belief and performance art (Frank 2008b; Perurena 1993: 265-280). For instance, we need to remember that Hamalau is the name of the main character of the «Bear Son» tales, the half-human, half-bear, born of a human female and a great bear who functions symbolically as a kind of intermediary between humans and bears (Frank 1996, 2001, 2005, in press.). Dialectal variants of the word *hamalau* include *mamalo*, *mamarrao*, *mamarro*, *mamarrua*, *marrau* and *mamu*, among others (Azkue 1969: II, 11-12, 19; Michelena 1987: XII, 52-53, 57-60). And at this juncture I should also point out that dialectal variants of the expression *hamalau*, most particularly *marrau* and *mamu*, are commonly used to refer to a frightening creature that parents call upon when their children misbehave, i.e., the counterpart of the «babau» or «spauracchio dei bambini» in Italian.

All of these Basque variants show «nasal spread», that is, the reflexes end up having two /m/ sounds. I would mention that in the case of the variant *mamarrao*, another common phonological change has taken place: the replacement of one

---

[7] In order to provide coherence to the linguistic sections of the second part of the investigation, I have included a certain amount of material presented initially in the first part of the study (Frank 2008b).

liquid, i.e., */l/*, with another, namely, with a trilled */r/*, so that the last syllable */lau/* is pronounced as */rrao/*. Finally, the variant *marrau* demonstrates further phonological erosion, i.e., the loss of the second syllable */ma/*: *mamarrao* → *ma(ma)rrao* → *marrao* → *marrau*. Also, we have variants in *mamarro* and *marraru*.

In the instance of *mamu*, additional phonological erosion can be detected: *(h)amalau* → *mamalau* → *mamarrao* → *mam(arr)au* → *mamau* → *mamu*. As we have seen, in Sardu in addition to the performers called *Mamutzones* and *Mamuthones*, there are a number of toponyms demonstrating a similar root stem (Fois 2002a, b [2002]). There are numerous other words that appear to derive etymologically from the same root. These items have essentially the same meanings but slightly different phonological representations. By this last statement, I refer to the fact that in Sardu the stem of the word varies in its phonological shape: roots appear in the shape of *mamu-*, *momo-/mommo-*, *momma-* and *marra-*. In the case of the root form *mamu-*, we find *mamuntomo* «spauracchio»; *mamuntone* «fantoccio»; *mamuttinu*: «strepito»; *mamudinu* «Belzebù, demonio, diavolo, strepito, zurlo»; *mamuttone* «spauracchio, spaventapasseri»; *mamuttones* «maschere carnevalesche con campanacci»; *mamutzone* «spauracchio» as well as *mamus* «esseri fantastici che abitano nelle caverne». In the instance of the root stem of *momo-/mommo-/momma-*, we find: *mommoi* «babau, befana, fantasma, licantropo, orco, pidocchio, spauracchio, spettro»; *momotti* «babau, befana, spauracchio»; *mommai* «befana»; and from *marra-*, *marragau* «orco, gruccione»,[8] *marrangoi* «babau, mostro, spaurrachio»; and

---

[8] The dialectal variants of the stem in *marra-* are particularly interesting in that there appear to be two unrelated sets of meanings associated with the term *marragau*. On the one hand, in some dialects *marragau* has meanings overlapping with those of *marragotti* 'befana, babau, mostro, spaurrachio' ('hag, bogey-man, monster, scarecrow'), while on the other hand it carries the meaning of *gruccione* ('a small bee-eating bird; Lat. *Merops apiaster*'). Then given that we have *mommoi* producing *mommotti*, it could follow that from *marragau* we could get *marragotti*. The difficulty that arises with *marragau* has to do with explaining its meaning of «bee-eater» and how that relates to notions such as «bogey-man». Perhaps the most parsimonious explanation is to argue that underlying the two sets of meanings are two separate etynoms, whose phonological representations ended up being so similar that the two sets of meanings fell together. For example, in other dialects the expressions meaning «bee-eater» are represented as: *apiolu, abiolu, abriolu, abiargiu, abiargo, miargiu* and *miargu*. Therefore, the latter reflexes (especially, *abiargiu, abiargo, miargiu* and *miargu*) could have become intertwined phonologically with the pre-existing lexeme *marragau*. This interpretation of events suggests that *marragau* did not originally mean 'bee-eater', but rather acquired that connotation because of the way that the variants for 'bee-eater' eventually converged phonologically on it. This would explain why among the meanings associated with *marragotti* we don't find *gruccione*. In short, *marragotti* would reflect the original meaning of *marragau*. (cf. Amades 1951: 59-60; 1952: 597-598; Frongia 2005: XXXII-XXXIII; Paulis 1997: 172-174).

marragotti «befana, biliorsa, bilioso, fantasma, mangiabambini, mannaro, orco, ragno, spauracchio, spettro» (Fois 2002b; Rubattu 2006).[9]

4.0. *Hamalau and the socialization of children*

In the first chapter of this study (Frank 2008b) we focused almost exclusively on the Sardu variants of *mamutzone* and *mamuthone* as they are applied to bear-like performers who have their counterparts in Basque performance art. That is, the emphasis was on documenting the performances and how they relate to the ursine cosmology. In this chapter the focus will shift to another set of meanings attached to these terms, specifically, the fact that many of these words also refer to a fantastic being who is often invoked by adults to scare children into behaving properly, going to bed on time, not crying and, in general, obeying their parents. In this instance, the being in question acts as an enforcer, as the entity that will punish the child for misbehaving.

For example, the frightful nature of the being in question is summed up in the expression *mangiabambini* which is associated with expressions such as *marragau* and *marragotti:* Paulis (1997: 173) comments that in Cagliari and Bosa, «ai bambi si dice, per intimorirli: 'se non stai zitto, ti faccio mangiare da su *Marragau'*» [to childen they say, if you aren't quiet, I'll have you eaten by the *Marragau*]. Fois (2008) has collected several of these sayings: «Fai a bonu, asinunka di vattsu bappai de su Marragau!» ['Be good, if not I'll have you eaten by the *Marragau*!']. Similarly, the term *Mommoti* is used to refer to this frightening creature: «Si no fais a bonu, beni Mommoti e ti furada» [If you misbehave, the Mommoti comes and takes you away]; «Si no ti cittis, beni Mommoti e ti pappada» [If you aren't quiet, the *Mommoti* will come and eat you!]. Thus, we find that the expressions *Marragau* and *Mommoti* are used interchangeably. The belief complex also makes reference to the method by which this being

---

[9] The English counterparts of these terms are as follows: from the root *mamu-*, *mamuntomo* 'scarecrow'; *mamuntone* 'puppet'; *mamuttinu* 'racket, clamour, noise'; *mamudinu* 'Beelzelbub, demon, devil, racket, clamour'; *mamuttone* 'scarecrow'; *mamuttones* 'masked performers wearing bells; masks'; *mamutzone* 'scarecrow'; *mamutzones* 'masked performers wearing bells' as well as *mamus* 'fantastic beings who inhabit caverns'; from the variants *momo-/mommo-/momma-* we find *mommoi* 'bogey man, hag, witch, phantom, spectre, were-wolf, ogre, louse, scarecrow'; *momotti* 'bogey-man, witch, scarecrow'; *mommai* 'hag, witch'; and from *marra-*, *marragau* 'ogre, bee-eater (ornith.)', *marrangoi* 'bogey-man, ogre, monster, scarcrow'; *marragotti* 'hag, witch, imaginary beast, phantom, baby-eater, were-wolf, ogre, spider, scarecrow, spectre'.

carries off children who misbehave: the creature is equipped with a sack or basket into which the culprits are stuffed (Fois 2008).

In section 9.0 of this study we shall examine traces of other possible phonological variants of this cultural conceptualization located within the western refugium zone, particularly in Catalunya. These variants refer to creatures with similar characteristics and functions, specifically, ones that belong to the category of beings called *asustaniños* or *espantachicos* ('that which scares children') and that fall under the broader rubric of *L'Home del Sac* (*The Man with the Sack*), a frightening being frequently equipped with a sack or basket and/or otherwise portrayed as a dangerous enforcer who takes away disobedient children. For example, the Catalan *Marraco* has been compared phonologically and functionally to the Sardu *Marragau* (Amades 1951: 59-60; 1957: 268-270; Paulis 1997: 173).

At the same time, other meanings associated with the word field in Sardu (e.g., «babau, befana, fantasma, licantropo, orco, pidocchio, spauracchio, spettro») indicate that the being in question was feared –at least at some point in the past – by adults, as well as children. Similarly, in Euskal Herria there is a creature who plays an analogous role as an enforcer. Today the being in question is invoked using phonological variants of Hamalau («Fourteen»). As was explained in the first chapter of this study (Frank 2008b), the term *hamalau* is associated specifically with the figure of a half-human, half-bear ancestor, the cosmological intermediary between humans and bears (Perurena 1993: 265-280). In times past it appears that this «enforcer» had a flesh and blood counterpart in the individual who held the office of *Hamalau-Zaingo* in the community, discussed in Frank (2008b), a term that translates, literally, as «Guardian of Hamalau», or, more loosely, as «the one who is in charge of watching over and caring for Hamalau».

In Euskera the variants of this term, e.g., *marrau* and *mamu*, are commonly used to refer to the creature that parents call upon when their children misbehave, i.e., the counterpart of the «babau» in Italian and the aforementioned *marragau* and *mommoti* in Sardu. However, the meanings associated with *marrau* and *mamu* no longer show any obvious trace of the meanings attached to the original etymon *hamalau*. In other words, today when Basque speakers use the expression *marrau* or *mamu*, they are no longer consciously aware of the etymon *hamalau* «fourteen» that stands behind the term. In short, speakers have lost track of the etymological relationships holding between the words. However, there is a third phonological variant that allows us to establish a semantic bridge between the first two variants (*marrau* and *mamu*) and the root form of the latter concepts: *hamalau*.

Stated differently, in Basque there are three basic phonological variants which are used to refer to the being that is said to take away ill-behaved children. First, there are the variants in *mamu* and *marrau* which we have already discussed. Then we have the variant *hamalauzanko*, also recorded as *hamalauzaku* (Azkue 1969: I, 36; Michelena 1987: I, 874). All three of these terms have their semantic counterparts in Basque performance art. These three reflexes are clearly derived from *hamalau*, while the variant *hamalauzanko* or *hamalauzaku,* from *hamalau-zain-ko,* demonstrates the presence of two additional morphemes *zain* «guardian, keeper» and *-ko/go* «of, pertaining to», as well as a certain degree of additional phonological erosion, i.e., *zain-ko* → *zainko* → *zanko*, producing *hamalauzanko;* and then from *zain-ko* → *zaiko* → *zaku*, producing in turn *hamalauzaku.*[10] Thus, there is a connection between the name of the fearsome being invoked by parents and the expression *hamalauzaingo* which in times past referred to an office held by members of the community, a topic that we shall return to shortly.

The development of a wide range of phonological variants from the term *hamalau* is not at all surprising, particularly in socio-cultural situations of orality where the collective memory embedded in the language reflects these earlier meanings only vaguely and where, consequently, there is no tradition of writing to stabilize the expression's meaning. Therefore, once the socio-cultural frames of reference for the term *hamalau* no longer anchored it fully, that is, in when its primary meaning was no longer coupled contextually with its other meanings, the resulting phonological variants could wander away from their parent stem, namely, *hamalau*. In other words, once the true etymology of the word is no longer understood by speakers, the fact that the expression also means «fourteen» is forgotten: the phonological shape of the word is no longer anchored in that etymology. Therefore, the speaker no longer recognizes the individual components of *hamalau*; she can no longer identify *hama(r)* as «ten» and *lau* as «four». At this point the term's phonology can become unstable and gradually begin to loose its original shape.

We need to recall that we are talking about the oral transmission of an expression that came to refer to a kind of abstraction, some sort of vague being. If you didn't know that *hamalau* meant «fourteen», it would be hard for you to remember how to pronounce it. None of its components would be meaningful to you. And it would be even more difficult if the multi-syllable expression didn't

---

[10] In most dialects of Basque the first element of the morpheme *-ko* voices after /n/, and ends up being pronounced as *-go*.

conform to the phonology of your native language. As a result, the stability of its phonological shape could be affected. In such a situation of orality, a degree of doubt enters the equation: the speaker is not entirely certain of what she has heard or, for that matter, exactly how to repeat it. And, consequently, as the term is transmitted from one generation to the next, from one dialect or language to another, what can result are phonological approximations of the original word.

In this cumulative process of multiple oral transmissions, at each juncture the speaker tries to capture the correct phonology, imitating what she thinks she has heard. I should point out, however, that at certain junctures in time, this process of oral transmission can lead to the stabilization, albeit momentary, of a given phonological shape of the original term; or it can undergo further phonological shifts – phonological re-shapings – often resulting in further phonological reduction of the expression, as is demonstrated in the case of the highly reduced variants of *hamalau-zaingo*, mentioned earlier. Indeed, the latter compound has an even more phonologically reduced dialectal form in *azaku/asaku* (Ihauteriak 1992).

In summary, when there is no meaning attached to the individual morphemes that compose the expression, the possibility of its phonological shape being altered is particularly great. As is well known, one of the most common ways that a word is *adjusted* is through the elimination of one of its syllables, what is called phonological erosion, that is, one of its morphemes is removed. In the various dialects of Basque we have seen this sort of reduction going on in the case of *marrau* and *mamu* where the three syllables of the original word are reduced to two and at the same time we can detect other subtle modifications in the original phonological shape of the expression. Naturally, as these transmissions occur, gradual changes in the expression's meaning can also take place: the term is repeatedly re-contextualized, adapted and modified to fit the ever changing socio-cultural environments experienced by the speakers.

4.1. *Hamalau as 'night visitor' and 'guardian' of communal norms*

Research carried out by the Basque ethnographer J.M. Satrústegi at the end of the twentieth century reveals that at that juncture in time the belief in the supernatural powers of this being had not totally disappeared among Basque-speakers. The particular way that this belief manifests itself involves the reflexes of Hamalau cited above, (e.g., *Mamu*, *Marrau*, and *Hamalauzanko/Hamalauzaku*). Satrústegi interviewed a number of Basques who said that they had been visited by the *Mamu* or the *Marrau* at night. As an aside, I would mention that in those

instances when the creature called *Mamu* is mentioned or addressed directly, the citation form is often used: *Mamua*. The nocturnal visits, as documented by Satrústegi, involve the following scenario. The experience regularly occurs either just as the individual is falling asleep or just upon awakening. What is significant is that the individual is not fully asleep but rather semi-conscious. What regularly triggers the experience is the fact that the person suddenly senses an ominous, foreboding presence in the room, often described as totally terrifying; then a heaviness or pressure is felt, first on one's legs. The sensation begins to move up the body, as if another being were pressing down on upon the victim. The weight can become particularly oppressive as if the *Mamua* were lying down on top of the person and pressing down forcefully on his chest, provoking difficulty in breathing and/or a sensation of suffocation. At the same time the afflicted party becomes paralyzed with fear; he cannot cry out; he cannot move at all.

In short, the «night visitor» described by Satrústregi's informants is the source of the classic concept of the «night-mare», where the second element in the expression -*mare* refers not to a female horse, but to the terrifying creature who comes to people in the dark of night. More concretely, in terms of its etymology, the second element of the English expression «night-mare», i.e., -*mare,* is the English equivalent of the German word *mahr* 'nightmare' (Grimm and Grimm 1854: 1166), while the latter is related to phonological variants in *mârt, mârte, mârten*.[11] These German reflexes, as well as other etymologically linked-terms found in Slavic languages, such as the Wendish expression *Murraue* (Ashliman 1998-2005; Kuhn and Schwartz 1848: 418-420), all refer to this supernatural being: a disturbing night visitor, often described as an ominous «presence» or «intruder» (Cheyne 2001, 2003; Cheyne, Newby-Clark and Rueffer 1999; Hufford 2005). Viewed from this vantage point, we can see that the English term derives from Germanic compounds containing *mârt mârte, mârten*, and more specifically from compounds such as *Nachtmärt* (the Night-Mare), discussed at length in Thorpe: «Under all these denominations is designated that spectral being which places itself on the breast of the sleeping, depriving them of the powers of motion and utterance» (Thorpe 1851-52, vol. 3: 154).

At the time when Satrústegi initially carried out his research, he was convinced that what he had discovered was a uniquely Basque phenomenon. Later, in 1995, when I visited him at his home he repeated this conviction. He also explained that he had given a presentation in Pamplona, Spain, before a group of cultural anthropologists, psychologists and psychiatrists who were particu-

---

[11] Dialectal variants also include *mare* (Germany), *mahrt* (Pommerania) and *mahrte* (North Germany).

larly intrigued with the data he had collected (Satrústegi 1980, 1987). Satrústegi seemed unwilling to accept the observations of the other investigators present at the colloquium who stated that the nocturnal experience that Satrústegi had recorded was not unique to the Basque region, as Satrústegi seemed to believe, but rather well documented among human populations in general where it is known as «sleep paralysis» (SP) or, more properly, «sleep paralysis with hypnagogic and hypnopompic hallucinations», where the terms «hypnagogic» and «hypnopompic» refer to hallucinations occurring during two periods, at the onset of sleep and when one is waking up (Cheyne 2000, 2001; Cheyne, Newby-Clark and Rueffer 1999).

Over the past decade research into this phenomenon has emphasized the fact that the experience itself lasts only few seconds or minutes, although occasionally longer. However, the brief duration of the hallucinatory experience does not diminish in any way the profoundly disturbing nature of the event.

> Sleep paralysis is a condition in which someone, most often lying in a supine position [face-up], about to drop off to sleep, or just upon waking from sleep realizes that s/he is unable to move, or speak, or cry out. People frequently report feeling a «presence» that is often described as malevolent, threatening, or evil. An intense sense of dread and terror is very common. The presence is likely to be vaguely felt or sensed just out of sight but thought to be watching or monitoring, often with intense interest, sometimes standing by, or sitting on, the bed. On some occasions the presence may attack, strangling and exerting crushing pressure on the chest. (Cheyne 2002b)

The International Classification of Sleep Disorders reports that sleep paralysis is frequent in about 3 to 6 percent of the rest of the population; and occurs occasionally as «isolated sleep paralysis» in 40 to 50 percent (Blackmore 1998; Thorpy 1990).[12] Although statistics concerning those who have or have had this condition vary considerably, it can be conservatively estimated that 25 to 40 percent of the overall population have had at least one experience of SP during their lifetimes while a somewhat smaller percentage have repeated experiences of it (Cheyne 2002a). Moreover, the statistics point to a somewhat higher frequency among adolescents and young adults as well as to the fact that the onset of the symptoms is most common among these younger age groups.[13]

---

[12] According to Blackmore (1998), other estimates for the incidence of isolated sleep paralysis include those from Japan: 40 percent (Fukuda et al. 1987); Nigeria: 44 percent (Ohaeri 1992); Hong Kong: 37 percent (Wing, Lee and Chen 1994); Canada: 21 percent (Spanos et al. 1995); Newfoundland: 62 percent (Ness 1978); and England: 46 percent (Rose and Blackmore 1996).

[13] For more detail on the statistics and age of onset of the symptoms, cf. Cheyne (2002a).

Left in isolation with no explanatory cultural resources available, the person who suffers from these symptoms must search on her own for an explanation and a way of determining the identity of the «intruder» or «sensed presence». And, that attempt, as is well documented, often gives rise to significant levels of anxiety and the suspicion that the person is under direct attack by the supernatural forces or when the substantive reality of these forces is rejected, that the person is in danger of losing her mind (De Blécourt 2003; Harris 2004; Hinton, Hufford and Kirmayer 2005; Hufford 1982, 2003, 2005; Liddon 1967). Cheyne (2001: 133) describes this condition as follows:

> A «sensed presence» often accompanies hypnagogic and hypnopompic hallucinations associated with sleep paralysis. Qualitative descriptions of the sensed presence during sleep paralysis are consistent with the experience of a monitoring, stalking predator. It is argued that the sensed presence during sleep paralysis arises because of REM-related endogenous activation of a hypervigilant and biased attentive state, the normal function of which is to resolve ambiguities inherent in biologically relevant threat cues. Given the lack of disambiguating environmental cues, however, the feeling of presence persists as a protracted experience that is both numinous and ominous. This experience, in turn, shapes the elaboration and integration of the concurrent hallucinations that often take on supernatural and daemonic qualities.

It is not surprising, therefore, that in reports written by those who have experienced SP perhaps the most common descriptive adjective employed to communicate what the experience provokes in them is «terror», even when the individual suffering from the condition is totally familiar with the official scientific definition and explanation of it:

> At this point, having had so many of these experiences, I usually realize I am having an episode and try to remain calm. But trying to remain calm never works. Never. That's the «thing» about Sleep Paralysis that is amazing – no matter how many times you go through it and know what is happening (more or less) the fear and terror are so undeniably great that it overpowers every rational thought you try to have. The feeling of impending doom is just too real and the terror is undeniable. All the while I try to wake myself up – but I am paralyzed. ([Furzdurzelette] 2008)

Indeed, one of the recurring themes is the the profound sense of panic produced by the conviction that the «presence» intends to carry off its victim: «[…] more specifically, it feels like something is coming to get me and carry me away […]. I fell into this dream world, and again I was panicking. I was getting really sick of these dreams, more specifically the terror and anxiety (that something was coming for me)» (Timohy 2001).

In contrast to the socio-culturally unmediated experience of people in contemporary Western cultures (Fukuda et al. 1987, 1998; Hinton et al. 2005),

other cultures have well instantiated explanatory paradigms: narratives that explain how to interpret who or what the «sensed presence» is. Where there is such an explanatory paradigm, the experience itself situates the person inside a culturally approved framework. Even though the experience itself is experienced in solitary, the identity of the visitor is recognizable as fitting into a collective narrative. In most cases, though, the identity of the «intruder» has a negative valence, coinciding with the sense of terror and awe that the numinous, ominous presence evokes. The culturally approved interpretive frames, therefore, can act to mitigate the negative effects of the experience by integrating them into a larger more encompassing cultural narrative.

Keeping these facts in mind, what appears to be unique about the Basque linguistic and cultural data is that they allow us to make the following connection: that the *Mamua* «intruder» (also known as *Marrau* and *Hamalauzango/Hamalauzaku*) who appears in the guise of a night-visitor is linked directly to the spectral being that parents call upon to scare their own children into behaving. And this in turn brings into view elements from the older culturally mediated narrative. We have two tiers of belief. In one version it is the child who is subject to attack; in the other it is primarily the adult who identifies as the victim. This intriguing connection will be treated in more detai detail in a future chapter of this investigation, i.e., in *Insula*-6. For the moment let it suffice to say that the fact that this «night visitor» attacks adults could help to explain another aspect of the semantic field of the Sardu examples, e.g., the meanings associated with terms such as *marragau, marragotti, momotti, mommoi*, etc, and therefore, the identification of the *mangiabambini* with entities such as «babau, spettro, fantasma» which because of their meanings are more oriented toward the culture of adults than that of children.

Satrústegi gives the following examples of adults invoking this frightening being as a way of chastising children:

> *Haur txikiak isilarazteko esames jostagarriak izan dituzte herri guztiek. Mamua, zer bildurgarri baten izena da. Errazuko jaio-berriak, ez dakit ulertuko zuen arrazoibide hori. Mamuseneko etxe-aurrean negarrez bataiatzera zihoan haurrari hala esan omen zion bere aitaxik.* ['All peoples have playful sayings to get little children to be quiet. What a frightening being's name *Mamua* is. I don't know whether a new-born of the village of Errazu would have understood this logic. In front of the house called *Mamusen*, it is said that a godfather said the following to his godchild who was crying on the way to being baptized'.]
>
> «*Xo, Xo! Mamuseneko atarian, badare mamuak!* » ['Shhhh, Shhhh (be still, don't cry) at *Mamusen*'s threshold, there are *mamuak* about!!'] (Satrústegi 1975: 196)

Caro Baroja defines the *Mamu* in the following way: «'Mamu' es actualmente un personaje análogo al Coco, con cuya presencia se amenaza a los chicos pequeños

cuando lloran» ('*Mamu* is today a character analogous to the bogey-man, whose presence is used to threaten small children when they cry'). The *Coco* is the Spanish (Castillian) language equivalent of the *asustaniños* (Caro Baroja 1986: 320).[14]

Fig. 3. «Que viene el Coco».[15] An etching by Francisco de Goya.

Fig. 4. «El ogro más famoso y temido, 'El Coco'». Source: www.fundacion-cajarioja.es.[16]

---

[14] Cf. also http://encina.pntic.mec.es/agonza59/europeos.htm#Coco and http://www.celtiberia.net/articulo.asp?id=1470.
[15] [«The Coco is coming!»]
[16] [«The most famous and fearsome ogre, the 'Coco.'»]

Then, alongside *Mamu*, Satrústegi lists a second phonological variant by which this creature is known: *Marrau*.

> *Gauzekin konturatzen hasten diren garaian, aurpegia perekatuz, hau esaten zaie Luzaiden* ['In the village of Luzaide when children begin to understand things, they say to them while caressing their faces']:
> *Marrau!* ['Marrau!']
> *Jan zak haur hau!* ['Eat this child!']
> *Gaur edo bihar?* ['Today or tomorrow?']
> *Gaur, gaur, gaur.* ['Today, today, today'.] (Satrústegi 1975: 196-197)

In this latter example there is a kind of playfulness on the part of the adult. While the parent is calling upon the *Marrau* to «eat» the child, at the same time the adult is expressing affection and hence treating the child in a loving way. Thus, two signals are being communicated at the same time: we could say that the status of the *Marrau* is morally ambiguous. It stands as a frightening and stalwart «guardian» of the social order, functioning as an ally of parents in their efforts to bring up their children properly: the *Marrau* is called upon to intercede and make the child behave. Yet, love is also being expressed, mitigating the seriousness of the threat to the young child.

At the same time when the child gets older, he comes to realize that he, too, will have the opportunity to dress up as a *Marrau*, as is the case each year in the Basque villages of Mundaca and Gernika where the *Marraus* still parade about. And, by extension, in times past it is highly probable that children would have immediately identified the frightful creature (that their parents has already spoken to them about) with these performers. In this interpretive process, children would have been aided by semantic signals accessible to them because of their knowledge of the Basque language itself: the names attached to the bizarre performers taking part in these public rituals were the same or remarkably similar to the name of the creature that their parents invoked, repeatedly, to get them to behave properly.

In conclusion, the similarities holding between the Sardinian and Basque linguistic and ethnographic and linguistic data suggest, once again, that we are looking dialectal variants drawn from the same cultural complex. At this juncture in the investigation the main difference between the two data sets lies in the fact that only in the Basque data set do we find clear evidence that the character in question was also thought to appear in the form of an «intruder» or «night visitor» who attacks not just children but also adults. In this respect, we can appreciate why the *Marrau* or *Mamu* has been viewed as a fearsome being whose presence causes great anxiety among both age groups.

5.0. *Methodological considerations*

Before taking up the next group of linguistic and ethnographic artifacts, we need to outline the methodology that will be applied to them. In recent years increased attention has been paid to the concept of *contested ritual agency,* as it has been applied in the field of cultural studies, particularly by researchers who are exploring what happens over time when contrasting belief systems come into prolonged contact with each other (Eade and Sallnow 2000). The concept refers to a particular kind of cultural contact and interaction: how belief systems that are in close contact over long periods of time end up interacting with each other. Briefly stated, contested ritual agency refers processes whereby the meaning of rituals and symbols, as well as linguistic artifacts, are *contested* as they come under pressure from different groups. Based on the way that the members of each group contextualize and interpret these artifacts, their actions can be understood as attempts to assert authority or *agency* over the meaning assigned to the artifact, and in this fashion their actions serve to direct and control the way that the symbol or ritual is received and interpreted by others.

What is being *contested* is the individual's right as well as his ability to define and therefore control the meaning of the artifact in question. In general there are two principal groups who *contest* the meaning of a given symbol or ritual: one defending, consciously or unconsciously, the older meanings and another promoting a revision of them. At the same time, we must keep clearly in mind that the process of contestation does not necessarily manifest itself as a conscious decision on the part of the individual members of the social collective(s). Quite the contrary, the transformation of the meaning of the artifact is often slow, so slow that those involved are often not fully aware of the changes that are taking place. In other words, it is frequently a very subtle cumulative process, constituted by a myriad of decisions taken by individuals – over several generations – and distributed across a given community. Thus, *contested ritual agency* refers to manner in which symbols of identity are manipulated by a given cultural group, even though the cognitive processes involved are not always consciously recognized while they are occurring, much less fully understood by the individual members of the collective in question.

In other instances, when the imposition of one belief system upon another is rapid, even violent, conflict can arise where the two groups consciously defend their turf and their right to control the meaning of the artifact, symbol or social practice. This process regularly pits those defending what they view as the traditional (indigenous) meaning of the artifact against those attempting to alter its

meaning, by appropriating the artifact and inserting it into a different interpretive framework or suppressing it entirely. By recontextualizing the ritual object – whether it be an aspect of traditional performance art, a material or a cognitive artifact – its meaning changes. Sometimes these shifts in meaning are quite minimal while at other times the recontextualization can alter the original meaning of the artifact in dramatic ways. Over time the cumulative process of these minimal shifts in meaning – recontextualizations of the artifact – can render the original meaning of the entity opaque, almost unrecognizable, unless the investigator can find what we might call dialectal variants of the same entity or even earlier variants of it that have not undergone the same process(es) of recontextualization.

In this sense, the process of «meaning-making» and the shifts in the meaning of these artifacts is quite similar to the often highly complex processes that take place as words acquire new meanings: over time they are socio-culturally recontextualized by speakers and as a result their meanings can shift. Generations of language agents or speakers are constantly interacting with their socio-cultural environment, adjusting their linguistic tools to the needs of the changing norms and requirements of their surroundings. In the case of language, these processes of semantic shift are almost imperceptible, that is, as they are actually taking place. Indeed, the speakers themselves are rarely fully aware that by their minimal choices, they are contributing ultimately to changes in the meaning of a given term, changes that might take centuries to become instantiated in the lexicon of all speakers of the language.

Yet, when viewed in retrospect, evidence can be collected pointing to how these shifts took place, evidence of new applications of the term: the way that the artifact has been being inserted into new contexts and hence over time acquires slightly different meanings. What might have been the term's primary meaning can be replaced by another meaning because of the frequency with which the term is being applied to a new object. At other times what was once the primary meaning of the linguistic entity merely slips in rank, becoming not the first meaning of the term that comes to mind, but rather a secondary or tertiary meaning (Frank 2008a).

Finally, if, let us say, the object to which the primary meaning of the term was originally attached slowly disappears from the socio-cultural repertoire of the speakers (i.e., it is no longer represented in the socio-cultural environment and hence no longer available to be named), what was the primary meaning associated with the object can eventually disappear from sight, moving down further and further in the ranking of meanings until only the eldest speakers can

recall the entity to which it was originally applied. Given that cultural knowledge is differentially distributed among the various members of a given cultural community, in this gradual process of semantic shift, there are stages in which the primary meaning of the term is still present, i.e., when its frequency of occurrence is high enough that it might hold the second place for centuries, only to fall to last place and/or disappear entirely centuries later. What governs these shifts appears to be a kind of complex, distributed interaction between speakers and their environment, an interaction that often can be reconstructed only after the fact, i.e., after the word has undergone major semantic shifts and, generally speaking, only in those cases where there is sufficient written documentation so that the processes involved earlier can be charted.

The aforementioned similarities holding between the nature of semantic shift and the kind of changes that take place over time in the case of ritual practice and belief allow us to develop a methodological approach that takes advantage of both types of shift. By this statement I refer to the fact that the current research project focuses on the meanings associated with the Basque term *hamalau* «fourteen» and the way that these meanings can be traced across space and time, the way the linguistic artifact has been socio-culturally situated and the way that it has generated a set of interlocking cultural conceptualizations (Sharifian 2008). Thus, we need to keep in mind that the term *hamalau* projects a semantic field consisting of a number of interrelated meanings: it has a number of referents. Furthermore, it is deeply entrenched in Basque social practice, occupying a central place within an archaic belief system, one that holds that Basques descended from bears. Naturally, as has been asserted, this ursine cosmology is more congruent with an environmental setting of hunter-gatherers. Therefore, if this assertion is correct, we are looking at a cultural complex that has been affected – recontexualized repeatedly over time – by several different kinds of symbolic orders, including the worldview of pastoralists and agriculturalists, characterized by the domestication of animals and the eventual rise of the human-nature dichotomy. In this new symbolic regime we find the downgrading of non-human animals and the subsequent elevation of human animals to the category of an entirely separate class of beings (Frank 2003, 2005; Ingold 1995).

Consequently, it would not be surprising to discover that at some point a confrontation took place between the ursine cosmology and the emerging anthropocentric framework that dominates today, and that over time these encounters or interactions between the opposing worldviews would have set up a *contest* with respect to the manner in which «meaning» was assigned to the symbolic artifacts in question. Thus, the interpretation of the symbolic artifacts –

which is at the center of this process of meaning-making – depends on the way the different groups adjusted to each other over time and came to (re-)negotiate the meanings assigned to the disputed object(s). In some instances, the older interpretation of the artifact is retained, albeit in a modified form. In other cases the older interpretation fades from view or disappears entirely. In short, rather than being a monolithic process the end result of these contacts can vary significantly.

There are three principal ways in which processes of *contested ritual agency* can alter the tenets and framework of the original belief system, the linguistic artifacts associated with it and the ritual practices supporting it: *hybridization*, *marginalization* and *generational down-grading*. In the sections that follow we shall look at examples of these three types of interactions, exploring how they relate to the cultural complex emanating from this ursine cosmology and how the meanings associated with the main figure of Hamalau have been reframed, although leaving behind a dense network of interlocking linguistic and ethnographic clues.

5.1. *Hybridization*

Hybridization is brought about when elements from competing belief systems collide and then partially or totally fuse. In the process competing interpretations can become attached to the same cultural artifact. Thus, hybridization represents a kind of fusion of two competing belief systems. In this process of conceptual reorientation the interpretive framework that contextualizes the artifact slowly shifts and there is a moment in which the artifact becomes ambiguous in its meaning: some people will still interpret it using the older interpretive framework, while others, supportive of the newer interpretation, are able to appropriate the artifact and attempt to make it fit with their own belief system. In short, over time a kind of compromise is reached in which the artifact in question stubbornly retains aspects of its older meaning even after being inserted into the new interpretive context.

For example, as we observed in the first chapter of this study, Christian saints who become attached to a pre-existing sacred spot often have names that retain in some fashion a reference to the entity venerated previously at the same site. A more concrete example is that hermitages with linkages to bears often have a saint assigned to them such as St. Ursula, i.e., the hermitages become associated with names of saints that resonate linguistically the former occupant of the site (Frank 2008b). In these cases the transition or shift in ritual meaning leaves behind a linguistic trail, a trail that is often reinforced by other types of

artifacts, legends binding the saint in question to a bear who helped him or her in some way and/or material artifacts that speak to the same, e.g., a bear carved in stone who sits at the foot of the tomb of the saint (Pastoureau 2007: 131-151).

In short, this kind of hybrid discourse is a rather typical result, one that occurs when two belief systems become fused; where the older system survives as a substrate element within the new system, indeed, where it is fused to and/or absorbed into the new symbolic regime. In these circumstances where hybridization is operating, it is not unusual for the older spiritual figure to survive, but often only after being assigned a more peripheral role. The figure now shows up seated, silently, beside the new spiritual authority, or is otherwise demoted to a lower level of importance, a side-kick, visible, nonetheless, to those who chose to reflect more upon the implications of the co-location of the participating parties. This situation is one of the possible results of the phenomenon called contested ritual agency. However, hybridization is often accompanied by another type of reinterpretation: marginalization.

5.2. *Marginalization*

Marginalization is a process that can contribute to hybridization as in the examples cited above, or contrarily it can allow the artifact to develop pretty much on its own, subject to the changes in the socio-cultural norms of the time, but without the artifact being appropriated directly into the emerging dominant belief system, e.g., as might occur through processes of *hybridization*. When this type of marginalization takes place, the artifact or social practice in question is frequently classified as belonging to the «folklore» of the community in question. Stated differently, for some reason it is not integrated into the dominant belief structures of the group. Rather the artifact is left to develop on the margins, peripherally, outside the dominant discourse. As such it acquires a somewhat ambiguous status in terms of its value as a legitimate symbol of the group's identity.

On the one hand, such folkloric survivals are constantly invoked as signs of identity, while, on the other hand, it is not unusual for beliefs associated with such residual practices to be looked at askance by certain sectors of the society, especially by those who no longer share the older value system and/or world view. Again, in this process of marginalization, among any given population we can usually detect at least three levels of conviction in relation to a particular belief or social practice: 1) the group that sincerely believes the practices should continue because the latter are needed to bring about some result, e.g., wearing

a bear claw amulet protects the person from harm; 2) the group that continues to support the practice in question because they see it as a kind of continuation of a custom, an engrained habit or entrenched tradition which is justified as a sign of group identity, however, without the individuals in question truly believing in the efficacy of the practice; and 3) the group that frowns upon the social practice as an example of a belief associated with the uneducated lower or rural classes of the society and, therefore, not to be venerated or held to be sacrosanct. Indeed, the custom can end up being denounced as nothing more than a worthless superstition. In turn, the latter group tends to be the group that is most willing to make changes in the social practice or artifact in question.

5.3. *Generational down-grading*

The term *generational down-grading* refers to another wide-spread, if not universal process, by which social practices which once formed part of adult culture shift downwards and are taken up by children. Again this transformation of cultural artifacts is the result of the effects of contested ritual agency. The process called generational down-grading regularly combines elements associated with the two aforementioned processes: hybridization and marginalization. More specifically, generational down-grading is a process that takes place gradually, usually over many generations. It involves a shift with respect to the nature of the agents who take part in a given social practice. Initially, the practice is performed only by adults. Naturally, as children grow up, they slowly become aware of the meaning and purpose of the social practice and come to recognize that once they are adults, they, too, are expected to take part in it.

However, over time the socio-cultural environment changes and as a result the practice comes under pressure. As the socio-cultural norms shift, the practice in question becomes demeaned, down-graded and eventually it is considered inappropriate for adults to participate in it in the same capacity as they did before. But at the same time, because there is a strong attachment to the practice itself, it is not abandoned. Rather the agents involved are the ones who are replaced. In short, when a generational down-grading takes place with respect to a given ritual practice, rather than adults, children now carry it out.

In other words, while belief in the efficacy of the specific practice and its associated cultural complex is no longer acceptable as part of the dominant mindset of adults, the belief and related social practices are passed on to children who are encouraged by their parents to *believe* in the «reality» of the belief in question and the efficacy of performing the ritual acts associated with it. In

this fashion adults impress upon their offspring the importance of carrying out certain ritual practices that they themselves no longer perform or believe in.

In this case, there is a sort of collusion between two generations. On the one hand, although the parents portray themselves as believers in front of their offspring, they themselves are situated, cognitively, on the outside, and from that vantage point they view the belief and/or activity as appropriate for children but not for adults. In this respect, there is a kind of tacit collaboration on the part of the parents in terms of conserving the belief and social practices related to it. While the parents no longer represent the agents who believe in the efficacy of carrying out the social practice, they continue to be active participants in the sense that they insist on fostering the belief in their own children. Naturally, over time even the participation by children can become further demeaned, e.g., consumerized where the material trappings of the practice and/or purely its entertainment value become the focus of the performance.

As we shall soon see, a typical example of this is represented by the degeneration of the phenomenon referred to as «good-luck visits», discussed earlier (Frank 2008b), where groups of adults wearing masks, often accompanied by a «bear», moved through the community, visiting one household after another, in an action that was considered to bring «good-luck» and protect the householders and their farm animals against evil influences. In other words, in times past the «good luck visits» were performed by adults with specific purposes in mind.[17] As we have noted, the visitations were understood to have a cleansing or healing function and it was not unusual for the «bear» character to be played by a flesh and blood bear.

Indeed, one of the principle reasons behind the persistence of such performances is the fact that the motley crew of masked actors along with their earthly bear or a man dressed as a bear was believed to be fully capable of carrying away the maladies and misfortunes of their households visited and/or the entire community (Frank 1996, 2005; Vukanovitch 1959). Consequently, the performances were considered to be of fundamental importance to all members of the community: a method of insuring the health and well being of the social collective. At the same time, the «good luck visits» acted as a complex and resilient mechanism in terms of their ability to insure the storage and transmission of the ursine belief system from one generation to the next, even though over time the

---

[17] For a detailed discussion of the typology of the «good luck visits», cf. Halpert (1969). For additional bibliography and a discussion of modern versions of the performance, cf. the collection of essays in Halpert and Story (1969).

full understanding of the significance of the underlying tenets of that belief system was increasingly obscured. Stated differently, the «good-luck visits» have functioned as a means of off-loading the tenets of the ursine belief system by embodying them in the performances themselves.

The performances also acted to communicate and reinforce the importance of proper behavior, as was pointed out in the first chapter of this study (Frank 2008b). Once at their destination the troupe of performers performed an abbreviated play that regularly concluded with ribald report which served to evaluate and critique the householders' behavior, the former being read or sung by a member of the troupe of actors and musicians.[18] Afterwards, the actors were treated to food and drink by their hosts. As will be demonstrated in the following sections, in some locations this performance which was conducted originally by adults for adults, although with children in the audience, so to speak, later came to be focused more and more on children, to such an extent that it was the evaluation of the behavior of children that become the central focus of the «good-luck visitors».

---

[18] For a discussion of contemporary samples of such reports, cf. Fabre (1968) and Fernández de Larrinoa (1997).

REFERENCES

Achilli, Alessandro, Chiara Rengo, Chiara Magri, Vincenza Battaglia, Anna Olivieri, Rosaria Scozzari, Fulvi Cruciani, Massimo Zeviani, Egill Briem, Valerio Carelli, Pedro Moral, Jean-Michel Dugoujon, Urmas Roostalu, Eva-Liis Loogväli, Toomas Toomas Kivisild, Hans-Jürgen Bandelt, Martin Richards, Richard Villems, A. Silvana Santachiara-Benerecetti, Ornella Semino and Antonio Torroni. 2004. The molecular dissection of mtDNA haplogroup H confirms that the Franco-Cantabrian glacial refuge was a major source for the European gene pool. *American Journal of Human Genetics* 75 (5): 910-918.

Adams, Jonathan and Marcel Otte. 1999. Did Indo-European language spread before farming? *Current Anthropology* 40 (1): 73-77.

Adiego, Ignasi-Xavier. 2002. Indoeuropeïtzació al paleolític? Algunes reflexions sobre la 'Teoria della Continuità' de Mario Alinei. *Estudis Romànics* 24: 7-29.

Alinei, Mario. 1997. La teoria della continuità ed alcuni esempi di lunga durata nel lessico dialettale neolatino. *Rivista italiana di dialettologia* 21: 73-96.

Alinei, Mario. 2000. *Origini delle lingue d'Europa. Vol. II: Continuità dal Mesolitico al Ferro nelle principali aree europee*. Bologna: Il Mulino.

Alinei, Mario. 2001. Conseguenze delle nuove teorie indoeuropeistiche sulla dialettologia romanza. *Estudis Romànics* 23: 7-47.

Alinei, Mario. 2004a. Intrusive farmers or indigenous foragers: The new debate about the ethnolinguistic origins of Europe, *Proceedings of the XIVth UISPP Congress, University of Liège, Belgium, 2-8 September 2001, Section 7, The Mesolithic, BAR International Series 1302*, 77-114. Oxford.

Alinei, Mario. 2004b. The Paleolithic Continuity theory on Indo-European origins: An introduction. Available online at: http://www.continuitas.com/intro.html.

Alinei, Mario. 2006. Darwinism, traditional linguistics and the new Paleolithic Continuity theory of language evolution. In: Nathalie Gontier, Jean Paul van Bendegem and Diederik Aerts (eds.), *Evolutionary Epistemology, Language and Culture. A Non-adaptationist, Systems Theoretical Approach*, 121-147. Berlin/Heidelberg/New York: Springer. Available online at: http://www.continuitas.com/darwinism.pdf.

Amades, Joan. 1951. *Costumari català. Les Carnestoltes, la Quaresima, Setmana Santa, el cicle pasqual*. Barcelona.

Amades, Joan. 1952. *Costumari català. El curs de l'any, III, Corpus, Primavera*. Barcelona.

Amades, Joan. 1957. Los ogros infantiles. *Revista de Dialectología y Tradiciones Populares* 13: 254-285.

Ammerman, Albert J. and L. Luca Cavalli Sforza. 1984. *The Neolithic Transition and the Genetics of Populations in Europe*. Princeton, NJ: Princeton University Press.

Arvidsson, Stefan. 2006. *Aryan Idols: Indo-European Mythology as Ideology and Science*. Chicago and London: University of Chicago Press.

Ashliman, Dan L. (ed.). 1998-2005. *Night-mares: Legends and Superstitions about the Demons that Cause Nightmares*. Translated and/or edited by D. L. Ashliman. Available online at: http://www.pitt.edu/~dash/nightmare.html.

Azkue, Maria Resurreccion. 1969. *El diccionario vasco-español-francés*. Bilbao: La Gran Enciclopedia Vasca.

Bakhtin, Mikhail M. 1973. *Problems of Dostoevsky's Poetics*. Trans. R. W. Rostel. Ann Arbor: Ardis.

Bernard, Jean and Jacques Ruffié. 1976. Hématologe et culture: Le peuplement de l'Europe de l'ouest. *Annales, Economies, Sociétés, Civilizations* 31 (31): 661-675.

Blackmore, Susan. 1998. Abduction by aliens or sleep paralysis. *Skeptical Inquirer* 22 (3): 23-28.

Caro Baroja, Julio. 1986. *De la vida rural vasca (Vera de Bidasoa)*. San Sebastián: Editorial Txertoa.

Cheyne, J. Allan. 2000. Sleep Paralysis and the Waking Nightmare Bibliography (Last Updated - August 2000). Available online at: http://watarts.uwaterloo.ca/~acheyne/wNightRef.html.

Cheyne, J. Allan. 2001. The ominous numinous. Sensed presence and 'other' hallucinations. *Journal of Consciousness Studies* 8 (5-7): 133-150.

Cheyne, J. Allan. 2002a. The Intruder. Available online at: http://watarts.uwaterloo.ca/~acheyne/intruder.html.

Cheyne, J. Allan. 2002b. Sleep paralysis and associated hypnagogic and hypnopompic experiences. Available online at: http://watarts.uwaterloo.ca/~acheyne/S_P2.html.

Cheyne, J. Allan. 2003. Sleep paralysis and the structure of waking-nightmare hallucinations. *Dreaming* 13: 163-180.

Cheyne, J. Allan, Ian R. Newby-Clark and Steve D. Rueffer. 1999. Relations among hypnagogic and hypnopompic experiences associated with sleep paralysis. *Journal of Sleep Research* 8 (4): 313-317.

Cheyne, J. Allan, Steve D. Rueffer and Ian R. Newby-Clark. 1999. Hypnagogic and hypnopompic hallucinations during sleep paralysis: Neurological and cultural construction of the nightmare. *Consciousness and Cognition* 8: 319-337.

Costa, Gabriele. 2001. Continuitá e identitá nella prehistoria indeuropea: Verso un nuovo paradigma. *Quaderni di Semantica* 22 (2): 215-260. Available online at: www.continuitas.com/continuita_identita.pdf.

Costa, Gabriele. 2004. Linguistica e preistoria. I: Evoluzione delle lingue e delle culture. *Quaderni di Semantica* 25 (2): 255-271. Available online at: www.continuitas.com/linguistica_preistoria.pdf.

De Blécourt, Willem. 2003. Bedding the nightmare: Somatic experience and narrative meaning in Dutch and Flemish legend texts. *Folklore* 114: 227-245.

Diamond, Jared and Peter Bellwood. 2003. Farmers and their languages: The first expansions. *Science* 300 (5619): 597-603.

Eade, John and Michael J. Sallnow. 2000. Introduction. In: John Eade and Michael J. Sallnow (eds.), *Contesting the Sacred: The Anthropology of Christian Pilgrimage*, 1-29. London/New York: Routledge.

Fabre, Daniel. 1968. *Jean L'ours: Analyse formelle et thématique d'un Conte populaire*. Carcassonne: Editiones de la Revue 'Folklore'.

Fernández de Larrinoa, Kepa. 1997. *Mujer, ritual y fiesta*. Pamplona/Iruña: Pamiela.

Fois, Graziano. 2002a. *Le carnaval de Samugheo et le masque de l'ours en Sardaigne dans le context européen*. CD-ROM. Cagliari: Scriptamanent.

Fois, Graziano. 2002b. Liason entre Basque et Sarde pour un possible racine **mamu /*momu /*mumu*. Ms. Cagliari, Sardinia.

Fois, Graziano. 2008. Personal Communication.

Fois, Graziano. [2002]. *Le carnaval de Samugheo et le masque de l'ours en Sardaigne dans le context européen*. 210 pg. manuscript.

Frank, Roslyn M. 1996. Hunting the European Sky Bears: When bears ruled the earth and guarded the gate of heaven. In: Vesselina Koleva and Dimiter Kolev (eds.), *Astronomical Traditions in Past Cultures*, 116-142. Sofia: Institute of Astronomy, Bulgarian Academy of Sciences, and National Astronomical Observatory Rozhen.

Frank, Roslyn M. 2001. Hunting the European Sky Bears: Candlemas Bear Day and World Renewal Ceremonies. In: Clive Ruggles, Frank Prendergast and Tom Ray (eds.), *Astronomy, Cosmology and Landscape*, 133-157. Bognor Regis, England: Ocarina Press.

Frank, Roslyn M. 2003. Shifting identities: The metaphorics of nature-culture dualism in Western and Basque models of self. *metaphorik.de (electronic journal)* 4: 66-95 Available online at: http://www.metaphorik.de/04/frank.pdf.

Frank, Roslyn M. 2005. Shifting identities: A comparative study of Basque and Western cultural conceptualizations. *Cahiers of the Association for French Language Studies* 11 (2): 1-54. Available online at: http://www.afls.net/Cahiers/11.2/Frank.pdf.

Frank, Roslyn M. 2008a. The language-organism-species analogy: A complex adaptive systems approach to shifting perspective on «language». In: Roslyn M. Frank, René Dirven, Tom Ziemke and Enrique Bernárdez (eds.), *Body, Language and Mind. Vol. 2. Sociocultural Situatedness*, 215-262. Berlin: Mouton de Gruyter.

Frank, Roslyn M. 2008b. Recovering European ritual bear hunts: A comparative study of Basque and Sardinian ursine carnival performances. *Insula* (Cagliari, Sardinia) 3: 41-97. Available online at: http://www.sre.urv.es/irmu/alguer/.

Frank, Roslyn M. in prep. Rethinking the Linguistic Landscape of Europe: The Indo-European «Homeland» in light of Palaeolithic Continuity Refugium Theory (PCRT). 280 pg. manuscript.

Frank, Roslyn M. in press. Hunting the European Sky Bears: A diachronic analysis of Santa Claus and his helpers. In: Paul G. Bahn (ed.), *An Enquiring Mind: Papers in Honour of Alexander Marshack*. American School of Prehistoric Research Monographs in Archaeology and Paleontology.: Oxbow Press.

Frongia, Eleonora. 2005. *Efisio Marcialis: Vocabulario*. Cagliari: Centro di Studi Filologici Sardi/ CUEC. Available online at: http://www.sardegnadigitallibrary.it/documenti/ 17_59_20080605165524.pdf.

Fukuda, K., R. D. Ogilvie, L. Chilcott, A. M. Vendittelli and T. Takeuchi. 1998. The prevalence of sleep paralysis among Canadian and Japanese college students. *Dreaming* 8: 59-66.

Fukuda, Kazuhiko, Akio Miyasita, Maki Inugami and Kaneyoshi Ishihara. 1987. High prevalence of isolated sleep paralysis: Kanishibari phenomenon in Japan. *Sleep* 10 (3): 279-286.

[Furzdurzelette]. 2008. «To sleep, perchance to dream...aye, there's the rub...» *Furzdurel Blog.* Available online at: http://furzdurzelette.wordpress.com/2008/03/09/to-sleep-perchance-to-dreamaye-theres-the-rub/.

Gamble, Clive, William Davies, Paul Pettitt, Lee Hazelwood and Martin Richards. 2005. The archaeological and genetic foundations of the European population during the Late Glacial: Implications for 'agricultural thinking'. *Cambridge Archaeological Journal* 15 (2): 193-223.

Gamble, Clive, William Davies, Paul Pettitt, Lee Hazelwood and Martin Richards. 2006. The Late Glacial ancestry of Europeans: Combining genetic and archaeological evidence. *Documenta Praehistorica* 33: 1-10. Available online at: http://arheologija.ff.uni-lj.si/documenta/pdf33/ gamble33.pdf.

Gimbutas, Marija. 1973. The beginning of the Bronze Age in Europe and the Indo-Europeans: 3500-2500 BC. *Journal of Indo-European Studies* 1: 163-214.

Grimm, Jacob and Wilhelm Grimm. 1854. *Deutsches Wörterbuch*. Vol. 12. Leipzig: Verlag von S. Hirzel.

Halpert, George. 1969. A typology of mumming. In: Herbert Halpert and George M. Story (eds.), *Christmas Mumming in Newfoundland: Essays in Anthropology, Folklore and History*, 34-61. Toronto: University of Toronto Press.

Halpert, Herbert and George M. Story (eds.). 1969. *Christmas Mumming in Newfoundland: Essays in Anthropology, Folklore and History*. Toronto: University of Toronto Press.

Harris, James C. 2004. The nightmare. *Archives of General Psychiatry* 61 (5): 439-440.

Häusler, Alexander. 1998. Überlegungen zum Ursprung der Indogermanen. In: Kyosti Julku and Kalevi Wiik (eds.), *The Roots of Peoples and Languages of Northern Eurasia*. Turku: Societas Historiae Fenno-Ugricae.

Hinton, Devon E., David J. Hufford and Laurence J. Kirmayer. 2005. Culture and sleep paralysis. *Transcultural Psychiatry* 42 (1): 5-10. Available online at: http://tps.sagepub.com/cgi/reprint/ 42/11/15.

Hinton, Devon E., Vuth Pich, Dara Chhean and Mark H. Pollack. 2005. 'The ghost pushes you down': Sleep paralysis-type panic attacks in a Khmer refugee population. *Transcultural Psychiatry* 42 (1): 46-77. Available online at: http://tps.sagepub.com/cgi/reprint/42/41/46.

Hufford, David J. 1982. *The Terror that Comes in the Night: An Experience-Centered Study of Supernatural Assault Traditions*. Philadelphia: Pennsylvania Press.

Hufford, David J. 2003. Response. *Journal of Folklore Research* 40 (1): 99-109.

Hufford, David J. 2005. Sleep paralysis as spiritual experience. *Transcultural Psychiatry* 42 (1): 11-45.

[Ihauteriak]. 1992. Ihauteriak: Zer eta Non?: [Carnival Publicity Brochure].

Ingold, Tim. 1995. From trust to domination: An alternative history of human-animal relations. In: Aubrey Manning (ed.), *Animals and Human Society: Changing Perspectives*. London: Routledge.

Koerner, E. F. Konrad. 2001. Linguistics and ideology in studies of language. In: René Dirven, Bruce Hawkins and Esra Sandikcioglu (eds.), *Language and Ideology. Volume 1: Theoretical Cognitive Approaches*, 253-276. Amsterdam; Philadelphia: John Benjamins.

Kuhn, Adalbert and Wilhelm Schwartz. 1848. *Norddeutsche Sagen, Märchen und Gebräuche*. Leipzig: F. A. Brockhaus.

Liddon, S.C. 1967. Sleep paralysis and hypnagogic hallucinations: Their relationship to the nightmare. *Archives of General Psychiatry* 17: 88-96.

Mallory, J. P. 1997. The homelands of the Indo-Europeans. In: Roger Blench and Matthew Spriggs (eds.), *Archaeology and Language I: Theoretical and Methodological Orientations*, 93-121. London: Routledge.

Michel, Aimé and Jean-Paul Clébert. 1968. *Histoire et Guide de la France secrète*. Paris: Editions Planète.

Michelena, Luis. 1987. *Diccionario general vasco = Orotariko euskal hiztegia*. Bilbao: Euskaltzaindia ; Desclée de Brouwer.

Ness, Robert C. 1978. The old hag phenomenon as sleep paralysis: A biocultural interpretation. *Culture, Medicine and Psychiatry* 2: 15-39.

Ohaeri, J. U. 1992. Experience of isolated sleep paralysis in clinical practice in Nigeria. *Journal of the National Medical Association* 84 (6): 521-523.

Otte, Marcel. 1994. *Diffusion of modern languages in prehistoric Eurasia*. New Delhi: Preprint WAC-4.

Otte, Marcel. 1995. Diffusion des langues modernes en Eurasie préhistorique. *Comptes Rendus de l'Académie des Sciences* 321, série IIa: 1219-1226.

Pastoureau, Michel. 2007. *L'ours. Histoire d'un roi déchu*. Paris: Ed. Seuil.

Paulis, Guilio. 1997. *Studi sul Sardo medioevale*. Nuoro: Ilisso Edizioni. Available online at: http://www.sardegnadigitallibrary.it/index.php?xsl=626&s=17&v=9&c=4463&id=37767&ni=1&c1=wagner&ric=1&n=4&urlrif=http://www.sardegnadigitallibrary.it/xml/datidl.php?idtipo=3%26n=24%26p=0%26cerca=wagner.

Pereira, L., M. Richards, A. Goios, A. C. A. Alonso, O. Garcia, D. Behar, M. Gölge, J. Hatina, L. Al-Ghazali, D. G. Bradley, V. Macaulay and A. Amorim. 2005. High-resolution mtDNA evidemce for the late-glacial resettlement of Europe from an Iberian refugium. *Genome Research* 15: 19-24.

Perurena, Patziku. 1993. *Euskarak Sorgindutako Numeroak*. Donostia: Kutxa Fundaxioa.

Renfrew, Colin. 1987. *Archaeology and Language: The Puzzle of Indo-European Origins*. London: Cape.

Richards, M., V. Macaulay, E. Hickey, E. Vega, B. Sykes, V. Guida and C. Rengo et al. 2000. Tracing European founder lineages in the Near Eastern mitochondrial gene pool. *Amercan Journal of Human Genetics* 67: 1251-1276.

Richards, Martin. 2003. The Neolithic invasion of Europe. *Annual Review of Anthropology* 32: 135-162.

Robb, John. 1993. A social prehistory of European languages. *Antiquity* 67: 747-760.

Rootsi, S., C. Magri, T. Kivisild, G. Benuzzi, H. Help, M. Bermisheva and I. Kutuev et al. 2004. Phylogeography of Y-chromosome haplogroup I reveals distinct domains of prehistoric gene flow in Europe. *American Journal of Human Genetics* 75: 129-137.

Rose, Nicholas and Susan Blackmore. 1996. Two pilot surveys of unusual personal experiences. Paper presented at the 20th International Conference of the Society for Psychical Research, Cirencester, England (August 1996).

Rubattu, Antoninu. 2006. *Dizionario Universale Della Lingua Sardegna*: 2 Edizione. Editrice Democratica Sarda. Available online at: http://www.toninorubattu.it/ita/DULS-SARDO-ITALIANO.htm.

Salvi, Sergio. 1973. *Le nazioni proibite*. Firenze: Vallecchi Editore.

Sanna, Emanuele. 2006. *Il popolamento della Sardegna e le origini dei Sardi*. Cagiliari: CUEC Cooperative Universitaria Editrice Cagliaritana.

Satrústegi, José María. 1975. *Euskaldunen seksu bideak*. Donostia: Aranzazu.

Satrústegi, José María. 1980. 'Inguma' en el folklore del País Vasco: Consideraciones en torno a un sueño prototípico. Presentation at the Seminario de Antropología cultural y Psiquiatría organizado por el Centro Psicosocial de Pamplona. April 15, 1980. Pamplona, Spain.

Satrústegi, José María. 1987. Sueños y pesadillas en el devocionario popular vasco. *Cuadernos de etografía y etnografía de Navarra* 47: 5-33.

Semino, O., G. Passarino, P. J. Oefner, A. A. Lin, Arbuzova S., L. E. Beckman, G. De Benedictis, Francalacci. P., A. Kouvatsi, S. Limborska, M. Marcikiae, A. Mika, B. Mika, D. Primorac, A. S. Santachiara-Benerecetti, L. L. Cavalli-Sforza and P. A. Underhill. 2000. The genetic legacy of Paleolithic *Homo sapiens sapiens* in extant Europeans: A Y chromosome perspective. *Science* 290: 1155-1159.

Sharifian, Farzad. 2008. Distributed, emergent cultural cognition, conceptualisation, and language. In: Roslyn M. Frank, René Dirven, Tom Ziemke and Enrique Bernárdez (eds.), *Body, Language and Mind. Vol. II. Sociocultural Situatedness*, 109-136. Berlin: Mouton de Gruyter.

Snyder, Gary. 1990. *The Practice of the Wild*. San Francisco: North Point.

Spanos, N. P., S. A. McNulty, S. C. DuBreuil, M. Pires and M. F. Burgess. 1995. The frequency and correlates of sleep paralysis in a university sample. *Journal of Research in Personality* 29 (3): 285-305.

Thorpe, Benjamin. 1851-52. *Northern Mythology: Popular Traditions and Superstitions of Scandinavia, North Germany and the Netherlands*. London: Edward Lumley.

Thorpy, Michael J. 1990. *Sleep paralysis. ICSD-International Classification of Sleep Disorders: Diagnostic and Coding Manual*. Rochester, Minn.: American Sleep Disorders Association.

Timothy, Justin. 2001. Hypnagogic hallucinations: Interested?!? Available online at: http://www.sleepnet.com/narco12/messages/218.html.

Torroni, Antonio, Hans-Jürgen Bandelt and L. D'Urbano, et al. 1998. mtDNA analysis reveals a major Palaeolithic population expansion from southwestern to northeastern Europe. *American Journal of Human Genetics* 62: 1137-1152.

Torroni, Antonio, Hans-Jürgen Bandelt and Vincent Macaulay, et al. 2001. A signal from human mtDNA, of postglacial recolonization in Europe. *American Journal of Human Genetics* 69: 844-852.

Vukanovitch, T. P. 1959. Gypsy bear-leaders in the Balkan Peninsula. *Journal of the Gypsy Lore Society* 3 (37): 106-125.

Whorf, Benjamin Lee. 1956. *Language, Thought and Reality: Selected Writings of Benjamin Lee Whorf*. Cambridge: The MIT Press.

Wing, Y. K., S. T. Lee and C. N. Chen. 1994. Sleep paralysis in Chinese: Ghost oppression phenomenon in Hong Kong. *Sleep* 17 (7): 609-613.

Zvelebil, Marek. 1995a. At the interface of archaeology, linguistics and genetics: Indo-European dispersals and the agricultural transition in Europe. *Journal of European Archaeology ; Journal of the European Association of Archaeologists* 3: 33-70.

Zvelebil, Marek. 1995b. Indo-European origins and the agricultural transition in Europe, *Whither Archaeology: Papers in Honour of Evzen Neustupny*. Prague: Institute of Archaeology.

Zvelebil, Marek. 1996. Farmers our ancestors and the identity of Europe. In: Paul M. Graves-Brown, Sián Jones and Clive Gamble (eds.), *Cultural Identity and Archaeology: The Construction of European Communities*, 145-166. London: Routledge.

Zvelebil, Marek. 2002. Indo-European dispersals and the agricultural transition in northern Europe: Culture, genes and language. In: Kyosti . Julku (ed.), *The Roots of Peoples and Languages of Northern Eurasia. Vol. IV*, 318-343. Oulu: Societas Historiae Fenno-Ugricae.

Zvelebil, Marek and Kamil V. Zvelebil. 1988. Agricultural transition and Indo-European dispersals. *Antiquity* 62: 575-576.

Zvelebil, Marek and Kamil V. Zvelebil. 1990. Agricultural transition, «Indo-European origins» and the spread of farming. In: T. L. Markey and John A. C. Greppin (eds.), *When Worlds Collide: The Indo-Europeans and the Pre-Indo-Europeans*, 311-344. Ann Arbor, Michigan: Karoma Publishers, Inc.