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CHILDREN AS PLEISTOCENE ARTISTS

Robert G. Bednarik

Abstract. Three types of Pleistocene palaeoart are considered which provide consistent evidence of having been made by children or adolescents: finger flutings, stencils or prints of body parts, and prints of fingertips. Combined with the observation that the known human foot prints found in caves frequented by Pleistocene humans of Europe also appear to be largely of young people, it is noted that there is currently very limited indication that western European Palaeolithic palaeoart could be substantially the work of fully adult people. The outstanding aspect of this corpus is its high content of figurative motifs, not apparent in the Pleistocene rock art of the rest of the world, which is almost exclusively non-figurative. The recent observation that children of a society with an otherwise purely non-figurative graphic art are perfectly capable of producing realistic figurative drawings when prompted could suggest that such art was regarded as children's art by at least some early societies. If that were the case, it might explain the unusual figurative content of Franco-Cantabrian palaeoart. The falsifiable hypothesis is proposed that a significant part of this corpus is the work of young people.

Introduction

For the one and a half centuries Palaeolithic art has been reported in Europe, first as mobiliary forms, later as cave art, the notion that a significant part of it is the work of children or adolescents has been rather unpopular. Indeed, most commentators have ignored it; many have found it incompatible with their own perspectives of the profundity of these traditions (e.g. Breuil 1925, 1952; Lommel 1967; Bahn 1978; Leroi-Gourhan 1982; Hahn 1986; Raphaël 1986). To attribute a major portion of these arts to young people was perhaps regarded as a form of devaluation, as somehow rendering the product less worthy of scholarly attention. Instead, most commentators have created a rich tapestry of interpretations, focusing on such favourites as shamanism, totemism, ceremonies and so forth, all of which have two things in common: they are presented without hard evidence, and they are apparently thought to be sufficiently profound to do the subject adequate justice. A good deal of discussion of early palaeoart has been in the form of a well-meaning but perhaps subliminally condescending over-emphasis of 'artistic merits' and sophistication of it (e.g. Lewis-Williams and Dowson 1988). This has no doubt helped in raising interest in the 'art' and in its preservation, but it has also skewed academic discussion and research direction.

The *scientific* importance of any interpretation of Pleistocene palaeoart is unrelated to such perceptions of perceived profundity. Science is not concerned

with the wishful thinking of researchers, but with veracity and falsifiability of propositions. A chronic issue in the explanations offered for Palaeolithic art is that they are typically presented in unfalsifiable formats, yet on closer examination of the evidence most of them appear to be contradicted by at least some of the hard evidence.

Very few of the numerous theories created around the Franco-Cantabrian cave art and mobiliary palaeoart of final Pleistocene Eurasia can withstand sustained scientific scrutiny. This body of evidence is only a small component of global Pleistocene palaeoart (probably in the order of 1% of its surviving corpus), most of which has remained ignored because of these biases, scholarly yearnings and predilections. Another example is the universally reiterated claim that all Palaeolithic cave art of Europe was created by 'anatomically fully modern humans' (Graciles) (e.g. Stringer 1989; Mellars 2005); an unproven proposition that is probably false. Already the main pillars of the orthodox model are without justification as there is in the order of a hundred times as much surviving Middle Palaeolithic rock art in the world as there is Upper Palaeolithic; yet the traditional claim is that there is no Middle Palaeolithic rock art at all, so the precise opposite is apparently true. Palaeoart was not introduced 35 000 years old, as traditionally claimed, but ten to twenty times as long ago, at least in other continents. Palaeoart production precedes the appearance of Graciles in Europe, and

even all of the early Upper Palaeolithic technological traditions (such as the Châtelperronian, Aurignacian, Proto-Aurignacian, Olshewian, Uluzzian, Uluzzo-Aurignacian, Bachokirian, Bohunician, Jankovician, Szeletian, Spitzinian, Streletskian, Gorodtsovian, Jerzmanovician, Altmühlian and Lincombian) apparently belong to the cultures mostly of *robust* hominins (such as Neanderthaloids; Bednarik 2006a, 2007a, 2008). We also know that the experts' *stylistic* pronouncements about this corpus are often false (cf. Bednarik 1995a, based on the cases of Chauvet, Cosquer, Cougnac, CÔa and Zubialde), as are their claims to know what was depicted, by whom, and when. If we add to these factors the proposition of the involvement of children in the production of this art, the already unravelling archaeological mythology concocted about Pleistocene palaeoart for more than a century emerges as so defective that the discipline is obliged to return to its starting point and begin its quest anew. Most of its interpretations of this corpus are either false, or are likely to be false, and much of its data and empirical base must be regarded as suspect, because of the inevitable contamination from predominant dogmas.

About finger flutings

Finger flutings (Bednarik 1986) or *sillons digitaux parallèles* (Drouot 1953) are a form of rock art resulting from dragging human fingers over soft surfaces in limestone caves, usually of *Mondmilch* (*Montmilch*, moonmilk, *Bergmilch*, a reprecipitated calcite speleothem; Schmid 1958; Bednarik 1998), which consists of sub-parallel grooves of rounded section where it is well preserved. Because the medium has the



Figure 1. Juvenile finger flutings, heavily modified by travertine deposit, in Snake Hill Cave (western passages), South Australia.

ability of hardening and because caves offer superb preservation conditions, such initially very delicate surface markings had good prospects of surviving for very long time spans. Most of those we know about today were made in the Pleistocene, and they have so far been found in France, Spain, Australia and New Guinea. The author began examining Pleistocene finger flutings thirty years ago, and his project (the Parietal Markings Project) has introduced methods of examining this phenomenon empirically — of quantifying their surviving characteristics to begin constructing forensically based profiles. Preliminary findings on various aspects have been presented, but of particular interest here are the observations foreshadowing the gist of the present essay:

One concept that is more relevant in the present context is the observation that adult [finger] markings may dominate in the more accessible caves, or parts of caves, while juvenile markings appear to be more conspicuous in locations of more difficult access, or in the remote part of a large system. ... Finger flutings are found in different parts of this extensive cave system [of Snake Hill Cave, in South Australia, see Fig. 1], and I noted that the westernmost occurrence produced comparatively high line spacings and finger size values (although this is not particularly well expressed in the mean spacing of 14.7 mm, for a sample of 35 measurable sets, which is because the same also includes some quite small spacings). I realised that this particular occurrence is one of the largest known within 20 m of the entrance of any of these caves. This peculiarity should not surprise us. In all probability, the younger people were more agile, adventurous or reckless, and penetrated deeper into the caves. They entered narrow spaces, and perhaps found for themselves chambers not frequented by the adults. The older people may simply have been more reluctant to penetrate deeper into the parietal environment (Bednarik 1986: 48–49).

The author's general observation, after investigating finger flutings in many dozens of caves, in both Europe and Australia, was that juvenile markings accounted for significantly more than half of all surviving and measured finger flutings in the world. For instance, the average finger sizes (total width of *closed* finger set divided by number of finger grooves it comprises) of the eighteen surviving identifiable sets of what he regards as the oldest of the three generations he postulates for the finger flutings of Baume Latrone (southern France, Fig. 2a) is 12.7 mm (Bednarik 1987: 3–4). In Koorine Cave (South Australia), he recorded a mean of 11.8 mm from six sets (Aslin and Bednarik 1984a), and the 34 measured sets in the main part of Orchestra Shell Cave (Western Australia, Fig. 2b) yielded an even lower result, 11.2 mm (Bednarik 1987: 9). These are clearly finger sizes of children or adolescents, as determined by several experiments, and the same trend pertains in most other sites surveyed (e.g. Aslin and Bednarik 1984b). Bahn and Vertut (1988, 1997) adopted this idea briefly, suggesting that some of the 'cruder artistic works'

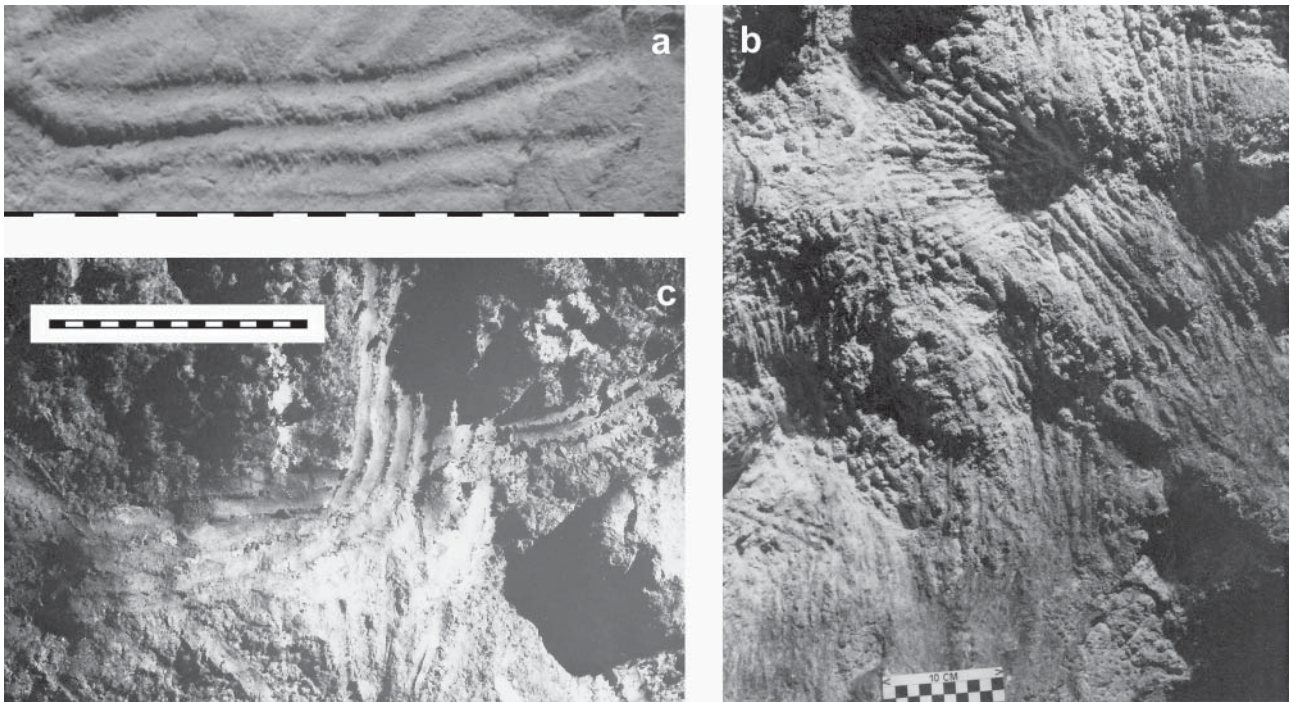


Figure 2. Three examples of juvenile finger flutings, at some of the sites subjected to metric determination: a - from Baume Latrone (France); b - from Orchestra Shell Cave (Western Australia); c - from Gran Gran Main Cave (South Australia). Sample b has undergone speleothem masking and corrosion.

of the Upper Palaeolithic may also be by children or beginners, probably encouraged in this by their survey of the often juvenile human footprints in five French caves (see also Bahn 1997). More recently, Guthrie (2005) and Sharpe and Van Gelder (2006a) followed this lead and the latter, in particular, presented new quantitative data underpinning the proposition by showing that children's finger flutings dominated in one chamber of a French cave, Rouffignac. These even included markings made by small infants. Sharpe and Van Gelder (2006b) advanced the notion that such infants may have been held aloft by adults, because the ceiling of chamber A1 in Rouffignac is today out of reach to children. However, floor levels in cave systems are notoriously changeable and many parts of Rouffignac have experienced significant floor alterations due to several processes, as evidenced by the bands of tens of thousands of mostly vertical cave bear claw scratches along the main galleries (Bednarik 1993, 2006b). Nevertheless, the major involvement of children in the production of finger flutings can be regarded as having been securely demonstrated by numerous metrical analyses now undertaken in dozens of French and Australian caves.

Prints of fingertips

The author has also long noted that there is a clear dominance of juvenile evidence in two forms of rock art, stating also that they are the only such forms that permit forensic deductions concerning the age of the artists. These are the finger flutings just discussed, and the prints or stencils of human body parts. He has

observed that this pattern coincides with the common occurrence of children's footprints in the Palaeolithic sites, especially cave art sites, of Europe. There is, however, at least one other form of palaeoart that also permits access to metrical information about the physical size of the artists. A good number of painted plaques of the Upper Palaeolithic have been found in European caves, especially from the Magdalenian, which bear rows or double rows of dots. These distinctive patterns were applied with fingertips dipped in wet paint, and as they are usually very well preserved, they allow precise measurement of the individual marks.

In the process of the intensive study of one such specimen several aspects of its history and production were determined (Bednarik 2002). This limestone fragment from the Hohle Fels in south-western Germany (Conard and Floss 1999; Conard and Uerpmann 1999) had been suggested to be the only known instance of Pleistocene rock art from Germany (Conard and Uerpmann 2000). Its microscopic examination revealed, however, that it had been painted *after* the plaque had become detached from the cave wall, i.e. it was in fact a mobiliary art object (Fig. 3). The piece found was only a fragment of the originally decorated stone slab, and the evidence of the impact that fractured it suggests the application of a single blow to break it. This is consistent with many apparently deliberately broken portable palaeoart objects of the general period, in southern Germany as well as other parts of Europe, from Spain to Russia (including plaques and figurines). The Hohle Stein

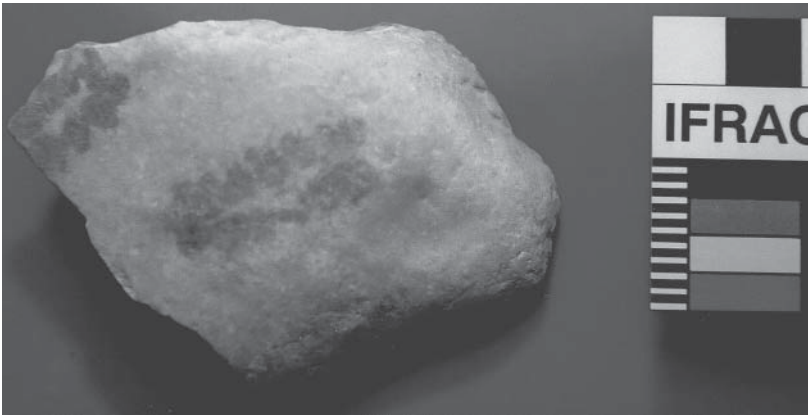


Figure 3. The painted limestone plaque fragment from Hohle Fels, Germany, with double rows of dots stamped on with juvenile finger tips.

fragment bears one full double row of fourteen dots, with a second set truncated by the fracture, of which only eight dots arranged as a double row remain. Originally it was probably about twice the remaining size and bore more sets, perhaps three in all. Identical stone plaques have been recovered from the Magdalenian of two nearby caves, Kleine Scheuer (Hahn and von Koenigswald 1977; Müller-Beck et al. 2001: Pl. 23) and Obere Klause (Obermaier 1914; Bosinski 1982). In examining all these specimens the author realised that the stamped-on dots are all approximately the same size, about 6 mm long and 4 mm wide (Bednarik 2002). Upon conducting replication experiments it became obvious that to effectively produce stamp marks with wet paint of such small fingertips these had to be of children, and were most probably limited to an age group of six to twelve years. Similarly guided examinations of corresponding finds from other Magdalenian contexts have yet to be conducted, but preliminary enquiries suggest a corresponding practice elsewhere.

This renders the objects in question more interesting than they were before. If this practice was indeed limited to children, it would offer an unexpected window into the societies in question, but it also raises the question to what extent the involvement of juveniles is to be found in other forms of Palaeolithic art.

Prints and stencils of human body parts

Another form of rock art offering reliable metrical data about the body sizes of artists are the paint prints and stencils of hands and other body parts commonly found among the pictograms of the world. While prints, made by pressing paint-covered objects against a rock, are almost exclusively of hands, stencils occur of hands, hands with lower arms, feet and even, in some cases, entire human bodies — as well as a great range of other objects. The latter include artefacts of various types, and bodies or body parts of animals, particularly in Australian rock art. Stencils (or negatives) were produced by holding

such objects against the rock and spraying the surrounding surface with paint. Henneberg and Mathers (1994) and Gunn (2006) have considered the difficulties of interpreting metrical data secured from hand stencils. Gunn determined that sex cannot be reliably distinguished in them, and that only broad age determinations are possible. One aspect of hand stencils that has attracted much more attention than their size distribution is the incidence of incomplete ('mutilated') hands (e.g. Pradel 1975; Sahly 1969; Walsh 1979; Wright 1985). It is now regarded more likely to be attributable to depictions of sign language than to digital amputations or effects of disease, as had been widely assumed.

In Palaeolithic art of the caves of Europe, hand stencils are said to occur in at least seven Spanish, twenty-two French and one Italian caves or shelters. There are almost no hand prints, contrary to Guthrie's (2005) claims; he describes only stencils. Guthrie (p. 124) suggests that he has identified 39 of his sample of 201 presumed Palaeolithic stencils as female, the other 162 as male. He thus contradicts the more careful assessment of Gunn (2006) that the sex of hand stencils cannot be established. Gunn's contention, however, is well supported by the data from physical anthropology he cites (chiefly unpublished data by N. Tindale). Chazine and Noury (2006) have also attempted to secure sexual determination of hand stencils, using a sample from Gua Masri II Cave in East Kalimantan, Indonesia. In this they applied the observation that the ratio between the 2nd and 4th digits of the human hand suggests a sexually dimorphic pattern, which is probably established *in utero* (Manning et al. 1998). This ratio is hypothesised to indicate sperm number and testosterone, oestrogen and luteinising hormone levels. However, the dimorphism is not very pronounced; it is not, as Chazine and Noury state, 0.96 to 1.00, but is in fact mean 2D:4D = 0.98 in males, i.e. only 0.02 different from females. Moreover, this sample is from two English populations, and it is known that finger length ratios of other populations can differ. To extrapolate from such figures to populations of the distant past or in the tropics (in the latter case, different metric indexes are known to apply) and produce unfalsifiable propositions about the gender of hand stencils is premature. The dimensional variations noted by Gunn, attributable to rock surface texture and topography, are well above the anatomical differences, and Gunn (2006: 100) has experimentally recorded Coefficients of Variance of 2.6 to 4.0 for specific attributes (Fig. 4).

More relevant is the finding that about 20% of Guthrie's sample derives from pre-adolescent hands, and that 186 (92.5%) of his 201 Palaeolithic stencils are



Figure 4. Hand stencil in Abrakurrie Cave, South Australia, showing the difficulties in determining precise digit lengths, caused by aspects of surface texture and topography.

of the hands of people below the age of 17 (Guthrie 2005: 124, 125). Only one specimen (0.5%) is by a 20-year-old, the oldest individual represented in his view. In other words, practically all measurable hand stencils Guthrie has surveyed are either by teenagers or by children. The smallest known refer clearly to small infants (in which cases it can be assumed that the artist was a second, older person, but not necessarily an adult); the predominant age group is 12 to 17 years.

This contrasts sharply with rock art traditions in other continents, such as the Americas or Australia. In the Australian surveys of Gunn, all hand prints and stencils made ethnographically – indeed most observed rock art production – are the work of initiated and thus usually adult men. This is an important aspect suggesting that the impetus of creating western European cave art of the Pleistocene differed from that for Holocene production of most other rock art.

Hominin tracks in European caves

The occurrence of Pleistocene children's tracks on the floors of Palaeolithic caves has been studied in some detail throughout the 20th century, since it was first discovered in Niaux in 1906. Clottes (1985), in reviewing the ichnological evidence available in recent decades, noted not only the prevalence of tracks of children, but also that the wide variations in

size among them indicated that all age groups were effectively represented. The available sample today comprises the foot, heel, finger or handprints of no fewer than eleven caves (e.g. Clottes 1997: 31; Clottes and Courtin 1995: 175; Roveland 2000). Although many of the tracks are rather faint and not well suited for metric determination, it is amply evident that the overwhelming majority, certainly over 90%, derive from children or teenagers, and relatively few (as in Niaux) can be attributed to adults (Bahn and Vertut 1997; Bégouën and Vallois 1927; Cathala 1949; Clottes 1973, 1985, 1986, 2001; Clottes et al. 1995; Clottes and Simonnet 1972; Delteil et al. 1972; Duday and Garcia 1983, 1985, 1990; Garcia 2003; Garcia and Duday 1993; Kiparissi-Apostolika 2000; Pales 1954, 1960, 1976; Roveland 2000; Ucko and Rosenfeld 1967; Vallois 1962). Some of these clay markings, for instance in Tuc-d'Audoubert (Bégouën and Breuil 1958), are thought to have been occasioned by infants as young as three years. The great majority appear to represent children and adolescents ranging from perhaps nine to fifteen years of age, i.e. they reflect the data derived from most finger flutings, which centre on the same age group; they are slightly lower than the ages deduced from hand stencils; and they are possibly slightly higher than those of fingertip paint prints.

Among the most recently reported hominin tracks from caves with Pleistocene rock art are those from Chauvet Cave (Chauvet et al. 1995; Clottes 2001). There are hundreds of footprints on the floor of this extensive cave system, as well as a substantial number of animal tracks, such as those of bears and wolves (Garcia 2003). One long set of human tracks, extending for almost 50 m and leading to the Salle du Crâne, is considered to have been made by a boy of 1.35 to 1.40 m height. The author's examination of these footprints suggests that this may have been a robust *Homo sapiens* ('Post-Neanderthal') rather than a fully gracile specimen (Bednarik 2007a, 2007b).

This is not the first time human tracks have been attributed to Neanderthaloids. Pales (1954) has suggested the same for surface footprints in the Italian cave Grotta della Basura. More recently, footprints of Neanderthal children aged between two and four years were excavated in a classical Mousterian layer near the base of the early Würm deposits of Theopetra Cave near Kalambaka, central Greece (Facorellis et al. 2001; Kiparissi-Apostolika 2000). This is overlain by an intermediate industry, developing from a Levallois-Mousterian to the inclusion of Upper Palaeolithic blades. The lowest carbon isotope date from the 4.2-m-deep deposit, near the infant tracks, is >48 ka BP, suggesting that the children can safely be assumed to have been Robusts.

Who created Palaeolithic cave art?

This distinctive pattern of the surviving evidence invites several comments. Most rock art or other palaeoart cannot be securely attributed to specific

age groups, but there are some types of art-like remains that present adequate forensic evidence to permit such attribution securely. Most important and unambiguous among these, in the context of European Pleistocene palaeoart, are (1) finger flutings; (2) prints and stencils of body parts; and (3) the fingertip stamp marks made with paint on certain portable objects. There are other situational conditions (e.g. aperture size of only available access to a site, or widths of wet-applied pigment lines drawn with fingers) that may also permit some deductions concerning body size. As shown above, all three types of palaeoart forming the principal indices for the ages of palaeoartists provide strong and consistent evidence that in the great majority of cases the artists were young people. This pattern seems to be so universal that only one possible variable could have distorted it, the taphonomy of palaeoart forms (Bednarik 1994a). In particular, one could argue that if the chance of preservation were a function of cave depth or remoteness from the entrance, as is very probably the case, there might be a bias in favour of children if they were more inquisitive or adventurous in exploring the deeper parts of cave systems. That may well apply especially with finger flutings, but it seems unlikely that it would result in the very strong empirical bias for juvenile markings evident in the surviving record. Moreover, it would not apply to the fingertip markings on portable plaques, which are usually found at occupation sites.

Therefore the available record indicates a distinct bias in favour of children's markings, among those types of surviving palaeoart that permit reliable determination. Moreover, there is a similarly strong bias in the ages indicated by the surviving human tracks in caves visited by Pleistocene people, which could be considered to be subject to very similar location-specific taphonomic qualifications. While it is obvious that none of the footprints on cave floors need to necessarily relate to any of the cave art of such sites, it is equally obvious that there would be expected to be a much greater number of adult footprints if adults had significantly contributed to the 'art'. On the basis of statistical probability or taphonomic logic it appears therefore extremely unlikely that the pattern is merely a sampling phenomenon, or the result of taphonomic distortion of the record.

Unless we were to postulate that *only* those forms of palaeoart permitting age estimates of the artists were for some cultural reason (or to intentionally mislead researchers?) made by children and adolescents, which logically seems to be beyond reasonable probability, we need to accept that there is a very high probability that other palaeoart forms were also often the work of young people. This would be supported by the sizes of footprints observed on cave floors. The alternative hypothesis, that all or most other Pleistocene palaeoart in Europe and cave art in Australia (known at only 45 sites; Bednarik 1990) are the preserve of adults, and are related to complex and deeply meaningful

rituals, has no empirical support. It seems to be the result of faulty ethnographic analogies, contrived and wishful thinking and the development of capricious hypotheses. To operate effectively, science, on the other hand, requires falsifiable propositions.

The hypothesis presented here offers such a testable model. The proposition that most European Pleistocene palaeoart is the work of children, and especially youths, can be readily refuted *by presenting sound evidence that a substantial portion of it must have been made by adults*. At present we have significant evidence to the contrary, therefore our interpretational notions should *provisionally* assume that we are dealing largely with children's art. While the above does not prove that children made any palaeoart other than the cited examples (e.g. the labour-intensive production of some of the high-relief sculptures near daylight, such as at Cap Blanc and Roc-aux-Sorciers, or cases undeniably involving extensive scaffolding, are among the stronger candidates of 'adult art'), it needs to be accepted that, at present, we lack evidence that any *significant* component of this corpus was made by adults. The observation that much ethnographic rock art elsewhere is the work exclusively of adults is as irrelevant to the issue as is wishful thinking.

Discussion

Of considerable relevance to this issue is the recent discovery that children of a traditional tribe of the Andaman Islands, the Jarawas (Sreenathan et al. 2008) — whose graphic art is otherwise entirely noniconic — have no difficulties producing excellent figurative drawings when prompted (Fig. 5). There is a possibility that figurative art was in some traditional cultures considered the preserve of children, which may explain a number of factors. For instance it is striking that almost all known graphic palaeoart of Pleistocene Asia is noniconic (and very similar to Jarawa art), but there are just two tantalising exceptions known in the entire continent (Bednarik 1994b), indicating that at least *some* of these ancient societies *did* know how to draw figuratively. The question then arises: why did they not develop a universal use of the type of figurative art found in the Palaeolithic cave sites of south-western Europe?

One possible answer implied by the above proposition is that this cave art survived because it occurs in deep limestone caves, which were frequented not for purposes connected with ceremonial or shamanistic activities, but which were explored by adolescents in much the same way as inquisitive young people behave today. Today's delinquent suburban graffiti artist may then be rather like a modern counterpart of the Palaeolithic cave artist. It should also be remembered that many of the cave art occurrences were re-discovered by modern adolescents, precisely because young people tend to be inquisitive and caves seem to hold special attractions for them.

Elsewhere it has been proposed that, contrary

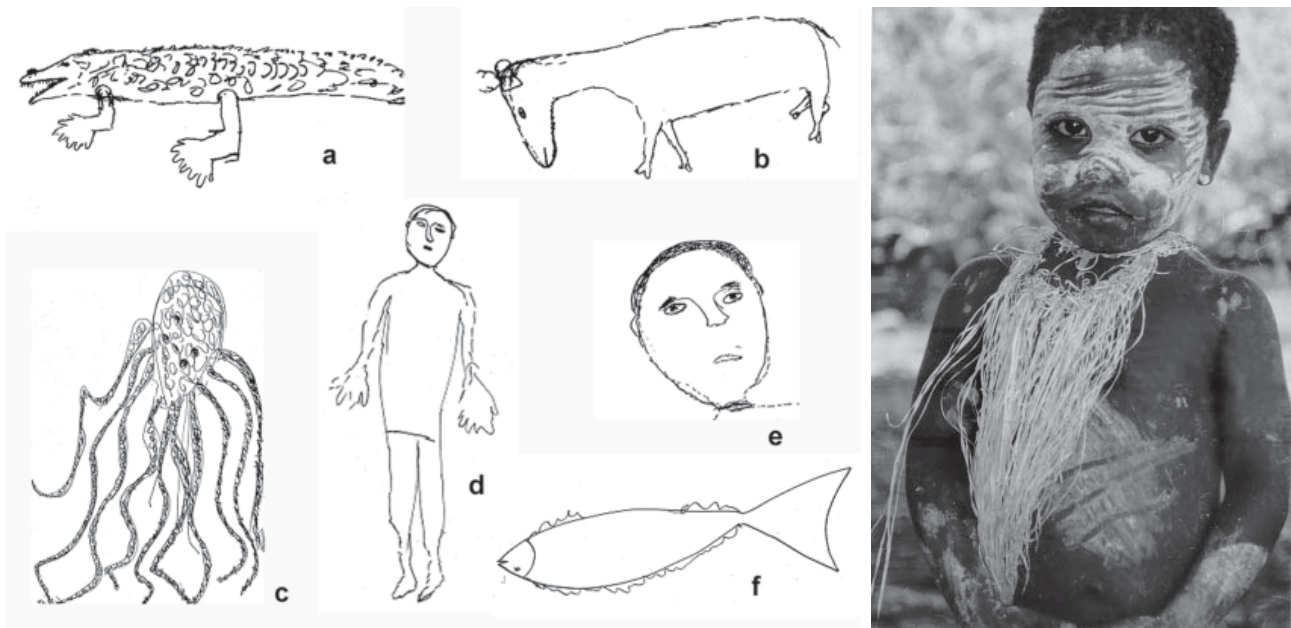


Figure 5. On left, samples of iconographic drawing ability of Jarawa boy, spontaneously produced despite conditioning by purely non-iconic tradition; on right, Jarawa boy; note geometric body art.

to what has been the dogma for over a century of Palaeolithic art research, non-figurative art is cognitively more complex than figurative (e.g. Bednarik 2003: 412). Whereas in figurative or iconic symbolism, the connection between referent and referrer is purely via iconicity — a relatively simple cognitive factor building on visual ambiguity and detectable even by animals other than humans — the symbolism of non-iconic art is only navigable by possessing the relevant neural ‘software’ furnished by culture. Figurative art results from a deliberate creation of visual ambiguity (Bednarik 2003: 408, 412) and is therefore based on lower levels of perception and neural disambiguation than non-figurative art. If we free ourselves from the naive evolutionism that decrees non-figurative (e.g. ‘geometric’) motifs are more primitive, and that figurative images are the more developed art form, we can appreciate that this logical error of scholarly contemplation may have prompted a whole chain of false deductions dominating much thought about Palaeolithic art. It may have prevented us from realising that figurative art is the less developed, and may in the distant past have been perceived as ‘juvenile’, or as a more ludic form of graphic expression.

As this perspective is developed further, it opens up new vistas of possible explanations of Pleistocene cave art. Most importantly, it raises the possibility of combining this hypothesis with the dictum of taphonomic logic that the reason why we have Franco-Cantabrian cave art is because caves are the only European environment facilitating the survival of a fairly large corpus of rock art from such remote times (elsewhere, especially in Australia, Pleistocene rock art survived essentially in arid conditions, in the form of

deep petroglyphs on very weathering-resistant rock, or under mineral accretions). Thus the Palaeolithic cave art is merely a taphonomic remnant phenomenon (Bednarik 1994a), and the apparent authorship of much of it by children adds yet another dimension to the possible explanation of this much-discussed rock art corpus. In fact, this level of explanation, based on the data and on logic rather than wishful thinking and fantasies, demands such a radical overhaul of our models that it involves a significant paradigm shift.

This is not intended to exclude the possibility that a certain portion of Palaeolithic rock art was created by adults; there is certainly no proof that it was exclusively the work of young people. But what this discussion does show is consistent with the observation that most of the explanatory endeavours offered for this famous European corpus since the late 19th century have in recent years been rejected in favour of more realistic, and scientifically better based notions. The Upper Palaeolithic cave art of Europe *is not* an art form endemic to caves — its location is merely a product of taphonomic processes. It *is not* a record of the ‘origins of art’ — much earlier palaeoart exists elsewhere, and mostly outside of Europe. In fact there is far more Middle Palaeolithic rock art surviving in the world than Upper Palaeolithic, and almost all of it occurs in Australia — yet no scholar has investigated this Antipodeans corpus with even remotely the zeal lavished on European Upper Palaeolithic art. Another mythology attached to the European body is that it marks the arrival of the ‘mythical moderns from Africa’ — one of the most incredible recent fads in world archaeology (Bednarik 2008). On the basis of the current evidence it can only be assumed that the Aurignacian, the technological ‘tradition’ to which the

'invention of art' has widely been attributed, is in all probability a tradition by the so-called 'Neanderthals', a taxonomic entity of robust *Homo sapiens* from Europe and western Asia. In other words, none of the core 'truths' about the Pleistocene cave art of western Europe stands up to any sustained scientific scrutiny. If we add to this state of affairs the ever-present problems of correct attribution of individual occurrences of this art (many much younger sites have been attributed to it; see e.g. Bednarik 1995b), and the now falsified claims of specialists to be able to date this rock art simply by contemplating its 'style' (Bednarik 1995a), or the slipshod way in which claims of spectacular new discoveries are sometimes presented (e.g. Bednarik 2005), we can see that no part of the received knowledge in this field should be accepted at face value. The entire explanation of this corpus is riddled with problems, and all of the evidence presented to date needs to be questioned relentlessly. Most of it consists of pure conjecture and mythology. If most of the Pleistocene rock art of Europe has been made by juveniles, as proposed on the basis of the available empirical evidence, one further reason for re-assessing this material can be added to the problems already faced by traditional explanations for Franco-Cantabrian cave art.

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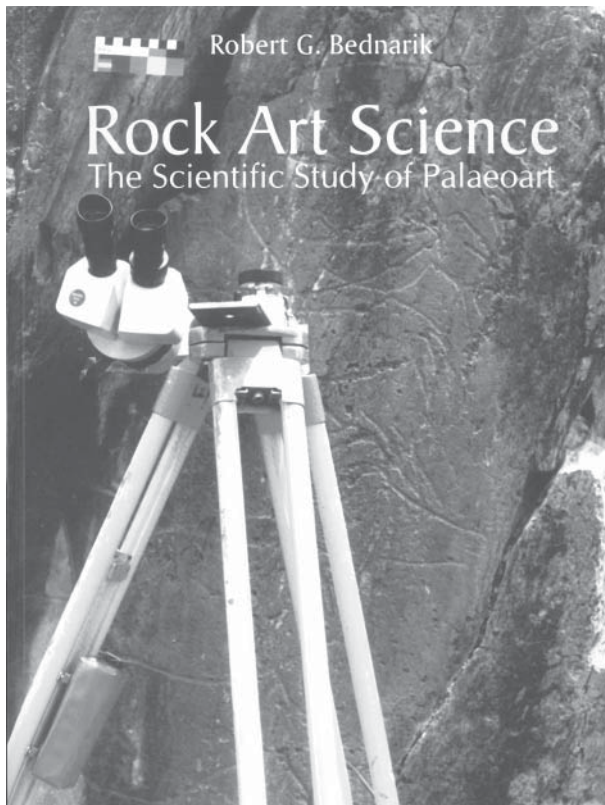
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