Containing Death in the Paleolithic: Hot and Cold Red.

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"*...the beginning of intentional burial may be seen as a kind of victory of the genus Homo over death*" *(Smirnov, 1989, 200).*

Burial

Burial contributes nothing in the material world of food, defence or procreation. Yet in the sphere of ideology, burial is the longest surviving tradition in human culture.

Placed out of the reach of scavengers, in a pit cut in the ground, humans were first buried some one hundred thousand years ago. Hence the notion "… and unto dust shalt thou return" (Genesis 3, 19) long preceded the scripture. The burial reveals the oldest documented concern for human dignity. Various symbolic objects were placed with some of the oldest burials: animal head parts (skull, jaw, and antlers), adornments made of sea shells (Bar-Yosef Mayer 2005) and fragments of red ochre (Hovers *et al.* 2003). The corpse was placed in a flexed, foetus position. This position, the pit/womb and the grave goods apparently render death as a transition between two states of being. Thus by the symbolic act of burial, the finality of death is denied (Smirnov 1989; Ronen 2012). Some of the animals placed in graves were of outstanding size (McCown 1937, 100; Vandermeersch 1970) which would suggest specialized hunting expeditions, indicating in turn a community involvement in the act of burial.

Fire

Fire and death are linked from the earliest burials. Hearths occur in numerous Palaeolithic burials. The link may perhaps stem from the human manipulation of fire. Fire moves relentlessly, consumes food, emits sounds and generates heat. Fire seems alive, the ultimate opposition to the cold and motionless death. Fire is the only form of life humans can kill and revive at will. This manipulation could have brought awareness of the life-death duality, awareness that gave rise to the act of burial. Fire continues to symbolize life in our days in the form of eternal flames or "memorial candles". "…it is likely that some of the hearths recorded in the vicinity of burials may also be considered as associated features" (Smirnov, 1989, 216). It is suggested that the associated feature was naively intended to warm and cure the dead. The red pigment smeared on the body could have helped.

The control of fire and the awareness of death are strictly human monopolies. Both constitute the formidable divide between humans and the non-human world. Both form the conflicting poles of human cognition: Fire made humans the mightiest creatures on earth while the awareness of death revealed their fragility. Simultaneously almighty and fragile, there lies the human paradox.

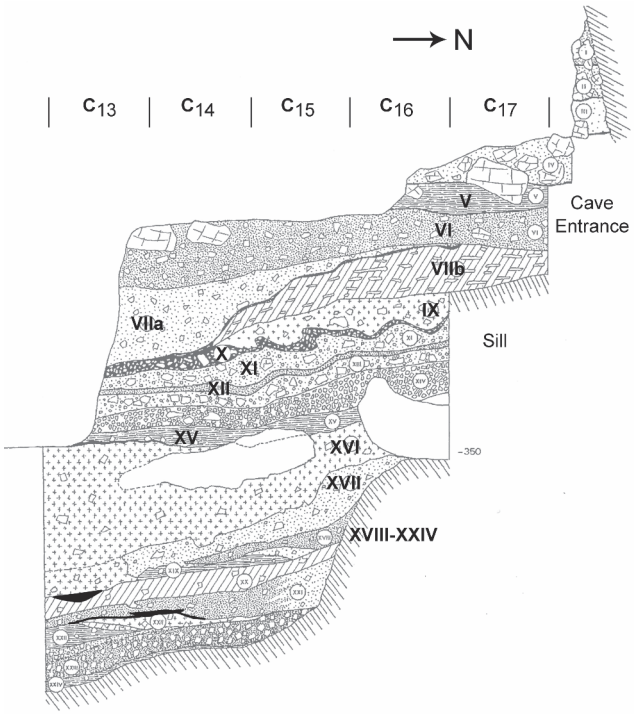

Figure 1: *cross section of Qafzeh terrace (modified from Vandermeersch 1981, fig. 6). The upper layers VIII-XVI show human occupations with no inhumations and a low frequency of hearths. The lower layers XVII-XXIV had numerous human burials accompanied by numerous hearths, ocher fragments and sea shells (Hovers* et al. *2003).*

SW Asia

The oldest burials presently known were found in Southwest Asia. The Neandertaloid burial pit at Tabun cave dated 130-100 ky ago (Grün *et al.* 2005) contained abundant ash remains (Garrod and Bate 1937: 67).

Similarly at Skhul, fire was indicated in the burial layer by abundant burnt flints, charred animal bones and charcoal fragments (McCown 1937: 95). In the

Qafzeh necropolis (Neuville 1934; Vandermeersch 1981), the burials were surrounded by ashes (Vandermeersch 1981; Hovers *et al.* 2003: 500)). A hearth was lit a short distance above the Kebara 2 burial and some bones of the skeleton were burnt (Bar-Yosef *et al.* 1992; Defleur 1993: 266).

Qafzeh

Symbolic artefacts (ochre, sea shell) and hearths are confined spatially and stratigraphically to the presence of skeletal remains (Vandermeersch 1981; Bar-Yosef and Vandermeersch 1993; Hovers 2006, 39). Unfortunately, while the position of skeletons was precisely recorded in the Qafzeh necropolis, the hearths became blurred by heavy post-depositional erosion and their precise position could not be measured (Vandermeersch, pers. comm. 20.7.2014). However, ochre fragments were spatially contained solely in the cemetery zone of Qafzeh. It seems that hearths and ash layers are abundant in proximity of burials.

Dederiyeh

Two 2.5 years old Neanderthal children were buried in pits dug in the cave floor. No hearth or ochre was found near the two Neanderthal infants burials in Dederiyeh Cave (Syria) (Akazawa and Muhesen 2002).

Europe

Intentional Paleolithic burial was recognized for the first time in the French cave site La Chapelle-aux-Saints (Corrèze). (Bouyssonie and Bardon, 1909). The corpse of a Neanderthal old man was placed in a pit 1.4 x 1.0 x 0.3 m excavated (or modified) by humans. A hearth was found 1 m from the corpse (Fig. 2). Ochre fragments were also discovered near the corpse (Bouyssonie et Bardon, 1908, 517). On the west side of the pit, between the pit and the cave wall there were two hearths dug in the soil. No object was found in the hearths but red burnt soil (Bouyssonie et Bardon, 1908, 517). One hundred years later, new investigations confirm a deliberate excavation of the burial pit (Rendu *et al.* 2014, 81-86) and an intentional Neanderthal burial at La Chapelle-aux-Saints. The corpse was covered and protected quickly, as shown by the absence of carnivore gnawing on the human bones and their different coloration and preservation compared to the faunal bones (Rendu *et al.* 2014).

Roc de Marsal

In the cave of Roc de Marsal a 3 year-old infant was buried in a pit 90 x 70 cm. The pit was shown to be a natural depression (Couchoud, 2003; Goldberg *et al.* 2013). The good preservation of the fragile young bones indicates, however, a rapid covering of the corpse, hence a deliberate interment. No hearth Ochre accompanied this burial like in Dederiyeh. Perhaps very young infants were not given the hearth and ochre treatment (as is true for the Dederiyeh infants as well).

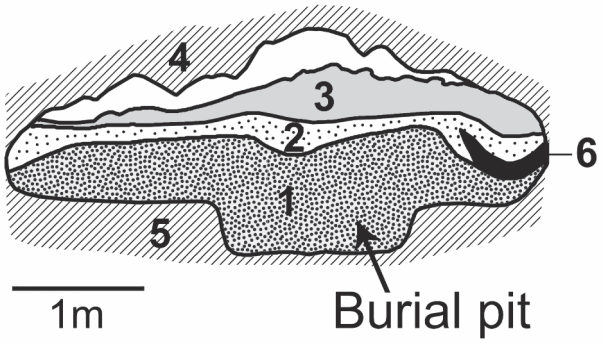

Figure 2: *The burial site La Chapelle aux Saints, showing the artificial pit and the related hearth (modified from Bouyssonie and Bardon 1908).*

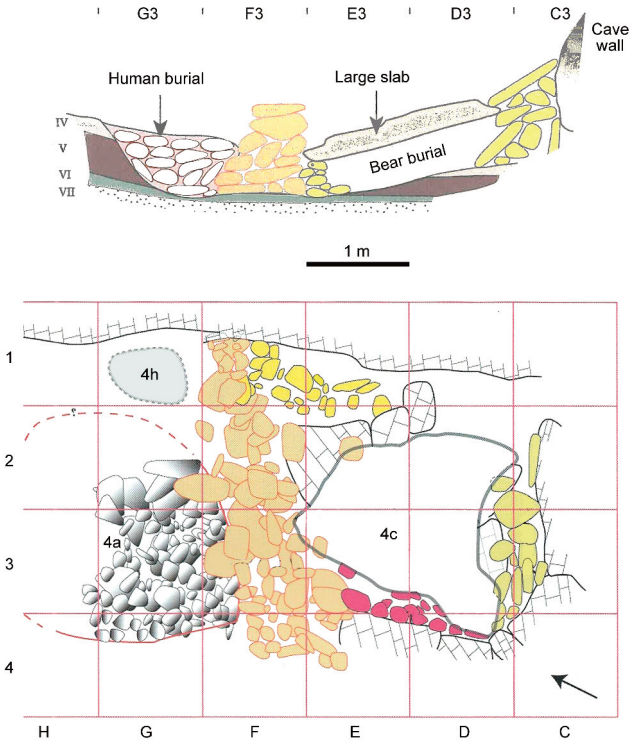

Figure 3: *The burial in Regourdou, plan and section (modified from Bonifay et al., 2007 figs. 7 and 8). A human burial adjacent to a bear's burial. Hearth 4h relates to the human burial.*

Regourdou

Deposits of Bear bones (=burials?) were found in various layers of Regourdou. The human burial is located in layer 4, with scant lithic artifacts, indicating that it was not a residential layer (Bonifay 1964). Similarly in the burial cave of Regourdou (France), an elaborate burial was found covered by

a pile of stones (Bonifay *et al.* 2007). A hearth was located on top of the stone structure; about 1 m above the skull (Bonifay 1965; pers. Comm. 29.9.2014) and another hearth was erected near the cave wall 1.6 m away from the corpse (Fig. 3).

Eastern Europe

In the major burial sites Dolni Vestonice and Pavlov the burials were shallow, close to the living surface. Some corpses were sheltered beneath large mammoth bones (Trinkaus and Svoboda 2006, 15, 16). In the triple burial DV 13-15 the bodies were lying practically on the surface of the soil and were protected apparently by a covering (wooden) structure (Klima 1963).

DV 3 was strongly flexed below a layer of limestone debris, clay and charcoal. The upper part of the body and especially the skull were covered withocher (Trinkaus and Svoboda 2006, 18).

DV 4 is a fragmented skull in a hearth, ashes and red-burnt clay. The skull is incompletely burnt (partial cremation?) (Trinkaus and Svoboda , 2006, 19). Nearby is an area with extensive charcoal, of which it is not clear whether it is part of the burial ceremony or later.

In the triple burial, DV 13 - 15, no. 13 located on the left, lies on his back with both arms directed to no. 15's pelvis. No. 15 exhibits abnormal features and lies on the back. No. 14, on the right, lies on its belly. This is the last individual to have been placed in the grave. The three were not buried in a pit, but laid unprotected on the living surface, probably covered by some superstructure made with wooden logs which subsequently burnt down. The three bodies were associated with a large quantity of charcoal fragments and a number of patches of reddened earth. Ochre formed a "compact plastered Crust" on the three skulls and lumps of ochre were around the neck of no. 13. Powdery and compact lumps of ochre were found all around the three, especially on the skulls and on the pelvis of no. 15. A large hearth was lit about 1 m west of the burial area. Nos 13 and 15 are males but the central corpse, no. DV 15 is of unclear gender. It has anatomical anomalies beside normal features and may have been the focus of the triple burial and its symbolism (Formicola *et al.* 2001).

DV 16, male (+45 years), is the oldest among the Pavlovian culture human remains. A hearth 1 m diameter and 0.3 m thick was located 50 cm from the corpse's ventral side (Trinkaus and Svoboda 2006, 24). The hearth contained limestone fragments to enhance (and prolong?) heat radiation. Ochre was applied to the skull and pelvis of DV 16 (Trinkaus and Svoboda 2006, Fig. 4.12). (Fig. 4). The spatial pattern of DV16 burial is similar to that of Regourdou (see above).

K.J. Maska excavated in Predmosti between April 1889 and July 1894 (Absolon and Klima, 1977). He noted hearths, fine charcoal and ashes that accompanied the great majority of human remains and some animal remains as well. Maska did not note ochre, which possibly remained unnoticed by him.

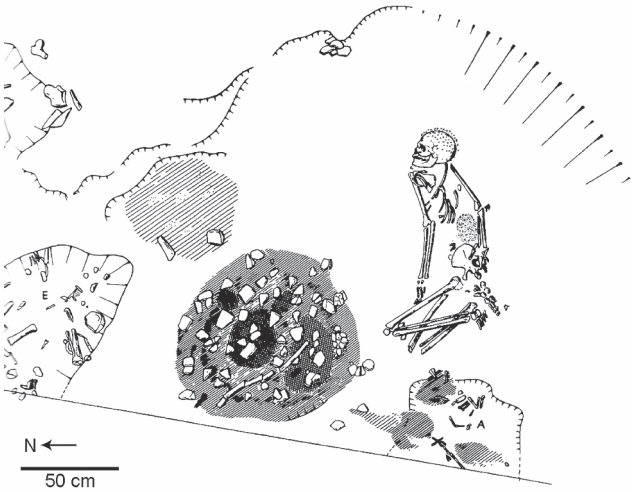

Figure 4: *The burial of Dolni Vestonice 16 (modified from Trinkaus and Svoboda 2006, 23). A hearth 1 m in diameter ca. 50 cm from the corpse. Red ocher was applied to the head and pelvis of the deceased.*

Discussion

Recent studies indicate a preference to bury handicapped and abnormal individuals: thus the sick old man of La Chapelle aux Saints (Rendu *et al.* 2014), the buried population of Dolni Vestonice and Pavlov (Oliva, 2014, 49) with the abnormal individual in the triple burial (Formicola *et al.* 2001), and the enigmatic adolescent Qafzeh 11 (Coqueugniot *et al.* 2014).

A frequent association of fire with burial was demonstrated. In addition, powder of red ochre was sometimes smeared on the corpse, most frequently on the skull and the pelvis. The same situation, hearths and sometimes red ochre, may have involved animal bone concentrations ("burials") as well. The reason for this pattern of burial is not clear. The hearth may have served to prepare a ceremonial meal. Alternatively, it is suggested that the hearth was perhaps aimed to warm and cure the deceased. The two possibilities are not mutually exclusive. The red ochre apparently supported the operation guided by the hot red fire.

Acknowledgements

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References

Absolon K. & Klima B. (1977) - Predmosti ein Mammutjagerplatz in Mahren. *Fontes Archeologiae Moraviae* VIII:38-51.

Akazawa T. & Muhesen S. (2003) *Neanderthal Burials: excavations of the Dederiyeh cave, Afrin, Syria.* Auckland, KW.

Bar-Yosef Mayer D.E. (2005) - The Exploitation of Shells as Beads in the Palaeolithic and Neolithic of the Levant. *Paleorient* 31:176-185.

Bar-Yosef O. & Vandermeersch B. (1993) - Modern Humans in the Levant. *Scientific American* 268:94-99.

Bar-Yosef O., Vandermeersch B., Arensburg B., Belfer-Cohen A., Goldberg P., Laville H., Meignen L., Rak Y., Speth J.D., Tchernov E.,Tillier A-M., Weiner S. (1992) - The Excavations in Kebara Cave, Mt. Carmel. *Current Anthropology* 33:497-550.

Bonifay E. (1964) - La grotte du Regourdou (Montignac, Dordogne). Stratigraphie et industrie lithique mousterienne. *L'Anthropologie* 68:49-64.

Bonifay E. (1965) - Un ensemble rituel moustérien à la grotte du Régourdou (Montignac, Dordogne). *Actes du IVème Congrès de l'UISPP*, Rome, vol. I, p. 136-140.

Bonifay E., Vandermeersch, B. Couture C., Panattoni R. (2007) - La sepulture neandertalienne du Regourdou (Montignac-sur-Vezere, Dordogne). *Centre d'Etude et de Recherche sur les Lacs, Anciens lacs et Tourbieres du Massif-Central,* Memoire 4.

Bouyssonie A.J., Bardon L. (1909) - Decouverte d'un squelette humain mousterien a la Bouffia de la Chapelle-aux-Saints (Correze). *L'Anthropologie* 19:519-525.

Coqueugniot H., Dutour O., Arensburg B., Duday H., Vandermeersch B, Tillier A.-M. (2014) - Earliest Cranio-Encephalic Trauma from the Levantine Middle Palaeolithic 3D Reappraisel of the Qafzeh 11 Skull, Consequences of Pediatric Brain Damage on Individual Life Condition and Social Care. *PlOSOne* doi.org/10.1371/journal.pone.0102822.

Couchoud, I. (2003) Processus geologiques de formation du site mousterien du Roc de Marsal (Dordogne, France). *Paleo* 15:51-68.

Defleur A. (1993) - *Les sépultures moustériennes.* Paris, Editions CNRS.

Formicola V., Pontrandolfi A., Svoboda J. (2001) The Upper Paleolithic triple burial of Dolni Vestonice: Pathology and funerary behavior. *Amer. J. Physical Anthropology* 115:372-379.

Garrod D.A.E. & Bate D.M.A. (1937) - *The Stone Age of Mount Carmel,* Vol. I. Oxford Clarendon Press.

Goldberg P., Aldeias V., Dibble H., McPherron S., Sandgathe D., Turq A. (2013) - Testing the Roc de Marsal Neandertal "Burial" with Geoarchaeology. *Archaeological and Anthropological Science,* [Online] Available from: doi10.1007/s12520-013-0163-2 [Accessed 6th January 2017].

Grün R., Stringer C., McDermott F. (2005) - U-series and ESR analyses of bones and teeth relating to the human burials from Skhul. *Journal of Human Evolution* 49:316 -34.

Hovers E. (2006) - *The Lithic Assemblages of Qafzeh Cave.* Oxford, Oxford University Press.

Hovers E., Ilani S., Bar-Yosef O., Vandermeersch B. (2003) - An Early Case of Color Symbolism. Ochre Use by Modern Humans in Qafzeh Cave. *Current Anthropology* 44:491-522.

Klima B. (1963) - *Dolni Vestonice 1947* - 1952. Prag, Tchekoslovak Academy Press, p. 143-147.

McCown T.D. (1937) - Mugharet es Skhul. Description and Excavations. In: D.A.E. Garrod, D.M.A. Bate (eds.) *The Stone Age of Mount Carmel,* Vol. I. Oxford, Clarendon Press, p. 91-17.

Neuville R. (1934) - La Prehistoire de Palestine. *Revue Biblique* 43:237-259.

Oliva M. (2014) - Dolni Vestonice I (1922-1942). *Anthropos* 37 (N.S. 29).

Rendu W., Beauvalc C., Crevecoeurd I., Bayled P., Balzeaue A., Bismuth T., Bourguignong L., Delfourd G., Faivred J.-P., Lacrampe-Cuyaubèrec F., Tavorminac C., Todiscoj D., Turqd A., Maureilled B. (2014) - Evidence supporting an intentional Neandertal burial at La Chapelle-aux-Saints. *Proc. Natl. Acad. Sci. U.S.A.* 111:81-86.

Ronen A. (2012) - The oldest burials and their significance. In: S.C. Reynolds & A. Gallagher (eds.), *African Genesis: Perspectives on Hominin Evolution,* Cambridge, Cambridge University Press, p. 554-570.

Smirnov Y. (1989) - Intentional Human Burial: Middle Paleolithic (Last Glaciation) Beginnings. *J. World Prehistory* 3:199-233.

Trinkaus E. & Svoboda J. (2006) - *Early Modern Human Evolution in Central Europe.* The People of Dolni Vestonice and Pavlov. Oxford University Press, Oxford.

Vandermeersch B. (1970) - Une sepulture mousterienne avec offtrandes decouverte dans la grotte de Qafzeh. *Comptes rendus de l'Academie des Sciences* 268:298-301.

Vandermeersch B. (1981) *Les hommes fossils de Qafzeh (Israel)*. Paris, CNRS Editions.