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PREHISTORIC ROCK ART AND LANDSCAPE: THE OUTCROPS AND ITS FORMS WERE CERTAINLY NOT SIMPLE CARVING SURFACES

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Abstract

The aim of this paper is to focus the importance of dialog between outcrops morphology and prehistoric motifs engraved or inscribed in them. Altogether, these elements form a well-adapted methodology that contributes to interpretation of rock art and prehistoric landscapes.

The theoretical framework was based in the landscape assumptions proposed by C. Tilley (2002): "physical" world is not simply made of inert things, but full of significant properties that matter to its inhabitants. In this sense, outcrops and their forms were not simple surfaces to carve, but acting agents that added meanings to these rock art places and stories to tell for posterity.

The rock engravings of Crastoeiro (Mondim de Bastos) and Lage dos Sinais/Monte do Olheiro (Barcelos) form the first and second case studies. In both cases there appears to be an inter and deep relationship between the topography of the engraved outcrops and the topography where they are located. By the arrangement of the motifs in the outcrops, both cases evidence intentional will to influence how to look to the slopes and ridges of both hills, probably of great symbolism during the past.

The third case study is Santo Adrião, in the parish of Âncora (Caminha). In this case, either the orientation of the slope of the outcrop and the engraved weapons indicate a narrative of blind and passive deposition of weapons.

A fourth case study, which clearly illustrates these assumptions, is Fornelos, in the parish of Carreço (Viana do Castelo). In different panels, several equines,

horsemen, a dog, and an anthropomorphic were engraved. The space chosen for the carvings of these signs, the orientation of motifs, the topography of the outcrop and its coloration create an impressive scenic effect for its audience. At the same time, all these elements appear to tell a real or a mythical narrative, where horses and horsemen seem to have travelled a certain path - narrowed, poorly lighted, and limited – from where only a few would return.

A fifth case study consists in the different outcrops engraved with footprints identified at Monte de São Romão (Guimarães). Here, the orientation of footprints, and their dialogue with the outcrops orientations suggest certain paths, related to some kind of symbolic interpretation.

During the difficult task of interpreting past landscape, it is important to think in outcrops not as simple carving surfaces, but as active elements in the surroundings, already bearers of stories and senses in the landscape, resulting from the complex social structures and, at the same time, acting as actors in between that structure.

Keywords: Geoforms; Rock Art motifs; Methodology; Prehistoric landscapes.

1. Introduction

The aim of this paper is to focus the importance of dialog between outcrops morphology and prehistoric motifs engraved or inscribed in them as a study methodology to achive rock art interpretation. Altogether, in the past these elements contributed to the construction of prehistoric landscapes.

The theoretical background of this work was based in the landscape assumptions proposed by Christopher Tilley (2002), where "physical" world is not simply made of inert things, but full of significant properties that matter to its inhabitants. The author mentions how world can be perceived as animated, alive, active, depending from the level of interaction established between body and surrounding things (Tilley 2004). In this sense, and following the works of Richard Bradley (2009), Chris Gosden (2009), or Chris Scarre (2009), inert matter can be considered "alive". As such, things can be seen as, and treated like people, as entities that can and make difference (Tilley, 2004).

Richard Bradley (2000) points out that it is common to relate some natural places with supernatural powers. Perhaps that is why some of these natural places preserve certain legends and beliefs, like the curative or destructive properties of the waters, or the presence of magical or odd creatures living inside or within the outcrops.

As Christopher Tilley (2004) and Julian Thomas (2006) argue, landscape we observe is always unique, and reflects our social, cultural and ideological background. However, as suggested by Marshall Sahlins (1988), unlike time, space can be reconstructed, reinvented, reinterpreted, or even manipulated. In this sense, outcrops and their forms were not simple surfaces to carve, but acting agents that added meanings to these rock art places, and stories to tell for posterity.

So, and according to several authors, in the "worlds" of many small-scale societies or pre-modern societies stones act as anchoring historical and mythical events, often linked to actions of specific or generalized ancestors. They can hold considerable cosmogony and spiritual significance, and be powerful and potent social agents in their own right (Pollard and Gillings, 2009: 30).



Figure 1.A - (Top) Seita, Ristinna (cf. Korpela, 2008); 1.B – (bottom left) Sami man praying in front of a Seita stone (cf. Picart 1723-25); 1.C – (bottom right) Seita21

That is the case of the native people from North America, where supernatural, so called *Manitou*, was seen to inhabit rocks and boulders, sometimes referred as 'spirit' or 'image' stones. Some *Manitou* stones and effigies can be dated back many millennia, as documented by Jesuits and French explorers during the eighteen and nineteen centuries. In some cases, it was said that the spirit of an ancient chief or some other person resided in rocks (Spence, 1994: 87). Those rocks were always associated with a special place, *e.g.*, the mouth of a river, hilltops, springs, rapids and water falls, creeks, straits, river bends and drainage divisions (Bender, 2007, 2008).

At the Nordic Europe, in the area of the Sámi people, we also have many examples of certain natural formations, such as outcrops (Figure 1), stone statues, trees or dead trees, where spirits inhabited and where some cults where perpetrated, usually named *seita* (Korpela, 2008). During the seventeen-century these were destroyed, in order to Christianise these societies.



Figure 2. São Martinho de Dume's representation in Códice Albeldensis, c. 976 (Library from the Monastery of San Lorenzo de El Escorial, Madrid).

At the North of Iberia, cult to outcrops and their features as a form of primitive animism was also a reality prior to Christianity, and much of these practices lasted to present day, although with smaller expression. Referring to these rites, the bishop from S. Martinho de Dume (Braga) during the sixty century (Figure 2), in its book entitled *De Correctione Rusticorum*, considers is mission to fight against the cults to nature, such as a watersource, crossroads, outcrops, days of the week, and others. He has argued that to consider as divine, something of the nature, as a source, a crossroads or day of the week, is a mistake. Even considering that S. Martinho de Dume's statements do not describe accurately the cultural ambiance influenced by the region of Braga during the six century in the North of Portugal (Meirinhos, 2006), they still are relevant. In fact, they allow us to capture the animistic background of NW Iberia during that phase.

Curiously, even in the sixteen-century (1563), the Constitutions of Bishopric from Lamego refer that "we defend and order that processions do not went to hills or outcrops, but only to churches" (Braga, 1885).

On the other hand, Anthropology works mention Pedras Leitais (stones that give milk) at the North of Portugal, as are known examples in the council of Vila Nova de Famalicão (Braga), at the parish of Reguião, near the chapel of S. João da Pedra Leital (Costa, 1712), or in the council of Póvoa de Lanhoso (Braga), parish of Frades (in the area close to the chapel of S. Mamede). In these outcrops, women sucked in protuberances similar to nipples in order to produce or increase milk production during the breast-feeding. At the council of Penafiel (Porto) it is known an outcrop where women usually rub their body parts in order to become fertile. It is called "Penedo da Barriga". Respecting to this, Santos Júnior (1940: 371) writes that in limits of the parish of Rio de Moinhos, council of Penafiel, the priest José Monteiro de Aguiar refers that "there is an outcrop [with nothing peculiar], where pregnant women at the eight month of gestation rub their belly, in order to have a good child-birth". "Yet, at 70 or 80 year, s all or almost all the pregnant women from the parishes of Rio de Moinhos, Boêlhe, and even from other neighbouring villages, rubbed their belly in the mentioned outcrop".

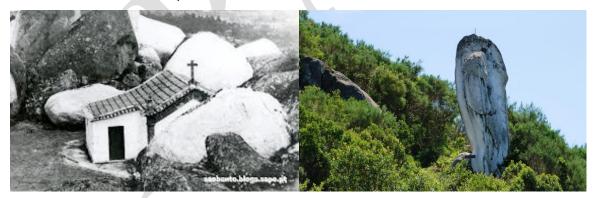


Figure 3.A - Painting rocks as S. Bento das Peras, Vizela²⁰; 3.B - Pedra Alta, Mondim de Basto²¹.

At Cruzeiro, Monte da Guia, council of Esposende, there are traces of a cult to magical rocks and outcrops that hybridized with the cult to Nossa Senhora da Guia, which still endures in the painting made to certain rocks during

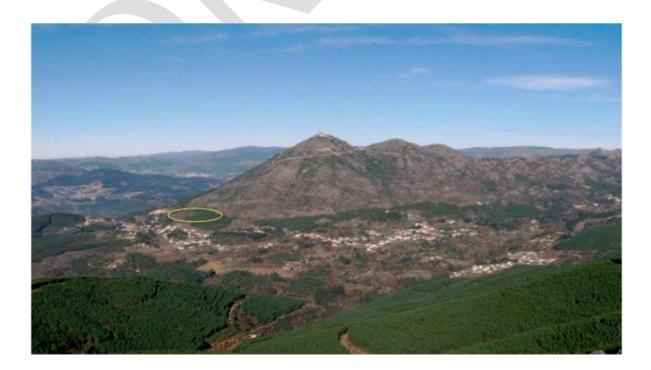
²⁰ Downloaded from http://saobento.blogs.sapo.pt.

²¹ Downloaded from https://pesnostrilhos.files.wordpress.com/2014/05/p1020347.jpg.

propitiatory rites (Serén, 2012). In S. Bento das Peras, council of Vizela, is also usual to paint the outcrops surrounding the chapel in white (Figure 3.A). The same occurred at Pedra Alta ("tall stone"), in Monte da Senhora da Graça, council of Mondim de Basto (Dinis, 2009) (Figure 3.B)Taking into account the several ethnographic mentioned examples, and the adopted theoretical premises, to afford an interpretative methodology concerning the role of rock art in the construction of prehistoric landscape, it was our option to study places with rock art, valuing both its physical context and the outcrops shapes in interaction with the inscribed motifs. For that, 6 case studies were conducted, some of which from distinct chronologies, although generically dating back from the Neolithic to the Iron Age, that is, between the 5th/4th and the 1st millennia A.C.

2. Case studies

The first two case studies are the rock engravings of Crastoeiro, in the council of Mondim de Bastos, and Lage dos Sinais/Monte do Olheiro, in the council of Barcelos. In both cases there appears to be an deep inter relation between the topography of the engraved outcrops and the topography where they are located.



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Figure 4. Location of Crastoeiro's engraved outcrops in the slope of Monte Farinha.

In both cases the rock art complexes are located in medium slope platforms, easily accessible and reachable from the valley (Figure 4). From these levelled platforms slopes become less steep and accessible. Also, the distribution of the motifs in the outcrops affects the audience positioning, which will be mainly facing the steep slopes and the peaks. In the case of Crastoeiro, the conic peak of Monte Farinha or Senhora da Graça, the precise point were the sun rises, and in the case of Laje dos Sinais, the plain peak of Monte da Saia. However, at Crastoeiro the topography and motifs from some engraved outcrops indicate the contrary. That is, an audience facing the valley and the sunset, as some kind of complementarity between the several engraved outcrops forming that nucleus, relating them either with the physical and "mental" "ascending and descending" of Monte Farinha, probably a "sacred path" or maybe solar cycles. In this sense, Monte Farinha could be seen as bearing a great symbolic importance and, simultaneously, a link with solar cosmogonies.

Also at Crastoeiro, all outcrops with protuberances saw the engraving of these small relieves with a circular motif, as physically representing some kind of mnemonic of Monte Farinha (Figure 5) In other words, as the memory of Monte Farinha and, eventually, its features and properties were present in this outcrops and in this levelled part of the slope, easily accessible to populations inhabiting the immediate valleys, were collective celebrations to its "deities" could easily occur (Dinis and Bettencourt, 2009).



Figure 5. Crastoeiro's outcrops with protuberances with circular motifs: 5.A - (left) rock 21 (cf. Dinis and Bettencourt, 2009); 5.B - (right) rock 16 (cf. Dinis, 2014).

In the case of Laje dos Sinais/Monte do Olheiro ("olheiro" means "*the one that sees*"), located at an intersection place between pathways accessible from the valley to the top of the elevation, their figures are easily lighted from the rising sun to sunset. The outcrop, levelled to the ground, also has a protrusion which observed from the valley access may symbolize the elevation peak and its properties (Figure 6.A). The outcrop includes a simple circular motif with a meander appendix, a type of iconography different from the usually present in the lower parts of the outcrop (Figure 6.B).

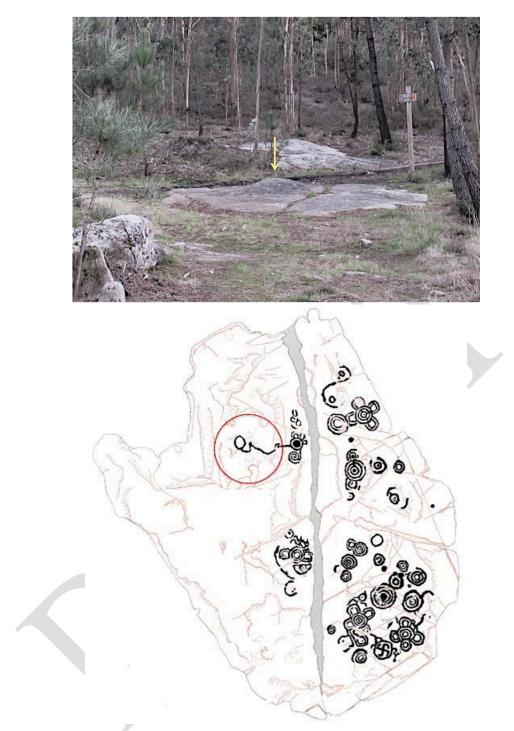


Figure 6.A - Location of Laje dos Sinais' engraved outcrops in the slope of Monte da Saia; 6.B – Hand made draw of the engraved motifs marking the upper part of the outcrop (red circle).

It is curious to observe that peaks in the Northwest of Portugal and Galicia have always less engraved outcrops and motifs with this kind of art, considered as Atlantic tradition, when compared to slopes. This lead one of us to consider that perhaps peak areas, as "significant" and "powerful" as they can be, were forbidden to some individuals, being only accessible to the ones that understood the complete message encoded in the engraved motifs or the inherent practiced celebrations (Bettencourt 2009; Dinis and Bettencourt 2009). In this sense, different places were altogether interrelated together in a network, materializing different physical and spiritual places in the landscape (Bettencourt 2009; Dinis and Bettencourt 2009; Cardoso, 2015).

The third case study is Santo Adrião 1, council of Caminha, an engraved outcrop of the Early Bronze Age (end of 3^{rd} to beginning of 2^{nd} millennia BC) located in the West slope of Monte do Cúturo. Here, either the outcrop slope orientation (with a pending from West to East in Winter) and the engraved weapons (probable halberd associated to a sword) indicate blind and passive narrative of weaponry deposition, probably related with the peak of Monte do Cúturo, in the back of which sun rises (Figure 7) Once again, it looks like there is a link between these weaponry engravings and solar circles, although in this case the ceremony indicated by the motifs position and the outcrop pending may represent the deposition of weapons related to sunrise (Santos Estéves *et al.*, 2016).



Figure 7. The outcrop of Santo Adrião with engraved weapons facing the top of Monte Cúturo (cf. Santos Estévez et al., 2016).

A fourth case study consists in the different outcrops engraved with footprints identified at Monte de São Romão, in the council of Guimarães, belonging to the Late Bronze Age and Iron Age (end of 2nd and 1st millennia BC). In this

case, the carving of footprints in 3 rocks was always performed on horizontal surfaces (Figure 8A). In a general manner, we may say that the footprints orientations located at Monte de S. Romão indicate ascending or descending paths and movement (Figure 8B). That is, suggesting routes that have functioned as part of a wider net of "sacred trails". In this sense, it is believed that each outcrop was imbued with a part of a wider meaning related to mithical and physical journeys (Cardoso, 2015).



Figure 8.A - Footprints orientations distributed at Monte de S. Romão; 8B - Its location in horizontal surfaces.

A last case study is Fornelos, council of Viana do Castelo, also belonging to Late Bronze Age/Iron Age. In different panels, several equines, horsemen, a dog, and an anthropomorphic were engraved. The space chosen to carve these signs, the motifs orientation, the outcrop topography, and its coloration, create an impressive scenic effect for the audience. At the same time, all these elements seem to tell a real or a mythical narrative, where horses and horsemen seem to have travelled a certain path – narrowed, poorly lighted, and limited – from where only a few would return. The main panel (n° 1) of this outcrop (with several horses) is illuminated since sunrise, as action starts at that phase of the day. At this precise moment panel 3 is shadowed (were only a few horsemen and an anthropomorph with raised arms, a probable prayer, are represented). Curiously, this panel is only lightened since the morning end and until about 16 p.m., during summer (Figure 9). This may indicate the action time being narrated. In this sense, the geomorphology of the outcrop and the game of lights and shadows seem to be part of a history perpetrated in this place (Bettencourt *et al.*, 2016).

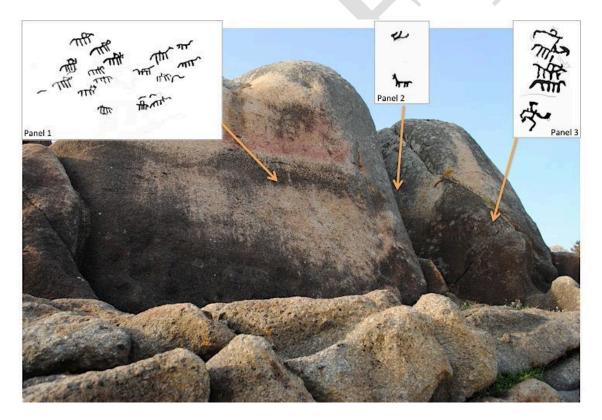


Figure 9. Distribution of the engraved motifs of Fornelos, suggesting a narrative story dialoguing with the outcrop morphology.

3. Final considerations

Finally, we can say that in distinct expressions of rock art spread in the Northwest of Iberia, produced all over the Prehistory, the engraved outcrops never were arbitrarily selected, neither in relation to their forms, neither to locations.

Thus, during the difficult task of interpreting past landscape, is extremely important to think these places not as simple carving surfaces, but as active elements, bearers of stories and senses in the landscape, resulting from the complex social structures and, at the same time, acting as actors in between that structure.

So, it looks that rock engravings only amplify these senses and their visibility, helping them to contributing to their permanence in the memory of the inhabitants and society.

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References

- Bender, H. E. (2007). *Nature's attributes, human perceptions and a sense of place: an integration of the natural and cultural landscape, landscape enquiries*. Proceedings of the Clifton Antiquarian Club, 8, 117-121.
- Bender, H. E. (2008) Seeking place: living on and learning from the cultural landscape. In G. Nas; G. Children (Eds.), The Archeology of Semiotics and the Social Order of Things [BAR International Series - 1833] (pp. 45-70). Oxford: Archaeopress.
- Bettencourt, A. M. S. (2009). Entre os montes e as águas: ensaio sobre a percepção dos limites na pré-história da faixa costeira entre o Minho e o Lima (NW português) In A.M.S. Bettencourt; L.B. Alves (Eds.), Dos Montes, das Pedras e das Águas. Formas de Interacção com o Espaço Natural da Pré-história à Actualidade (pp. 131-162). Braga: CITCEM/APEQ.
- Bettencourt, A. M. S., Alves, M.I.C.; Simões, P.P.; Silva, I.S. (2016). To where do the horses run? A dialogue between signs and matter in the rock

carvings of Fornelos (Viana do Castelo, North-Western Portugal). In A.M.S. Bettencourt, M. Santos-Estevez, D. Cardoso; H.A. Sampaio (Eds.), *Recorded places experienced places. The Holocene rock art of the Iberia Atlantic margin* [BAR International Series]. Oxford: Archeopress (forthcoming).

- Braga, T. (1885). O Povo Português nos seus Costumes, Crenças e Tradições. Coimbra: Imprensa da Universidade.
- Bradley, R. (2009). Dead Stone and Living Rock. In B. O'Connor, G. Cooney, J. Chapman (Eds.), Materialitas. Working Stone, Carving Identity [Prehistoric Society Research Paper 3] (pp. 1-8). Oxford: The Prehistoric Society/Oxbow Books.
- Cardoso, D. (2015). Arte Atlântica do Monte de S. Romão (Guimarães) no Contexto da Arte Rupestre Pós-paleolítica da Bacia do Ave – Noroeste Português. Dissertação de Doutoramento. Vila Real: Universidade de Trás-os-Montes e Alto Douro.
- Costa, A.C. (1712). Corografia Portugueza e Descripçam Topografica do Famoso Reyno de Portugal. Lisboa: Deslandesiana.
- Dinis, A. (2009). *Carta Arqueológica de Mondim de Basto*. Mondim de Basto: Câmara Municipal.
- Dinis, A. (2014). *Crastoeiro 16*. In A.M.S. Bettencourt; E. Abad-Vidal (Eds.), CVARN - Corpus Vitual de Arte Rupestre do Noroeste Português (www.cvarn.org).
- Dinis, A.; Bettencourt, A.M.S. (2009). A Arte Atlântica do Crastoeiro (Noroeste de Portugal): contextos e significados. Gallaecia 28, 41-47.
- Gosden, C. (2009). Afterword. In B. O'Connor, G. Cooney, J. Chapman (Eds.), Materialitas. Working Stone, Carving Identity [Prehistoric Society Research Paper, 3] (pp. 181-184). Oxford: The Prehistoric Society/Oxbow Books.
- Korpela, J. (2008). *The World of Ladoga: Society, Trade, Transformation and State Building in the Eastern Fennoscandian Boreal Forest Zone c. 1000-1555* [Nordische Geschichte Band, 7]. Berlim: LIT Verlag.
- Meirinhos, J. F. (2006). S. Martinho de Braga e a compreensão da natureza na alta Idade Média (séc. VI): símbolos da fé contra a idolatria dos rústicos. Estudos em Homenagem ao Professor Doutor José Marques - vol. 2 (pp. 395-497) Porto: FLUP.
- O'Connor, B. (2009). Re-collected objects: carved, worked an unworked stone in Bronze Age funerary monuments, In Blaze O'Connor, Gabriel Cooney, John Chapman (Eds.), Materialitas. Working Stone, Carving Identity [Prehistoric Society Research Paper, 3] (pp. 147-160). Oxford: The Prehistoric Society/Oxbow Books.

- Picart, B. (1723-25). Cérémonies et coutumes religieuses de tous les peuples du monde (3 Tomos). Amsterdam: J.F. Bernard.
- Pollard, J.; Gillings, M. (2009). The World of the Grey Wethers, In B. O'Connor, G. Cooney, J. Chapman (Eds.), Materialitas. Working Stone, Carving Identity [Prehistoric Society Research Paper, 3] (pp. 29-41). Oxford: The Prehistoric Society/Oxbow Books.
- Salhins, M. (1988). *Cosmologies of Capitalism: the TransPacific Sector of "The World System"*. Proceedings of the British Academy, 74, 1-51.
- Santos E. M.; Bettencourt, A.M.S.; Sampaio, H.A.; Brochado, C.; Ferreira, G. (2016). Shape and meaning: engraved weapons as materialisations of the Calcolithic / Early Bronze Age cosmogony in NW Iberia. In A.M.S. Bettencourt, M. Santos Estevez, H.A. Sampaio; D. Cardoso (Eds.), Recorded places, experienced places. The Holocene rock art of the Iberian Atlantic margin [BAR International Series]. Oxford: Archeopress (forthcoming).
- Santos J. J.R. (1940). *Arte rupestre, I Congresso do Mundo Português* (pp. 327-376). Lisboa: Bertrand e Comissão Executiva dos Centenários. Secção de Congressos.
- Scarre, C. (2009). Stones with character: animism, agency and megalithic monuments. In B. O'Connor, G. Cooney, J. Chapman (Eds.) Materialitas. Working Stone, Carving Identity. [Prehistoric Society Research Paper, 3] (pp. 9-18). Oxford: The Prehistoric Society/Oxbow Books.
- Serén, M.C. (2012). Pedras, montes e protecções: a religião no Norte précristão. Cem. Cultura, Espaço & Memória, 3, 151-162.
- Spence L. (1994). *Myths of the North American Indians*. New York and Avenal: Gramercy Books,
- Thomas, J. (2006). From dwelling to building. In V.O. Jorge, J. Muralha-Cardoso, A. Vale, G.L. Velho, L. Pereira (Eds.), Approaching "Prehistoric and Protohistoric architectures" of Europe from a Dwelling perspective (pp. 349-359). Porto: ADECAP.
- Tilley, C. (2002). *Metaphor, materiality and interpretation*. In V. Buchli (Ed.), The Material Culture Reader (pp. 23-26). Oxford: Berg.
- Tilley, C. (2004). *The Materiality of Stone: explorations in Landscape Archaeology*. Oxford University Press: Berg.

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