

Modeling the social process behind the selection of rocks and the positioning of rock art figures in Aspeberget during the Bronze Age

Julián Moyano Di Carlo^a, Christian Horn^b, Johan Ling^c, Carina Liebl^d, Mark Peternell^e, Ashley Green^f, Richard Potter^g, and Cecilia Lindhé^h

^aDepartment of Historical Studies, University of Gothenburg, Göteborg, Sweden, julian.moyano.di.carlo@gu.se; ^b Department of Historical Studies, University of Gothenburg, Göteborg, Sweden, christian.horn@gu.se; ^cDepartment of Historical Studies, University of Gothenburg, Göteborg, Sweden, johan.ling@archeology.gu.se; ^d Department of Earth Science, University of Gothenburg, Göteborg, Sweden, carina.liebl.2@gu.se; ^eDepartment of Earth Science, University of Gothenburg, Göteborg, Sweden, mark.peternell@gu.se; ^f Department of Historical Studies, University of Gothenburg, Göteborg, Sweden, ashley.green@gu.se; ^gDepartment of Historical Studies, University of Gothenburg, Göteborg, Sweden, richard.potter@gu.se; ^hDepartment of Literature, History of Ideas, and Religion, University of Gothenburg, Göteborg, Sweden, cecilia.lindhe@lir.gu.se

Scandinavian Bronze Age rock art (1700–500 BC) constitutes one of the world’s richest prehistoric legacies. Over the years, rock art has been used as evidence to verify ideas about Bronze Age ideology, religion, long-distance exchange, warfare, landscapes, and social organization (Ling 2008). However, because of the large number of motifs in the region and their complex distribution over time and space, fitting these theoretical models to the available data is always a hard task.

One of the topics that most debate has generated among the research community in the last few years is the landscape dimension of the phenomenon (e.g. Bradley 2002; Ling 2008; Goldhahn 2010; Ling 2013; Tilley 2021). It has been argued that the selection of panels was closely linked to, for example, the evolution of the coastline (Ling 2008; 2013), the symbolic value of the place before being carved (Goldhahn 2010), or the creation of narratives (Tilley 2021). Recently, it has also been shown that figures were placed on the panels according to how water naturally flows over the rock (Horn, Potter, and Peternell 2022; cf. Bengtsson 2004). However, other potential confounders, like the geological properties of the rock or the constraints of social practices, have been overlooked.

To address this problem, I will present an exploratory data analysis of the rock art panels located on the Aspeberget hill in Tanum parish. All the panels were documented in 3D, segmented, and annotated with chronological and geological information. The data was incorporated into multi-level models to try to answer the following questions: why were panels initially selected? Why have some panels collected more figures than others? Did the geological properties of the rock constrain the selection of panels and the position of figures? How were panels approached and re-approached by the carvers over the Bronze Age?

The preliminary results show that the selection of panels and the creation of motifs followed non-linear temporal and spatial dynamics and that more complex modelling techniques will have to be used in the future to fully characterize the phenomenon.

References

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