What can the ancient rock art tell us about our past? And how can we understand this story? Hundreds of small stones must be “heard” to get more knowledge of cultural processes that have forced ancient artists to create them. I’m trying to reveal more of the pre-Historic art using 3D modeling techniques. And observing these small stones’ surfaces I intend to let them tell something new of their and our common pre-History.

The images of the past are quite far from us, so just a few managed to advance in their understanding. Basically, that’s what I’m trying to do: to make the small engraved stones speak for themselves using my camera and an archaeologically-focused way of thinking. The vast variety of technological methods has already been developed to create and analyze 3D-models. And some of them have been successfully applied to archaeological and ancient rock art research. The well-spread are laser scanning techniques and 3D-photogrammetry. However, the uniqueness of ancient art portable stones have forced us to study them one by one while there are huge collections that should be considered as a whole. My idea is to create 3D models of each object from the collection, using just my camera and software. Then, investigating them in detail, grain by grain, to obtain the complex understanding of their surface and what has been scratched there by our ancestors. Following the smallest characteristic of each (sometimes their size is less than 1 mm) I will see the variety of notches and engravings. This will help to decipher the stones, find out their similarities and differences and, probably, associate them with pre-Historical phenomena that have caused their creation and use.
The main case study for this project is located in Kamyana Mohyla site in Eastern Ukraine. Not only this is a unique rock art site in Eastern Europe and the biggest one in Ukraine, it also contains a collection of more than 300 portable stones that are the objects of my research. Their analysis and classification based on the surface features will be of a great use for the pre-History of Ukraine and it will provide us with the answers to a number of still opened questions: have these notches on the stones been created intentionally? What is the relation between different rock art instances in the collection? What is their possible cultural context? Do they tell a unique story of Ukrainian pre-History or just a part of a huge European-history saga? When did we start to share mutual European-Ukrainian art experience? Is there Paleolithic art (like the images of mammoth etc.) in Ukraine?

The discussion still raised upon most of these questions, though the ray of light is visible from time to time — a number of recent papers (here and here) had shown that digital data and technologies are very helpful when we have to interpret the Prehistoric art of Kamyana Mohyla through different ornaments and notches on the stone surface.

Well, it is obvious for now, that some answers can be found. Indeed, 3D modeling will be quite informative when applied to portable rock art collection and allows us to see much more that through a simple observation. Indeed we can distinguish some object types and even associate them with particular cultural phenomenon, namely fishing-oriented Late Mesolithic — Early Neolithic societies or the beliefs of the local Iron Age population. Finally, it is possible to contribute to the discussion whether or not there are the engravings of mammoth on these stones. However, it is obvious that the distance between Us and Them — the stones — is impossible to overcome. Even if we can understand some words that they are trying to tell us, their language will hide more secrets than we are ever capable to solve.

This tremendous subject is of a great interest for those, who are trying to reveal, or, perhaps, to construct, the mutual past of modern societies and for those seeking to construct the mutual future. The art and the material culture seem to be the best speakers on this regard.