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The main objective of the proposed project is answer to the question why within similarly dated Late Gravettian inventories known from the area of Central Europe (defined as an terrain of Czech Republik, Slovakia, Poland and Hungary) we could observed significant differences, both in technology, as well as the typology of individual artefacts.

The transition from the Interpleniglacial to the Upper Pleniglacial (30–20 ka BP) faced a significant climatic deterioration. During this period Gravettian ruled most of Europe, what was conncted with occurrence of the Pavlovian culture in the territory of southern Moravia. During period 25-20 ka BP we could observed changes in the existing model of the settlement, where semi-sedentary communities have been replaced by the more mobile group of hunter-gatherers. The changes also include an lithic inventory, whereas shouldered points and Kostienki knives appear in greater numbers. This archaeological record is named Late Gravettian.

On such significant differences in lithic inventories fundamentally affect the way of life and the type of game for which the hunted, and the indirect influence exerted climatic and environmental factors. Some sites are ruled by shouldered points (Kraków-Spadzista), others with backed bladelets (Moravany-Lopata II, Bodrogkeresztur), and there are assemblages which contain bifacial leaf points (Pet kovice) (Lengyel 2015; Kozłowski et al., 1974; Kozłowski 1998; Novák 2008). Besides the effect of mobility on the lithic production, the type of prey hunted also predetermines the tool used in hunting. According to this statement, similarly dated localities on which we discovered comparable set of fauna should contain a congruous assemblage of retouched tools - especially points of throwing weapons. But this evidence is not clear, as we could see in the example of two sites dominated by mammoths remains - Kraków Spadzista and Milovice where respectively massive shouldered points and small backed blades prevailed. Similarly startling differences we could observed among lithic inventories discovered on two sites located in southern Poland - Kraków Spadzista and Jaksice II (Kozłowski et al., 1974, Wilczy ski et al., 2015). Therefore, it should be noted that for the diversity observed within the lithic inventories not single factor is responsible (eg. type of available raw material, season and type of hunted animals), but this process is more complex. An explanation of this process will help in better understanding how hunter-gatherers groups reacted on the environmental change.

Running this research is hoped to result in a model for a comprehensive analysis of any period in the Palaeolithic, where the human foraging zone can be defined by analogies in lithic tool types and the provenience of lithic raw materials. The model is expected to provide understanding the influence of environment on culture, specific to geographic location, and the interaction between peoples of the Pleistocene landscape especially with regard to their subsistence strategy. In the research of the Palaeolithic in Eastern Central Europe this is the first time when well definable foraging territory of hunter-gatherers is investigated under uniform methodology. We do not expect others to adopt completely our methods, rather we would like to give an example for comprehensive archaeological research design specific to geographic regions.