## Spatial language in Kalaallisut (Greenlandic) Lenore A. Grenoble

(with Hilary McMahan & Alliaq Petrussen)

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Studies of the linguistic encoding of spatial relations inform an understanding of the interactions between language, culture, and the environment. Kalaallisut (Greenlandic), the official and majority language of Greenland, exhibits a complex grammatical and lexical system for the encoding of spatial relations. This includes an extensive demonstrative system, relational nouns signifying intrinsic topological relations, a coastal (and, more recently, cardinal) based orientation system (Fortescue 1988), a complex system of slope terms, spatial locating verbs, wind directional terms, and local case morphology. More broadly, the frame of reference system is landmark-based (Bohnemeyer & O'Meara 2012) and deeply anchored in the physical geography of Greenland. A fundamental part of the spatial domain in Kalaallisut is landscape terminology. Existing research on the locality of place in Greenland illustrates how culture is embedded within the physical environment, identifying landscape as "memoryscape" (Nuttall 1991), permeated with cultural knowledge, narrative, and experience.

Using the frameworks of ethnophysiography and landscape linguistics, sociotopography, and spatial cognition, (e.g. Burenhult & Levinson 2008; Levinson & Wilkins 2006; Palmer et al. 2016), we demonstrate that the Kalaallisut spatial domain as a whole is cognitively and culturally structured with reference to the physical landscape. Culturally specific conceptual ontologies are encoded in landscape terms, which, in turn, divide landscape into chunks that are culturally relevant. At the same time, landscape terminology is framed within larger interactions across the spatial domain; navigation is a key factor in determining which parts of the landscape are labelable, and which landmarks receive official place names. As this suggests, a deep part of Greenlandic culture involves naming parts of the landscape in great detail. This is often done through the use of multiple suffixes, as in a place name built from the root *kangerluk* 'fjord': *Kangerlussuatsiaq* with the two suffixes *-rsuaq* and *-tsiaq* meaning 'pretty big fjord'. Studies of Inuit place names and landscape to date (e.g. Collignon 2006 for Canadian Inuit; Holton 2011 for Alaskan Inuit) have emphasized the multidimensional nature of toponyms, which have layers of cultural and historical meaning.

Toponyms and landscape terms interact with the spatial orientation system in Greenland. For example, the demonstrative root *qav*- and the derived stem *kujat*- are used throughout Greenland to refer to the direction to the left along the coast when facing the sea (Fortescue 1988: 5). When used to refer to local space, it can indicate any point along the coast, depending on the basic reference point. Yet when referring to Greenland as a whole, it refers to South Greenland, and the Kalaallisut name for this region is in fact *Kujataa*, the possessed form of this derived stem. From the standpoint of someone in West Greenland, facing outward to the sea, South Greenland is to the left. The demonstrative system, as a whole, is highly anchored to the landscape of Greenland (particularly the west coast), revealing a high degree of functionality for navigation and reference within this environment.

Our fieldwork shows recent and ongoing changes in the system due to a diverse set of factors, including urbanization, migration, changes in climate and weather, and the influx of Western technology such as GPS systems, all of which affect lifestyle and the use and knowledge of spatial language. Our analysis supports Palmer et al.'s (2016) Socio-Topographic Correspondence Model, that cultural and social factors mediate the relationship between people and landscape. Notably, the relationship is bi-directional, and changes in socio-cultural circumstances affect that relationship, just as changes in landscape and climate affect the socio-cultural dynamics.

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