

Analysing the effects of spatial configuration on human movement and social interaction in Canadian Arctic communities

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Peter C. Dawson

University of Calgary, Canada

Abstract

In the archaeological record, the rise of sedentary communities is often a gradual process involving increasing settlement nucleation, and the indigenous development of more complex levels of community organization. In contrast, the creation of permanent nucleated settlements in the Canadian Arctic by the Federal Government in the 1950s and 1960s introduced Inuit families to settled community life almost overnight. The layout and design of these new arctic towns were based upon Euro-Canadian concepts of community structure, administrative control, and social cooperation. Roads, utility hookups, and building codes replaced cultural values, familial ties, and the requirements of traditional activities in determining the placement of roads and homes within settlements. Axial analysis is used to examine the effect that the spatial configuration of Canadian arctic communities has had on patterns of movement and social interaction among Inuit inhabitants. Analysis of field observations conducted over a two-month period in the hamlet of Arviat, Nunavut Territory indicate that integration is a much better predictor of vehicular than pedestrian traffic, and that each is characterized by a different pattern of movement. I argue that this unique pattern of pedestrian movement is generated by cultural values in Inuit society which stress the need for regular face-to-face contact among members of extended families. These results may have important implications for northern community planning.

Keywords

Inuit, Canadian Arctic, human movement, Space syntax, Northern community planning

pcdawson@ucalgary.ca

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