FITTED, GREEN, AND VOLUNTEERED: LEGAL AND SURVEY COMPLEXITIES OF FUTURE BOUNDARY SYSTEMS

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The disparity between the legal understanding of boundaries and their surveyed location is explained. The impacts of this disparity on three boundary fabrics issues: survey-accuracy; greening cadastres; and crowdsourced cadastres are then examined. The features are selected based on contemporary discourse within the domain of land administration. Survey-accuracy is found to be a confused, misused, and often politicized term. The concept of idealization precision should be revisited and embedded into both curriculum and cadastral design. Green boundaries, at least some forms, are already handled in some systems; however, newer varieties require better tools for adjudication, demarcation, survey, recording, and adherence. Crowdsourced data can be understood as a re-emergence of deeds style registration with its associated benefits and disadvantages. It might support existing cadastral systems, particularly those that lack complete coverage; however, it may also be used to publicize discontent with these existing systems. The paper illustrates lessons, threats, and opportunities for land practitioners involved with the establishment and maintenance of the legal boundary fabric.

1. Introduction

Since property exists, boundaries exist. Since rights in property are registered and the limits of property estates are surveyed, cadastral boundaries must exist. The cadastral boundary is a legal concept. It is an authoritative recording in which lines on a map are a representation of the legal boundary between mine and thine. Of course, in parts of the world where cadastres are not institutionalized [Powell 2009] or simply do not perform [World Bank 2012], boundaries still exist; boundaries between what people possess are, by their nature, a reflection of social relationships.

One of the first to explain a property right as a social relationship was Wesley Newcomb Hohfeld [1913] in his essay ‘Fundamental Legal Concepts’. He argued that the various powers comprised by a property right represented at least 4 different relationships between human beings with regard to a thing. This was further elaborated by Stanhope Rowton Simpson in his seminal work ‘Land Law and Registration’ (1976), who introduced these different elements as a ‘bundle of rights’, illustrating the complexity of property. So, irrespective of the existence of a cadastre, property and property boundaries exist.

Recognizing the world’s huge variety of land tenure arrangements [Payne 2004], it is clear that property rights are a highly political issue. Extremes which can be found are John Locke’s...