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Equity, discrimination and remote policy: Investigating the centralization of remote service delivery in the Northern Territory

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ABSTRACT

Two hypotheses have been advanced to explain the spatial patterning of service accessibility. The bureaucratic hypothesis holds that spatial inequalities are unpatterned and result from the application of decisions rules, while the competing political hypothesis suggests that politically-motivated decision making results in discriminatory outcomes. We use the example of the centralization of service provision in remote Indigenous communities in Australia's Northern Territory to show that these hypotheses may in fact be complementary. In recent years, government rhetoric about Australia's remote Indigenous communities has moved to focus on economic viability instead of social justice. One policy realization of this rhetoric has been the designation of 'growth towns' and 'priority communities' to act as service hubs for surrounding communities. The introduction of such hubs was examined and substantial inequality in access to service hubs was found. Inequality and overall system efficiency could be reduced with by optimizing the selection of hubs but the imposition of any hub-and-spoke mode in the study area was associated with racially-patterned patterned inequality of access. We conclude that when policy contexts are politically motivated, the application of racially-blind decision rules may result in racially-discriminatory spatial inequalities.

Introduction

Provision of public services is one of the fundamental roles of contemporary governments. However, whenever allocative decisions are made questions of equity inevitably arise. A vast literature documenting the spatial inequity of service provision has proliferated over recent years. One branch of literature is concerned with identifying locations that are underserviced so that resources can be directed appropriately. For example, Coffee et al. (2012) developed an index of access to cardiac services in Australia, finding that 14% of localities have poor access to relevant health services, suggesting an increased risk of mortality from cardiovascular diseases for residents of those areas. A similar logic underlies an immense set of studies in the domains of access to health services (for a review, see Rosenberg, 2014) and other services such as food retailing (McEntee & Agyeman, 2010) or high-speed internet access (Riddlesden & Singleton, 2014).

The geographic accessibility of services and amenities is important because accessibility may potentially impact on service use and thereby outcomes. Studies of the association between accessibility and health outcomes generally find mixed results. A recent meta-analysis of the relationship between access to greenspace and obesity found that most studies reported a weak correlation between health outcomes and greenspace accessibility, although results were inconsistent (Lachowycz & Jones, 2011). In one typical study of health service accessibility, Astell-Burt, Flowerdew, Boyle, and Dillon (2012) found that for people diagnosed with hepatitis C, those living further from a specialist treatment center were less likely to be referred. For those who were referred, however, travel distance to treatment was not correlated with non-attendance or loss to follow-up. Similarly, Wan, Zhan, Lu, and Tiefenbacher (2012) found that while access to oncologists was related to cancer survival in rural Texas, accessibility was not a salient factor in urban Texas. While the specific results in this vast literature vary among service types, outcome variables and study areas, the cumulative evidence suggests that service accessibility frequently impacts on outcomes in ways that are sometimes minor but often policy relevant.

Service accessibility thus becomes an issue of social and indeed spatial justice (Rosenberg, 2014). When inequalities of access exist

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and when accessibility influences outcomes, questions of 'who gets what, where and how' (Smith, 1974) take on a new urgency. Indeed, many studies have found that access to services is correlated with socio-economic advantage and race. For example, Hilmers, Hilmers, and Dave (2012) review of 24 studies found generally greater levels of neighborhood accessibility to unhealthy food outlets in deprived neighborhoods or neighborhoods with a greater proportion of residents from an ethnic minority. In Auckland, New Zealand, Sanders, Aguilar, and Bacon (2013) found that the provision of private musculoskeletal clinics was concentrated in ethnically European neighborhoods, but that the provision of publicly-funded general practitioners was not racially patterned. Similarly, a national county-level analysis of the distribution of physician assistants and medical doctors in the United States found that levels of provision were greater in counties with a greater proportion of white, non-Hispanic residents (Shaffer & Zolnik, 2014). What these exemplary studies reveal is that the accessibility of services that affect people's life chances is frequently distributed in racially and socially patterned ways.

Given that the geography of service delivery impacts on outcomes, questions should be raised about *why* such discriminatory spatial patterning exists. While this question has received relatively little attention in the geographic accessibility literature, it became a key issue among urban policy scholars following a Washington DC court finding the presence of discrimination in the distribution of school funding in 1967 (Oakley & Logan, 2007). While most scholars confirmed the existence of some degree of inequity in the distribution of urban services, the cause of misallocation has been the subject of much attention. Animating this debate has been an effort to discover whether discrimination—direct or indirect—has resulted in ethnic minorities or other disadvantaged groups receiving diminished access to services relative to the rest of the community.

Two competing hypotheses have been proposed to explain the creation and persistence of spatial inequity in service delivery. First, a political hypothesis has been proposed, in which elected officials misallocate services in order to ensure the loyalty of their voter base (e.g. Cingranelli, 1981). Alternatively phrased, the political hypothesis predicts that when it comes to service distribution 'some groups suffer because of their race, because of their social status or because of their paucity of political power' (Lineberry, 1977, p. 12). If this hypothesis holds, we should expect to find disadvantaged groups having relatively low levels of access to services.

The second hypothesis asserts that service allocation is largely a bureaucratic rather than political function and therefore suggests that because bureaucratic decisions are usually routinized and made without reference to race or class, there should be no systematic pattern to service delivery inequalities (e.g. Mladenka, 1989). Over three decades of empirical research among urban scholars, mostly in the United States, generally lent support to the bureaucratic hypothesis (Meier, Stewart, & England, 1991), with some notably rare exceptions (e.g. Koehler & Wrightson, 1987). Recent methodological advancements in Geographic Information Systems (GIS) and spatial analysis (Miyake, Maroko, Grady, Maantay, & Arno, 2011; e.g. Talen & Anselin, 1998) have done little to dislodge the conclusion among scholars or urban policy that the spatial distribution of service provision demonstrates 'unpatterned inequality' (Lineberry, 1977, p. 142), especially with respect to fixed infrastructure such as urban parks which cannot easily be relocated (Lineberry, 1977; Pallas & Jennings, 2010). This literature has suffered, however, from an urban American bias and a relative disconnection from the vast body of geographic studies of accessibility discussed above.

In this paper we seek to advance the state of the literature examining the political and bureaucratic hypotheses using a novel research design that demonstrates that these two hypotheses and the dynamics they describe may in some cases be complementary rather than competitive. That is, we advance the thesis that the application of a bureaucratic set of decision rules may still result in racially-patterned service accessibility.

Background

Remote Australia is qualitatively different from much of the rest of Australia (Holmes, 1981). Remote Australia, as defined by the Australian Bureau of Statistics (ABS) Remoteness Structure, accounts for the more than 85 per cent of the national landmass that is located at a great distance to major centers of industry and commerce. It is characterized by a physical environment that is generally unattractive for agricultural activity aside from low-density rangeland pastoralism. In consequence, remote Australia is sparsely populated, inhabited by only 2.3 per cent of the Australian population, with a mean population density of just 1 person per 13.5 km. Land use in this sparsely populated region is undergoing a multifunctional transition from pastoralism towards conservation, Indigenous and resource-extractive uses (Holmes, 2008). Although ownership of Australia was violently appropriated from its Indigenous people by the British Crown, land rights legislation and judicial decisions since 1966 have resulted in Indigenous ownership of 22 per cent of the Australian landmass being restored or recognized, almost all of which is located in remote parts of the country (Altman & Markham, 2015).

The Northern Territory is perhaps the most remote jurisdiction in continental Australia, with a population of just 231,000 in 2011, the majority of whom live in the capital Darwin (Australian Bureau of Statistics, 2013). Outside of Darwin, just 102,000 people occupy a remote hinterland of 1,345,000 km^2. Over half of this remote population is Indigenous, mostly living in so-called 'discrete Indigenous communities' on land owned by formally-incorporated Aboriginal entities. These discrete communities, established due to Aboriginal social agitation for land rights and self-determination in the 1970s and 1980s, have enabled some Aboriginal people to move back to land from which they had been dispossessed. Remote communities now form a key part of remote Australia's settlement structure (Holmes, 1988), especially in the NT. In 2006, an estimated 63 per cent of the remote Indigenous population lived in 1112 discrete Indigenous communities.[2] These small settlements range from tiny 'homelands' populated by a handful of residents to larger remote towns of several thousand (see Fig. 1). Discrete Indigenous communities usually occupied by Indigenous residents and a small minority of transient non-Indigenous staff.

Australia's remote discrete Indigenous communities are characterized by their relative inaccessibility and their distinctive economy, with a persistent customary economy, relatively little access to private-sector labor markets and encapsulation within a federal welfare state (Altman, 2001). In general, physical access to services is an acute problem for Indigenous residents of remote areas, with a nationally representative survey of Indigenous Australians finding that not only are basic facilities such as dentists and hospitals more difficult to access in remote areas than non-remote areas but also that access barriers in remote areas are more frequently related to physical access rather than other issues such as cost barriers or waiting times (Australian Bureau of Statistics, 2010).

These spatial factors and on-going settler colonialism combine to produce a range of negative economic, health and educational

[2] This should be considered an approximation only, as the numerator population is sourced from ABS CHINS while the denominator comes from the ABS ERP.