Ethnic and Class Clustering through the Ages: A Transdisciplinary Approach to Urban Neighbourhood Social Patterns

Abigail M. York, Michael E. Smith, Benjamin W. Stanley, Barbara L. Stark, Juliana Novic, Sharon L. Harlan, George L. Cowgill and Christopher G. Boone

[Paper first received, March 2010; in final form, April 2010]

Abstract

This paper presents initial findings from longer-term transdisciplinary research concerning the social dynamics of urban neighbourhoods. It examines the spatial clustering of ethnicity and class in neighbourhoods over urban history, from Bronze Age Mesopotamia to contemporary cities. Fourteen distinct drivers of social clustering are identified, grouped under the headers of macro-structural forces, the state, local regimes and institutions, and bottom—up processes. The operation of these processes is examined through three historical and three archaeological case studies of clustering. It is concluded that: clustering is a common, but not universal, attribute of cities; there is much variation in clustering patterns, both within and between cities and urban traditions; and, consideration of a wide variety of drivers is required to understand historical and modern residential dynamics.

For [cities] are each one of them many cities, not a city, as it goes in the game. There are two at the least at enmity with one another, the city of the rich and the city of the poor (Plato, *The Republic*, Book IV 1937 edn).

Observers of human society have written about social clustering in cities since at least the time of Plato. The existence of neighbourhoods with concentrated ethnic, class, occupational or religious groups has been repeatedly documented from Plato to the analyst of modern census tracts. In some eras, writers praise such social clustering; the Han dynasty Chinese philosophical aphorisms recorded in the Guanzi annals include this statement

Abigail M. York, Michael E. Smith, Barbara L. Stark, Juliana Novic, Sharon L. Harlan, George L. Cowgill and Christopher G. Boone are in the School of Human Evolution and Social Change, Arizona State University, PO 872402, Tempe, Arizona, 85287-2402, USA. E-mail: abigail.york@asu.edu, mesmith9@asu.edu, blstark@asu.edu, jnovic@asu.edu, sharlan@asu.edu, cowgill@asu.edu and cgboone@asu.edu.

Benjamin W. Stanley is in the School of Sustainability, Arizona State University, Tempe, Arizona, USA. E-mail: bwstanley@asu.edu.

The scholar-official, the peasant, the draftsman and the merchant ... should not mix with one another, for it would inevitably lead to conflict and divergence of opinions and thus complicate things unnecessarily ... Let the scholar-official reside near school areas, the peasants near fields, the craftsmen in the constructions workshops near the officials' palace, and the merchants in the *shia* [commercial wards] (quoted in Kostof, 1992, p. 102).

In the modern era, writers tend to disapprove of residential clustering typically discussed in terms of discriminatory segregation.1 There is a general consensus that heterogeneous neighbourhoods have social advantages (Fainstein, 2005; Talen, 2006) despite the fact that homogeneity appears to be more frequently observed in modern cities (for example, Knox and Pinch, 2006, pp. 168–187). Urban planners distinguish "socially acceptable clustering" from "clustering that is undesirable" (Marcuse, 2005, p. 15). Others investigate socially heterogeneous urban neighbourhoods in order to identify the factors that encourage diversity (Nyden et al., 1997; Talen, 2010).

What can the historical record tell us about the occurrence of social clustering in urban neighbourhoods? Some scholars assert that socially homogeneous neighbourhoods have been the norm throughout history (Rapoport, 1980/81). New urbanists argue that the homogeneity of modern neighbourhoods represents an extreme that is neither socially healthy nor rooted in history (Talen, 2006). Were the earliest cities socially segregated, or did ethnic and class groups live interspersed with one another? How similar are the dynamics in pre-modern and modern cities? Can information about these patterns contribute to a better understanding of general processes of urbanisation?

In this paper, we report initial findings from a transdisciplinary research project entitled 'Urban organization through the ages: neighborhoods, open spaces, and urban life'. We are in the midst of a long-term investigation of urban life and the dynamics of change from the earliest cities to the present. Although our empirical research is far from complete, we have identified 14 distinct drivers that promote or discourage social clustering in pre-modern² and modern cities, and have reached preliminary conclusions about the empirical variation in urban neighbourhoods across time and space. These initial findings will assist in development of a major systematic comparative study to answer some of the larger questions posed earlier.

Background

Intellectual Context

The historical and archaeological records are replete with examples of cities with socially homogeneous neighbourhoods and cities with heterogeneous residential zones. Many of the earliest cities with good data—in southern Mesopotamia—had mixed neighbourhoods, whereas some cities in the same region exhibited marked clustering by wealth (see later). Processes of segregation and mixing are far from uniform within individual historical and regional contexts. Both medieval Europe and Aztec Mexico were settings in which some cities exhibited marked social clustering while others did not. What accounts for this variation? Some writers claim that social clustering is always imposed by the state (Marcuse, 2002), while others endeavour to show that extensive clustering can result from the unco-ordinated and unintentional actions of individuals (Schelling, 1960).

Our point of departure is the notion that all cities share a set of basic social dynamics that permit comparative analysis of urban life. We agree with recent calls for greater comparison in urban studies (Nijman, 2007; Sellers, 2005), but argue that most comparative works do not go deeply enough into the past. In order for comparative urbanism to

address underlying processes such as social clustering, comparison should not be limited to the modern period. A broad understanding of 'urban' must incorporate pre-industrial, non-Western and interdisciplinary perspectives (Smith, 2009).

Some may question our effort to compare modern urbanism with ancient and non-Western urban experiences because capitalism has fundamentally changed land markets, or because transport and other technologies have altered human interaction, or because democratic institutions have changed social relationships within cities. We do not propose a single experience or trajectory of historical development; rather, we suggest that a set of drivers influence clustering patterns observed throughout time. One of the goals of our project is to identify and analyse such processes and conditions through comparative analysis. We are not the first to make empirical comparisons among diverse kinds of cities—we build on the insight of a number of scholars, including Besim Hakim (2007), Jill Grant (2001), Xavier de Souza Briggs (2004) and Ralph Grillo (2000).

Approach to Comparison

Our project is comparative, but we find it difficult to situate our approach within existing categories of comparative social science methods (for example, Ember and Ember, 2001; Mahoney and Rueschemeyer, 2003; Ragin and Becker, 1992; Tilly, 1984; Nijman, 2007; Trigger, 2003). Approaches to comparison are often discussed in terms of a contrast or continuum between systematic and intensive comparative methods (Caramani, 2009). Systematic comparisons typically involve large-number random sampling strategies and the statistical analysis of many variables (Ember and Ember, 2001; Ragin, 1987). The application of these methods to pre-modern cities is limited by the scarcity of available data. A recent project by Richard Blanton and Lane Fargher (2008), however, has broken new ground in applying systematic comparisons to pre-modern urban societies, although their focus is governance and collective action rather than urbanism.

Intensive comparisons employ fewer cases and greater social and historical contextualisation (Tilly, 1984; Trigger, 2003). In an approach that might be called 'exemplary comparison', Xavier de Souza Briggs (2004) describes a project close to our own in its goals. He compares ethnic diversity in imperial Rome, medieval Córdoba and contemporary Los Angeles in order to generate insights on how such diversity has been handled by governments. Another kind of intensive approach can be called 'typological comparison'; cities (or other phenomena) are divided into types and the problem of interest is analysed separately for each type. A good example is Grillo's (2000) comparison of four types of 'plural cities': pre-industrial patrimonial cities, colonial cities, modern industrial cities, and neo-liberal post-modern cities. He identifies characteristic patterns in the political-economic role and significance of ethnicity in each of his types.

While the research of Briggs and Grillo is valuable, we argue that deeper empirical analyses of specific cities are required to model processes of social clustering. Our approach combines elements of the systematic and intensive strategies of comparison. Another distinctive feature of our research is its transdisciplinary nature. We started with the notion that an adequate comparative understanding of urban neighbourhoods and social clustering, like many other phenomena in the human sciences, requires research that goes beyond the confines of individual disciplines (Polimeni, 2006; Wallerstein, 2003). Our team includes scholars from archaeology, geography, sociology, political science and sustainability studies. By combining the insights of these diverse disciplines, we hope to generate new understandings of neighbourhoods and social clustering in pre-modern and modern

cities. In the following section, we review drivers that generate urban social clustering under different conditions.

Drivers of Ethnic and Class Clustering

There is a large and varied academic literature on the drivers of ethnic and class clustering in contemporary cities, spanning many disciplines and theoretical approaches, but most writers focus entirely on modern cities. The historical and archaeological literature on social clustering in pre-modern cities is much thinner and typically case-oriented with little concern for comparison, generalisation or theory. Some of the dynamics of clustering appear to be quite similar in ancient and modern cities, while others are distinct, and one of the tasks of our larger project is to disentangle and examine these processes.

The Chicago School of Sociology first highlighted social clustering (or segregation) by presenting a human ecology model, which hypothesised that American ethnic groups and neighbourhoods proceed through a series of cultural stages (Park, 1926). Subsequent researchers, both supportive and critical of this approach, focused on the existence of clustering and measurement issues (for example, Duncan and Duncan, 1955; Goldsmith and Stockwell, 1969), the impact of clustering on populations (Marschall and Stolle, 2004), the causes of segregation (Bruch and Mare, 2006) and policy prescriptions (Nelson *et al.*, 2004).

Arguments about top—down versus bottom—up drivers are common within this literature. Ceri Peach (2003) has described several archetypes of clustering present within the American and Canadian urban experience, which reflect both top—down and bottom—up pressures. Peach (1998) has framed this dichotomy in terms of 'constraint' and 'choice'. Increasing patterns of ethnic-based clustering observed in Britain have been explained

in terms of both free choice (Dahya, 1974) as well as social constraint (Rex and Moore, 1967). As the debate between Dahya (1974) and Rex and Moore (1967) regarding drivers of Pakistani clustering in Birmingham illustrates, constraint and choice should often be understood as mutually reinforcing.

Other authors tend to focus on 'structure' the larger, often global, drivers of change generating class differences or bringing ethnicities into close contact in urban areas. Some believe that the literature on Western clustering is

dominated by those adhering to the structural approach ... Structural global economic processes and, recently, also structural differences between welfare states are brought to the fore as the main forces behind the social and spatial processes [of segregation] (Musterd *et al.*, 1999, p. 578).

In the following section, we briefly lay out the major types of top-down, bottom-up and structural theories often presented to explain social clustering. Although multiple processes are usually at work in any given situation, the interesting issues concern the relative importance of each driver in specific cases and the varied ways in which they may interact. Except in the smallest societies, the labels 'top-down' and 'bottom-up' are oversimplifications because complex societies are multilayered hierarchies. Nevertheless, these provide a convenient way to present drivers of social clustering.

Macro-structural Processes

A variety of macro-level processes—such as major shifts in socioeconomic systems—clearly influence residential patterns. Our focus is primarily on relatively proximate factors affecting neighbourhoods and clustering. We recognise that a variety of prominent processes operate at a broad level and affect ethnic relations, occupations and class, which in turn can affect urban clustering—processes such

as European colonial expansion, pre-modern state expansion (Stark and Chance 2008, pp. 24–32), urbanisation and world-system interactions (Chase-Dunn and Manning, 2002; Smith, 1996; Hall 1998). These processes often are a precursor to specific neighbourhood patterns, initially operating to bring together a diversity of ethnic, class and family groups in urban areas.

- (1) Industrialisation. Industrialisation, which leads to rural-to-urban labour migration, brings highly diverse groups into close contact. This driver of clustering was important in the US and Europe in the 19th century and it remains a significant factor in many parts of the developing world today. The industrialisation of African cities triggered extensive migration from rural villages to urban centres. Since rural Africa contains highly diverse tribal groups, this directly led to ethnically diverse African cities characterised by various degrees of conflict and co-operation between groups (Hanna and Hanna, 1981).
- (2) Capitalism. David Harvey (1989) and Richard Sennett (1990) argue that capitalism changed the relationships between individuals and their environments—particularly their relationships to real property—leading to class clustering. Post-Fordist economic restructuring following the crisis of the mid 1970s has been implicated as a cause of increased segregation. The retraction of welfare benefits like public housing provision and expansion of free market reforms accelerated growth of wealth-based disparities and classbased residential enclaves in developed cities such as Hamburg (Dangschat, 1994).
- (3) Globalisation and world systems. Some scholars argue that the effects of globalisation—such as the loss of industries leading to unemployment and immobility, or the growth of industrial centres in developing countries—contributed to class-based

clustering (Sassen, 1991, Levitt and Jaworsky, 2007). Other scholars question the importance of globalisation processes in generating social clustering, pointing instead to a variety of state and civic mechanisms (van Kempen, 2007). The world-systems literature covers a broader temporal range than globalisation studies and the effects of world-systems processes on city size have become an important topic of research (Chase-Dunn and Manning, 2002). David Smith (1996) has addressed the impact of differential world-system position on development, poverty and inequality, but so far specific linkages to clustering processes have not been studied.

- (4) Pre-modern commercialisation. The role of commercialisation did not originate with capitalism. Some pre-capitalist economies had well developed commercial institutions, while others had state-controlled non-commercial economies; the former are distinguished from capitalism by the importance of wage labour and land markets in capitalist economies (Smith, 2004). In at least one documented case, growing pre-modern commercialisation led to increased social clustering at the neighbourhood level (see the Chang'an case study later).
- (5) Religious rules. Islamic law contains numerous provisions concerning the urban built environment and social relations between groups of people (Akbar, 1989; Hakim, 1986, 2007) and these have affected processes of social clustering in some Islamic cities. Wirth (1956) argues that Jewish neighbourhoods in European cities began as voluntary clusters enabling the practice of the Jewish faith and the maintenance of the community, but were formalised as ghettos by the Christian Church and cities, as Christian intolerance grew towards Jews during the Crusades (see also Haverkamp, 1995).

The State

Formal state policies addressing the built environment directly generated residential clustering. Whether expressly intended to bring about clustering—such as segregationist or colonial planning policy in the 20th century—or aimed at a broader range of social objectives, policies established by nation-states often lead to clear-cut examples of clustering.

(1) Federal law and policies. In modern Europe, state policies regarding assimilation (for example, France) and multicultural or pluralist approaches (for example, the Netherlands) influence ethnic settlement patterns amid complex political forces operating at more local scales (Musterd, 2005). French federal policy aimed at the socio-spatial assimilation of highly clustered immigrant groups has been largely ineffective, distorted by the ways in which municipal levels of government interpret and implement such policies. Laws preventing the legal recognition of minorities have been cited to explain increasing patterns of ethnic clustering in suburban public housing estates (Simon, 1998; Rhein, 1998). In the US, Supreme Court cases opened the housing market to non-Whites, yet local institutions and norms—such as mortgage and insurance discrimination by the public and private sectors—reduced the ability of minorities to purchase homes in White neighbourhoods (Gotham, 2002). More explicit state policies about citizenship and rights also affect class and ethnic clustering. In southern Africa, colonial administrations and local political élites co-created tribal ethnic and racial categories, which were codified (Vail, 1989) and designated specific lands for settlement (Marks, 1989). South Africa's apartheid policy led to neighbourhoods and townships segregated by race (Christopher, 2001) that continue to cluster after the legal repeal of apartheid in 1991 (Kotze and Donaldson, 1998).

The policies and decisions of pre-modern states also affected social clustering. We include the impact of imperialism and colonialism (both recent and ancient) on clustering in this category. In the ancient world, Inca emperors in Peru often moved whole villages to new areas and Aztec rulers in central Mexico granted urban land to immigrant ethnic groups for political gain (for example, Hicks, 1982), leading to ethnic clustering. Augustus famously divided Rome into 14 residential districts or areas (Lott, 2004), but there is little evidence of how this may have affected social clustering.

(2) Planning and public works. Modern state planning projects and public works often displace people, frequently the poor or disenfranchised, because of concerns about social unrest, public health or the aesthetic of crowded slums. The size of such works in urban areas was limited prior to Haussmann's major reconstruction of Paris in the 19th century (Jordan, 1995; Rabinow, 1989). In the mid 20th-century US, urban renewal efforts supported by federal governments fuelled clustering in cities across the country (Anderson, 1964). In many cities, such as Algiers and New Delhi, colonial city planning drastically altered the spatial layout forming new enclaves or ghettos outside the central city (Çelik, 1997; King, 1976; see discussion of Algiers later). In modern Chinese cities, concerted efforts by the state to redevelop inner-city areas displaced large numbers of residents, breaking up older economically diverse neighbourhoods (Abramson, 2007; He and Wu, 2007). Fully planned cities often show premeditated forms of clusteringsuch as Chandigarh, the administrative capital of Punjab, where construction of various sizes of housing mitigated Indian tendencies to cluster by ethnicity and caste, but promoted class-based areas in the city (D'Souza, 1968).

(3) Housing policy. Residential housing projects built by federal and local governments generated specific clustering patterns in cities around the world. In the former Soviet Union, state allocation and residential construction policies only partially mitigated class-based clustering; many neighbourhoods continued to show concentrations of wealth, while others exhibited clustering based by occupation and age (Smith, 1989; Gentile, 2004). In 20th-century western Europe, Kesteloot and Cortie (1998) show that different public housing policies in Belgium and the Netherlands led to divergent residential patterns among Turkish and Moroccan immigrants; Dutch policies scattered public housing leading to a dispersal of immigrants, whereas a lack of social housing in Belgium pushed immigrants into specific districts of older housing stock.

Local Regimes and Institutions

Urban regimes, coalitions of municipal governments, commercial interests and local élites drive social clustering, although this may be a recent phenomenon. Van Kempen notes that in the modern period

the state gradually becomes only one of the actors [generating segregation and clustering], especially when all kinds of coalitions, partnerships, and governance emerge (van Kempen, 2002, p. 50).

(1) Local land use policy. Contemporary city administrators commonly restrict land uses through zoning and related mechanisms. In earlier periods, laws regulating landownership served a similar purpose. Dan Smail's (2000) study of medieval Marseille illustrates the growing encroachment of municipal authorities as city officials took over regulative activities formerly managed by informal neighbourhood organisations. Decisions about building, transport, demolition and renewal often occur at the city level. In the Western context, notorious institutions such as racial zoning and restrictive covenants led to neighbourhood clustering. In

the US, single use zoning (Young, 1990) and growth politics (Peterson, 1981) or machines (Logan and Molotch, 1987) fuelled clustering at a neighbourhood level.

(2) Real estate practices. Informally within the modern system of building codes, planning and zoning, realtors and developers imposed their ideas about separation of uses and people. In the US, until the Fair Housing Act of 1968, it was legal to steer buyers to different residential areas based on race. Prior to the US Community Reinvestment Act, and even afterwards, local banks refused to grant mortgages for particular areas of town or for Blacks moving into White areas. Thus, even without government interference, informal city-level institutions contribute to clustering.

Bottom-Up Processes

Bottom-up processes—a catch-all term describing the initiatives of individuals, small groups and grassroots movements—affect social clustering in both modern and premodern settings. The degree to which such processes can be conceptually separated from top-down constraints continues to be a subject of academic debate (Peach, 1998).

(1) Individual and household preferences. Scholars of contemporary cities have shown how individual and household actions can generate macro social processes at the neighbourhood level. An influential work in this area was Schelling's (1960) computer simulation, which showed how simple threshold rules and a preference for a majority of similar neighbours can generate patterns of hyper-segregation. More recently, Bruch and Mare (2006) demonstrate that smoothing the preference functions of individual agents leads to lowered segregation in simulations, yet segregation still persists. Economists often use arguments based on individual choice to explain the 'White flight' during the 1950s and 1960s (Gotham, 2002).

(2) Mutual support. Ethnically clustered neighbourhoods can provide mutual support for vulnerable and marginal groups in modern cities. Gerald Suttles (1968) argues that residential clustering in Chicago and other US cities persisted for three reasons: to minimise conflict between different groups; to maximise political voice through such functions as block voting; and, to establish the greater self-control and self-policing made possible in homogeneous groups (see also Knox and Pinch, 2006, pp. 175–177). Similar processes have been identified in squatter and slum settlements in developing countries. Nijman (2010) shows that aspects of spatial organisation in the slums in Mumbai can be seen as the result of individual choice relating to issues of defence and support.

(3) Chain migration. For pre-industrial cities and some modern cities in the developing world, rural-to-urban migration is the most important bottom-up driver. Ethnographers have identified numerous cases in which immigrants from particular rural areas settled in distinct urban neighbourhoods that were perpetuated by continued in-migration (Mangin, 1970; UNCHS/Habitat, 1982). Greenshields (1980) shows how this works in historical and recent Near Eastern cities. Established migrants help to find homes for immigrant relatives and friends near their own dwellings and ethnic solidarity becomes a form of migrant adaptation to urban life. Another kind of rural-to-urban migration that can generate clustering is the relocation of particular social groups to cities in reaction to the intrusive actions of states in rural areas (Chance and Stark, 2007, pp. 216–218; Scott, 1998, pp.185, 395).

(4) Neighbourhood self-regulation. Empirical work has demonstrated that contemporary neighbourhoods 'self-regulate', leading to temporal stability in indicators such as crime rates (Galster *et al.*, 2007). This process of

stabilisation can occur through both formal and informal governance arrangements. neighbourhoods may self-govern by providing public goods, leading to Tiebout-like sorting in which individuals 'vote with their feet' and move to neighbourhoods with preferred amenities (Aronson, 2001). Although it is difficult to apply simulation models to ancient cities, the concept of neighbourhood self-regulation is consistent with Grillo's (2000) model, which suggests that ethnic clustering in pre-industrial cities arose from bottom—up forces without the intervention of state or city authorities.

Dynamics of Change in Ethnic and Class Clustering: Three Case Studies from History

To show the operation of many of our clustering drivers, we describe three case studies—Chang'an, Algiers and Prague—selected from our growing database. These cases illustrate clustering pattern dynamics in response to changes in major drivers.

Chang'an, China, 9th-10th Century: From State Control to Commercialised Economy

During its height in the T'ang period (581-907 A.D.), the Chinese imperial capital Chang'an was the largest city in the world with around 1 million inhabitants (Xiong, 2000). There is considerable historical documentation of this walled city and modern research reveals a causal relationship between commercial expansion and increased social clustering by neighbourhood. During the T'ang period, the state exerted strong control over neighbourhoods and patterns of city life. In what is called the 'ward system', large walled residential wards or districts called fang had gates that were guarded and closed at night to traffic. Marketplaces were restricted to two walled zones inside the city and commercial activity was not permitted in residential areas. The social composition of Chang'an was reflected in broad spatial patterns. Most foreigners lived in the western part of the city and the houses of aristocrats were roughly clustered. Nevertheless, social groups were not extensively clustered within the city (Xiong, 2000, ch. 8; Tatsuhiko, 1986).

The transition to the following Song period (960-1127 A.D.) was marked by population growth, a florescence of commercial activity and a reduction in state control over residence and movement. Buying and selling escaped the confines of the T'ang marketplaces and streets with shops became busy centres of commerce. The ward system broke down as gates were opened and officials no longer enforced curfews or regulated movement (Heng, 1999, ch. 4). These developments led to major changes in land use and residential patterns, a process Tatsuhiko (1986) calls 'urban specialisation'. One component of this was the formation of neighbourhoods ("social communities"; Tatsuhiko, 1986, p. 176) that appear to be clusters of people with similar social characteristics. Thus, in Chang'an, the relaxation of central political control accompanied by commercialisation produced urban restructuring, including an increased social clustering at the neighbourhood level. In our terminology, state drivers were replaced by structural and bottom-up drivers as the major forces affecting social clustering.

Algiers, 19th Century: Ottoman to French Colonial City

Prior to French colonial rule, Algiers, Algeria, resembled many Near Eastern cities in having strong neighbourhood clustering based on ethnicity and rural place of origin (Greenshields, 1980). Although neighbourhoods were separated by walls in these cities, the walls were built and maintained by residents, in contrast to the centrally built walled neighbourhoods of Chang'an (Abu-Lughod, 1987). In the 16th century, Algiers contained over 50 separate neighbourhoods

and a number of diverse ethnic groups clustered in specific residential spaces, including Andalusians, Moors, Kabyles, Jews, Saharans and Europeans (Çelik, 1997; Shuval, 1998). On the eve of French colonialism in the 1820s, this residential clustering was generated and maintained by bottom—up drivers such as chain migration and mutual support and by Islamic law, a macro-structural driver. Most groups mixed in public streets and markets. As in many Islamic cities, religious law encouraged wealth-based mixing within clan-based compounds (Miege, 1985).

The imposition of French rule drastically affected the social makeup of Algiers. The French government rased neighbourhoods in the Marine quarter and built a new modern urban district (Rabinow, 1989) that soon became home to French, Italian, Spanish and Maltese immigrants. The historical Casbah neighbourhood became the cultural heart of the stigmatised Muslim population.

Racial, cultural, and historical otherness constituted the main paradigm that dominated all building activity in Algiers during the French occupation, and spatial separation in the most concrete sense reinforced the difference (Çelik, 1997, p. 5).

Although some groups continued to cluster residentially in traditional patterns, the breakdown of Islamic rule led to new neighbourhoods segregated according to income. Official segregation policies instituted in the 1920s helped to reinforce clustering, although certain exempt neighbourhoods, like the Marine quarter, showed signs of heterogeneous mixing.

By the 20th century, an acceleration of rural-to-urban migration transformed Algiers into "essentially a Berber-European city" (Miege, 1985, p. 176). Public housing camps built by colonial authorities far from the centre of the city housed some of this influx, but many immigrants were shunted towards growing squatter settlements and

the now-overcrowded Casbah. On the eve of independence, both state policies (in the form of colonial planning practices) and bottom—up processes (such as additional ethnic clustering) worked to reinforce historical trends towards ethnic segmentation in Algiers (Çelik, 1997).

Prague, Czech Republic, Late 20th Century: Post-communist Social Stratification

At the start of World War II, élites and working classes clustered in different neighbourhoods in Prague, similar to many European cities. The centre of the city, however, was "socially and culturally highly mixed", with proximate populations of elderly, young, Jewish, Gypsy, working-class and established families of the wealthy élite (Musil, 1987, pp. 30-31). The Communist takeover of 1945 led to central state attempts to increase class-based heterogeneity through aggressive allocation and relocation policies and construction of large peripheral housing estates. By 1970, socioeconomic segregation had been considerably reduced, as many working-class families were relocated to the historical core, but clustering based on occupation and age increased due to housing estate allocation policies favouring young families and specific professions. This sort of favouritism increased into the 1980s, creating a distinctive class- and occupation-based clustering. Pre-war classbased clustering endured in a small number of neighbourhoods as well, since the socialist government left most élite neighbourhoods undisturbed (Musil, 1987).

Since the fall of the socialist government in 1989, Prague, like other post-socialist countries, has exhibited increasing levels of class-based spatial clustering. Sýkora observes that

the major factors which influence growing socio-spatial disparities in post-communist Prague are increasing income inequalities and newly introduced market-based mechanisms of housing allocation (Sýkora, 1999, p. 680).

Suburban luxury villas are increasingly common, as are luxury infill developments more proximate to lower classes. Socialist-era housing estates, now operated as rentcontrolled public housing, have been increasingly deregulated and opened to market forces, spurring new forms of class-based stratification. Free-market business and tourism have fuelled gentrification of central-city neighbourhoods (Sýkora, 1999). Although the processes of socioeconomic stratification have been relatively slow in the post-socialist years, shrinking state control over housing has been accompanied by increasing class-based clustering, a trend evident in other Soviet, eastern European and Chinese cities (Sýkora, 1999; He and Wu, 2007). Prague presents a case where the imposition of stronger state controls (under socialism) worked to reduce ethnic and class clustering and then the reduction in state power after 1989, coupled with increasing capitalist penetration, permitted greater expression of macro-structural, local and bottom-up forces, resulting in increased social clustering.

Ethnic and Class Clustering in Ancient Cities

The three case studies illustrate the roles of specific clustering drivers in well documented episodes of historical transformation. It is likely that many of the factors identified also operated in ancient cities, but the limitations of data prevent dynamic analyses of the sort already described. In this section, we briefly review three examples that illustrate variability in social clustering in the earliest cities.

The earliest cities—in Bronze Age Mesopotamia—already exhibit variability in neighbourhood organisation. The first cities arose before 3000 B.C. and, by the Old Babylonian period (2000–1600 B.C.), urbanism was firmly established in southern Mesopotamia (van de Mieroop, 1999). Neighbourhoods can be identified in both archaeological plans and

cuneiform documents and, at cities such as Nippur and Ur, neighbourhoods were socially heterogeneous (Stone, 1987). Wealthy aristocratic families lived alongside commoners and craft specialists were spread among diverse neighbourhoods (Keith, 2003). Yet at least one city—Larsa—exhibits wealth-based clustering. Archaeologist Yves Calvet excavated a large residential zone comprised solely of large, aristocratic houses (Calvet, 1996). Thus, the cities of the Old Babylonian period in Mesopotamia show variation in the nature and extent of social clustering.

In the New World, Teotihuacan was a large metropolis of 100000 residents that flourished in central Mexico between 100 and 650 A.D. Among the Pre-Hispanic cities of Mesoamerica, Teotihuacan stands out for its large size, its pervasive orthogonal planning and the intensity of archaeological fieldwork at the site (Cowgill, 2008). Several discrete neighbourhoods of foreigners have been identified, suggesting that at least some ethnic groups were strongly clustered at Teotihuacan. On the western edge of the city, the 'Oaxaca barrio' is a neighbourhood-sized locale where a small proportion of the pottery vessels are of a style derived from the Zapotec-speaking valley of Oaxaca, nearly 400 km away. They buried some of their dead in Zapotec-style tombs and most scholars believe that this was an enclave of Zapotec speakers, perhaps part of a broad Zapotec commercial diaspora network (Spence, 2005). Curtin (1984) discusses other examples in which merchant diasporas create ethnic/commercial clustering in both pre-modern and contemporary cities. At least one other ethnic neighbourhood has been identified at the city and advanced spatial analysis has allowed the reconstruction of neighbourhood organisation throughout the entire city of Teotihuacan (Robertson, 2001).

Several centuries after the fall of Teotihuacan, central Mexican cities of the Aztec period (1100–1520 A.D.) exhibit variation in the nature and extent of social clustering. At

some cities (most notably the imperial capital Tenochtitlan and the city-state capital Otumba), craft workers were concentrated by neighbourhood, whereas in most citystate capitals, craft activities were apparently dispersed throughout the city (Smith, 2008). Archival documents suggest the possible clustering of foreigners in separate zones at Tenochtitlan (Calnek, 1976), but in a group of smaller cities in the state of Morelos with detailed colonial census enumerations, immigrants were dispersed. None of the neighbourhoods in these latter cities exhibited clustering by class, by occupation or by place of origin (Friedman, 2009; Smith, 2010). Variation in social clustering at Aztec cities does not map neatly onto obvious dimensions such as the imperial capital vs city-state centres and neither does it follow patterns of regional variation in Aztec society. There is certainly no typical Aztec pattern of urban social clustering and this variation among cities has yet to be adequately explained. These and other ancient cities present a diversity of social drivers, similar to those found in our three case studies. We anticipate that our continuing comparative analyses will allow us to refine our understanding of the drivers of clustering in these and other ancient cities.

Conclusions

Three observations emerge from our review of ethnic and class clustering in ancient, historical and modern cities.

- (1) Urban social clustering by ethnicity and class is a common, but by no means universal, attribute of urban neighbourhoods, both today and in the past.
- (2) There is considerable variability in the occurrence of clustering, both within and between cultural and historical traditions. There is no such thing as a 'typical' pattern of clustering within, say, Medieval cities or Islamic cities and the explanation for

variation must be sought in the social, economic and political contexts of cities, not in attributes of cultures or peoples.

(3) A wide variety of processes or drivers were important in generating clustering in the past and the present. We identified five macro-structural forces, three state-level drivers, three drivers from local regimes and institutions, and four bottom—up processes.

The three historical case studies show that, in each case, a combination of drivers operating at different levels influenced clustering patterns. Structural forces, such as the emergence of capitalism in post-socialist Prague, exacerbate existing patterns of class clustering. States set the stage for clustering by imposing restrictions on individual choice, in the case of T'ang period in China, or by forcibly imposing clustering through planned and segregated neighbourhoods, as in Algiers. Individual choice plays a major role in Prague and Song-period Chang'an, whereas individual choice was limited in segregated 1920s Algiers and T'ang Chang'an. Today, in Algiers, individual choice plays a larger role through chain migration perpetuating historical clustering patterns. Local regimes and institutions play a less prominent role in our cases, although the gentrification processes in Prague are influenced by local élite investment and government policy.

These and other historical cases argue against single-factor explanations for clustering. Peter Marcuse, who uses the terms 'social divisions' and 'social partitions' for what we call clustering, claims that

The state has been decisive in creating, maintaining, or destroying partitions in all periods (Marcuse, 2002, p. 31).

In the same volume, van Kempen argues that

Cities are not 'naturally' divided: they are actively partitioned. There are those that do the partitioning and those that are subject to it (van Kempen, 2002, p. 50).

Our review of literature on pre-modern cities indicates that these generalisations do not hold up across time and space. In some settings, such as historical Islamic cities, the state played little or no role in generating pronounced social clustering (Greenshields, 1980). In other cases, state dynamics influenced clustering, but not in the way posited by Marcuse and van Kempen. In Chang'an and Prague, it was the *relaxation* of state control over urban populations that led to increased clustering, which is the reverse of the Marcuse/van Kempen model.

In another single-factor explanation, Amos Rapoport (1980/81) claims that socially homogeneous neighbourhoods are universal through time because of the role of the neighbourhood in the mutual support of its members. Not only is this claim inaccurate, but a closer look shows that most of Rapoport's reasons for homogeneity are better seen as attributes of long-standing successful neighbourhoods rather than homogeneous neighbourhoods.

Jan Nijman has recently argued that

some key notions in the Anglo-Saxon literature on urban studies do not apply to the context of India's urban slums (Nijman, 2010, p. 15).

In particular, Nijman argues that the Dharavi slum in Mumbai cannot be understood using common concepts such as ghettos and enclaves as discussed by Marcuse (1997), Peach (2003) and others. We would go further and suggest that it is still not clear whether these and other concepts in urban studies are sufficiently broad to apply to pre-industrial, ancient and non-Western cities. One of the advantages of the broad comparative approach we advocate is the ability to sort commonly accepted concepts and explanations into those that have wide applicability (across time and space) and those useful primarily in the modern world, such as industrialisation or capitalism. A better understanding

of the diverse contexts and actions linked to social clustering is essential for examination of a range of macro-scale processes, several of which are not yet well studied for their effects on and responses to urban social clustering, such as state expansion and world systems relationships. Continued transdisciplinary exploration forces us to look closely at assumptions and presumptions about neighbourhoods, pushing us towards a more general understanding of human organisation in urban areas.

Notes

- In this paper, we avoid the terms segregation, ghetto and enclave because of their definitions, which sometimes have ideological connotations. We define a clustered population loosely as a spatially concentrated group of people who share a common social, cultural, occupational or economic status.
- 2. We use the term 'pre-modern' to refer to ancient cities around the world, European cities before the 18th century and non-Western cities prior to the era of European colonialism; our usage is similar to Sjoberg's (1960) concept of the 'pre-industrial city'. We use the term 'ancient' to refer to the earliest cities of the world.

Acknowledgements

This paper is a product of the transdisciplinary project, 'Urban organisation through the ages; neighborhoods, open spaces, and urban life' (see: http://cities.asu.edu/). The project is sponsored by the School of Human Evolution and Social Change at Arizona State University and funded by the President's Strategic Initiative. The authors wish to thank student research assistants Cinthia Carvajal, Maricha Friedman, and Katrina Johnston, and a group of bright and energetic student volunteers, for help with sources and research. A number of colleagues provided feedback on earlier drafts of this paper; for this the authors thank Jan Nijman, Jeffrey Sellers, Kevin Ward and Roger Parks.

References

- Abramson, D. B. (2007) The dialectics of urban planning in China, in: F. Wu (Ed.) *China's Emerging Cities: The Making of New Urbanism*, pp. 66–86. London: Routledge.
- Abu-Lughod, J. L. (1987) The Islamic city: historic myth, Islamic essence, and contemporary relevance, *International Journal of Middle Eastern Studies*, 19, pp. 155–176.
- Akbar, J. (1989) Khatta and the territorial structure of early Muslim towns, *Mugarnas*, 6, pp. 22–32.
- Anderson, M. (1964) *The Federal Bulldozer: A Critical Analysis of Urban Renewal, 1949–1962.* Cambridge, MA: MIT Press.
- Aronson, D. (2001) Neighborhood dynamics, *Journal of Urban Economics*, 49, pp. 1–31.
- Blanton, R. E. and Fargher, L. F. (2008) *Collective Action in the Formation of Pre-modern States*. New York: Springer.
- Briggs, X. de Souza (2004) Civilization in color: the multicultural city in three millennia, *City and Community*, 3, pp. 311–342.
- Bruch, E. E. and Mare, R. D. (2006) Neighborhood choice and neighborhood change, *American Journal of Sociology*, 112, pp. 667–709.
- Calnek, E. E. (1976) The internal structure of Tenochtitlan, in: E. R. Wolf (Ed.) *The Valley of Mexico: Studies of Pre-Hispanic Ecology and Society*, pp. 287–302. Albuquerque, NM: University of New Mexico Press.
- Calvet, Y. (1996) Maisons privées paléo-babyloniennes á Larsa: remarques d'architecture, in: K. R. Veenhof (Ed.) *Houses and Households in Ancient Mesopotamia*, pp. 197–209. Istanbul: Nederlands Historisch-Archaeologisch Institoot Voor Het Nabije Oosten.
- Caramani, D. (2009) Introduction to the Comparative Method with Boolean Algebra. Los Angeles, CA: Sage.
- Çelik, Z. (1997) Urban Forms and Colonial Confrontations: Algiers under French Rule. Berkeley, CA: University of California Press.
- Chance, J. K. and Stark, B. L. (2007) Estrategias empleadas en las provincias imperiales: perspectivas prehispánicas y coloniales en Mesoamérica, *Revista Española de Antropología Americana*, 37, pp. 203–233.
- Chase-Dunn, C. and Manning, E. S. (2002) City systems and world systems: four millennia of

- city growth and decline, *Cross-cultural Research*, 36, pp. 379–398.
- Christopher, A. J. (2001) Urban segregation in post-*apartheid* South Africa, *Urban Studies*, 38(3), pp. 449–466.
- Cowgill, G. L. (2008) An update on Teotihuacan, *Antiquity*, 82, pp. 962–975.
- Curtin, P. D. (1984) *Cross-cultural Trade in World History*. New York: Cambridge University Press.
- Dahya, B. (1974) The nature of Pakistani ethnicity in industrial cities in Britain, in: A. Cohen (Ed.) *Urban Ethnicity*, pp. 77–118. London: Tavistock Publications.
- Dangschat, J. S. (1994) Concentration of poverty in the landscapes of 'boomtown' Hamburg: the creation of a new urban underclass, *Urban Studies*, 31, pp. 1133–1147.
- D'Souza, V. S. (1968) Social Structure of a Planned City: Changigarh. Bombay: Orient Longmans Ltd.
- Duncan, O. D. and Duncan, B. (1955) Residential distribution and occupational stratification, *American Journal of Sociology*, 60, pp. 493–503.
- Ember, C. R. and Ember, M. (2001) *Cross-cultural Research Methods*. Walnut Creek, CA: AltaMira.
- Fainstein, S. S. (2005) Cities and diversity: should we want it? Can we plan for it?, *Urban Affairs Review*, 41, pp. 3–19.
- Friedman, M. (2009) *Urban neighborhoods in ancient Mesoamerica*. Senior Honors thesis, Arizona State University.
- Galster, G., Cutsinger, J. and Lim, U. (2007) Are neighbourhoods self-stabilising? Exploring endogenous dynamics, *Urban Studies*, 44, pp. 167–185.
- Gentile, M. (2004) Divided post-soviet small cities? Residential segregation and urban form in Leninogorsk and Zyryanovsk, Kazakhstan, *Geografiska Annaler B*, 86, pp. 117–136.
- Goldsmith, H. F. and Stockwell, E. G. (1969) Interrelationship of occupational selectivity patterns among city, suburban and fringe areas of major metropolitan centers, *Land Economics*, 45, pp. 194–205.
- Gotham, K. F. (2002) Race, Real Estate, and Uneven Development: The Kansas City Experience, 1900–2000. Albany, NY: State University of New York Press.
- Grant, J. (2001) The dark side of the grid: power and urban design, *Planning Perspectives*, 16, pp. 219–241.

- Greenshields, T. H. (1980) 'Quarters' and ethnicity, in: G. H. Blake and R. I. Lawless (Eds) *The Changing Middle Eastern City*, pp. 120–140. London: Croom Helm.
- Grillo, R. D. (2000) Plural cities in comparative perspective, *Ethnic and Racial Studies*, 23, pp. 957–981.
- Hakim, B. S. (1986) *Arab-Islamic Cities: Building and Planning Principles*. London: Routledge.
- Hakim, B. S. (2007) Generative processes for revitalizing historic towns or heritage districts, *Urban Design International*, 12, pp. 87–99.
- Hall, T. D. (1998) The effects of incorporation into world-systems on ethnic processes: lessons from the ancient world for the contemporary world, *International Political Science Review*, 19, pp. 251–267.
- Hanna, W. and Hanna, J. L. (1981) *Urban Dynamics in Black Africa*. Chicago, IL: Aldine.
- Harvey, D. (1989) *The Urban Experience*. Oxford: Blackwell.
- Haverkamp, A. (1995) The Jewish quarters in German towns during the late Middle Ages, in: R. P. Hsia and H. Lehmann (Eds) *In and Out of the Ghetto: Jewish–German Relations in Late Medieval and Early Modern Germany*, pp. 13–28. New York: Cambridge University Press.
- He, S. and Wu, F. (2007) Neighborhood changes and residential differentiation in Shanghai, in: F. Wu (Ed.) *China's Emerging Cities: The Making of New Urbanism*, pp. 185–209. London: Routledge.
- Heng, C. K. (1999) Cities of Aristocrats and Bureaucrats: The Development of Medieval Chinese Cityscapes. Honolulu: University of Hawai'i Press.
- Hicks, F. (1982) Tetzcoco in the early 16th century: the state, the city and the Calpolli, *American Ethnologist*, 9, pp. 230–249.
- Jordan, D. P. (1995) *Transforming Paris: The Life* and Labors of Baron Haussmann. New York: Free Press.
- Keith, K. (2003) The spatial patterns of everyday life in old Babylonian neighborhoods, in:
 M. L. Smith (Ed.) *The Social Construction of Ancient Cities*, pp. 56–80. Washington, DC:
 Smithsonian Institution Press.
- Kempen, R. van (2002) The academic formulations: explanations for the partitioned city, in:
 P. Marcuse and R. van Kempen (Eds) Of States and Cities: The Partitioning of Urban Space,
 pp. 35–56. New York: Oxford University Press.

- Kempen, R. van (2007) Divided cities in the 21st century: challenging the importance of globalisation, *Journal of Housing and the Built Environment*, 22, pp. 13–31.
- Kesteloot, C. and Cortie, C. (1998) Housing Turks and Moroccans in Brussels and Amsterdam: the difference between private and public markets, *Urban Studies*, 35, pp. 1835–1853.
- King, A. D. (1976) Colonial Urban Development: Culture, Social Power and Environment. Boston, MA: Routledge and Kegan Paul.
- Knox, P. and Pinch, S. (2006) Urban Social Geography: An Introduction. New York: Prentice-Hall.
- Kostof, S. (1992) The City Assembled: The Elements of Urban Form through History. Boston, MA: Bullfinch.
- Kotze, N. J. and Donaldson, S. E. (1998) Residential desegregation in two South African cities: a comparative study of Bloemfontein and Pietersburg, *Urban Studies*, 35, pp. 467–477.
- Levitt, P. and Jaworsky, B. N. (2007) Transnational migration studies: past developments and future trends, *Annual Review of Sociology*, 33, pp. 129–156.
- Logan, J. R. and Molotch, H. L. (1987) Urban Fortunes: The Political Economy of Place. Berkeley, CA: University of California Press.
- Lott, J. B. (2004) *The Neighborhoods of Augustan Rome*. New York: Cambridge University Press.
- Mahoney, J. and Rueschemeyer, D. (Eds) (2003) Comparative Historical Analysis in the Social Sciences. New York: Cambridge University Press.
- Mangin, W. (Ed.) (1970) Peasants in Cities: Readings in the Anthropology of Urbanization. Boston, MA: Houghton Mifflin.
- Marcuse, P. (1997) The enclave, the citadel and the ghetto: what has changed in the post-Fordist U.S. city, *Urban Affairs Review*, 33, pp. 228–264.
- Marcuse, P. (2002) The partitioned city in history, in: P. Marcuse and R. van Kempen (Eds) *Of States and Cities: The Partitioning of Urban Space*, pp. 11–34. New York: Oxford University Press.
- Marcuse, P. (2005) Enclaves yes, ghettos no: segregation and the state, in: D. P. Varady (Ed.) *Desegregating the City: Ghettos, Enclaves, and Inequalities*, pp. 15–30. Albany, NY: State University of New York Press.
- Marks, S. (1989) Patriotism, patriarchy and purity: Natal and the politics of Zulu ethnic consciousness,

- in: L. Vail (Ed.) *The Creation of Tribalism in Southern Africa*, pp. 215–240. Berkeley, CA: University of California Press.
- Marschall, M. J. and Stolle, D. (2004) Race and the city: neighborhood context and the development of generalized trust, *Political Behavior*, 26, pp. 125–153.
- Miege, J. L. (1985) Algiers: colonial metropolis (1830–1961), in: R. J. Ross and G. J. Telkamp (Eds) *Colonial Cities: Essays on Urbanism in a Colonial Context*, pp. 171–180. Dordrecht: Kluwer.
- Mieroop, M. van de (1999) *The Ancient Mesopotamian City*. Oxford: Oxford University Press.
- Musil, J. (1987) Housing policy and the sociospatial structure of cities in a socialist country: the example of Prague, *International Journal* of Urban and Regional Research, 11, pp. 27–35.
- Musterd, S. (2005) Social and ethnic segregation in Europe: levels, causes, and effects, *Journal of Urban Affairs*, 27, pp. 331–348.
- Musterd, S., Priemus, H. and Kempen, R. V. (1999) Towards undivided cities: the potential of economic revitalisation and housing redifferentiation, *Housing Studies*, 14, pp. 573–584.
- Nelson, A. C., Sanchez, T. W. and Dawkins, C. J. (2004) The effect of urban containment and mandatory housing elements on racial segregation in US metropolitan areas, 1990–2000, *Journal of Urban Affairs*, 26, pp. 339–350.
- Nijman, J. (2007) Introduction: comparative urbanism, *Urban Geography*, 28, pp. 1–6.
- Nijman, J. (2010) A study of space in Mumbai's slums, *Tijdschrift voor Economische en Sociale Geografie*, 101, pp. 4–17.
- Nyden, P., Maly, M. T. and Lukehart, J. (1997) The emergence of stable racially and ethnically diverse urban communities: a case study of nine U.S. cities, *Housing Policy Debate*, 8, pp. 491–533.
- Park, R. E. (1926) The urban community as a spatial pattern and a moral order, in: E. W. Burgess (Ed.) *The Urban Community*, pp. 3–18. Chicago, IL: University of Chicago Press.
- Peach, C. (1998) South Asian and Caribbean ethnic minority housing choice in Britain, *Urban Studies*, 35, pp. 1657–1680.
- Peach, C. (2003) The ghetto and the ethnic enclave, in: J. Doomernik and H. Knippenberg (Eds) *Migration and Immigrants: Between Policy and Reality*, pp. 99–122. Aksant: Het Spinhuis.

- Peterson, P. E. (1981) *City Limits*. Chicago, IL: University of Chicago Press.
- Plato (1937) *The Republic*. Cambridge, MA: Harvard University Press.
- Polimeni, J. M. (2006) Transdisciplinary research: moving forward, *International Journal of Transdisciplinary Research*, 1, pp. 1–3.
- Rabinow, P. (1989) French Modern: Norms and Forms of the Social Environment. Cambridge, MA: The MIT Press.
- Ragin, C. C. (1987) The Comparative Method: Moving beyond Qualitative and Quantitative Strategies. Berkeley, CA: University of California Press.
- Ragin, C. C. and Becker, H. S. (1992) What is a Case? Exploring the Foundations of Social Inquiry. New York: Cambridge University Press.
- Rapoport, A. (1980/81) Neighborhood homogeneity or heterogeneity: the field of manenvironment studies, *Architecture and Behavior*, 1, pp. 65–77.
- Rex, J. and Moore, R. (1967) Race, Community, and Conflict: A Study of Sparkbrook. London: Oxford University Press.
- Rhein, C. (1998) Globalisation, social change and minorities in metropolitan Paris: the emergence of new class patterns, *Urban Studies*, 35(3), pp. 429–447.
- Robertson, I. G. (2001) Mapping the social landscape of an early urban center: socio-spatial variation in Teotihuacan. PhD thesis, Arizona State University.
- Sassen, S. (1991) The Global City: New York, London, Tokyo. Princeton, NJ: Princeton University Press.
- Schelling, T. C. (1960) *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.
- Scott, J. C. (1998) Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven, CT: Yale University Press.
- Sellers, J. M. (2005) Re-placing the nation: an agenda for comparative urban politics, *Urban Affairs Review*, 40, pp. 419–445.
- Sennett, R. (1990) *The Conscience of the Eye: The Design and Social Life of Cities.* New York: Knopf.
- Shuval, T. (1998) La ville d'Alger vers la fin du XVIIIe siècle: population et cadre urbain. Paris: C. N. R. S. Editions.
- Simon, P. (1998) Ghettos, immigrants, and integration: the French dilemma, *Journal of Housing* and the Built Environment, 13, pp. 41–61.

- Sjoberg, G. (1960) *The Preindustrial City: Past and Present.* New York: The Free Press.
- Smail, D. L. (2000) Imaginary Cartographies: Possession and Identity in Late Medieval Marseille. Ithaca, NY: Cornell University Press.
- Smith, D. A. (1996) Third World Cities in Global Perspective: The Political Economy of Uneven Urbanization. Boulder, CO: Westview.
- Smith, D. M. (1989) Urban Inequality under Socialism: Case Studies from Eastern Europe and the Soviet Union. Cambridge: Cambridge University Press.
- Smith, M. E. (2004) The archaeology of ancient state economies, *Annual Review of Anthropology*, 33, pp. 73–102.
- Smith, M. E. (2008) *Aztec City-state Capitals*. Gainesville, FL: University Press of Florida.
- Smith, M. E. (2009) Editorial: just how comparative is comparative urban geography? A perspective from archaeology, *Urban Geography*, 30, pp. 113–117.
- Smith, M. E. (2010) The archaeological study of neighborhoods and districts in ancient cities, *Journal of Anthropological Archaeology*, 29, pp. 137–154.
- Spence, M. W. (2005) A Zapotec diaspora network in classic period central Mexico, in: G. J. Stein (Ed.) *The Archaeology of Colonial Encounters*, pp. 173–205. Santa Fe, NM: SAR Press.
- Stark, B. L. and Chance, J. K. (2008) Diachronic and multidisciplinary perspectives on meso-american ethnicity, in: F. F. Berdan, J. K. Chance, A. Sandstrom et al. (Eds) Ethnic Identity in Nahua Mesoamerica: The View from Archaeology, Art History, Ethnohistory, and Contemporary Ethnography, pp. 1–37. Salt Lake City, UT: University of Utah Press.
- Stone, E. C. (1987) *Nippur Neighborhoods*. Chicago, IL: Oriental Institute.
- Suttles, G. D. (1968) The Social Order of the Slum: Ethnicity and Territory in the Inner City. Chicago, IL: University of Chicago Press.
- Sýkora, L. (1999) Processes of socio-spatial differentiation in post-communist Prague, *Housing Studies*, 14, pp. 679–701.
- Talen, E. (2006) Design that enables diversity: the complications of a planning ideal, *Journal of Planning Literature*, 20, pp. 233–249.
- Talen, E. (2010) The context of diversity: a study of six Chicago neighbourhoods, *Urban Studies*, 47, pp. 486–513.

- Tatsuhiko, S. (1986) The urban systems of Chang'an in the Sui and T'ang dynasties, in: M. A. J. Beg (Ed.) *Historic Cities of Asia*, pp. 159–200. Kuala Lumpur: Percetakan Ban Huat Seng.
- Tilly, C. (1984) *Big Structures, Large Processes,* and Huge Comparisons. New York: Russell Sage Foundation.
- Trigger, B. G. (2003) *Understanding Early Civilizations: A Comparative Study*. New York: Cambridge University Press.
- UNCHS (United Nations Centre for Human Settlements) (1982) *Survey of Slum and Squatter Settlements*. Dublin: Tycooly International.

- Vail, L. (1989) Introduction: ethnicity in Southern African history, in: L. Vail (Ed.) *The Creation of Tribalism in Southern Africa*, pp. 1–19. Berkeley, CA: University of California Press.
- Wallerstein, I. (2003) Anthropology, sociology, and other dubious disciplines, *Current Anthropology*, 44, pp. 453–465.
- Wirth, L. (1956) *The Ghetto*. Chicago, IL: The University of Chicago Press.
- Xiong, V. C. (2000) Sui-Tang Chang'an: A Study in the Urban History of Medieval China. Ann Arbor, MI: University of Michigan Press.
- Young, I.M. (1990) *Justice and the Politics of Difference*. Princeton, NJ: Princeton University Press.