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# Urban History Matters: Explaining the German-American Homeownership Gap

### Sebastian Kohl

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# **Urban History Matters: Explaining the German–American Homeownership Gap**

Sebastian Kohl

Max Planck Institute for the Study of Societies, Cologne, Germany

#### **ABSTRACT**

The homeownership rate in the United States has continuously been about 20 percentage points higher than that of Germany. This homeownership gap is traced back to before the First World War at the urban level. Existing approaches, relying on socio-economic factors, demographics, culture or housing policy, cannot explain the persistence of these differences in homeownership. This article fills this explanatory gap by making a path-dependence argument: it argues that nineteenth-century urban conditions either began to create the American suburbanized single-family house cities or compact multi-unit-building cities, as in Germany. US cities developed differently from German ones because they lacked feudal shackles, were governed as "private cities" and gave easier access to mortgages and building land. The more historically suburbanized a city, the lower its homeownership rate today. Economic and political reinforcing mechanisms kept the two countries on their paths. The article's contribution is to give a historical and city-focused answer to a standing question in the housing literature.

#### **ARTICLE HISTORY**

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#### **KEYWORDS**

Housing tenure; homeownership; urban history; path dependence

#### 1. Introduction

The pronounced differences in international homeownership rates have been a question for housing researchers ever since Jim Kemeny observed that some countries with relatively high GDP-per-capita values displayed surprisingly low homeownership rates (Doling, 1997, p. 95f; Kemeny, 1980, 1981). More particularly, he opposed countries roughly affiliated with German culture to Anglo-Saxon countries, between which one observes a homeownership gap of about 20 percentage points. Throughout most of the twentieth century, homeownership was dominant in English-speaking countries, while their German-speaking counterparts remained countries of tenants. Other scholars have followed this classification of central continental, corporatist lower homeownership countries and English-speaking high-homeownership countries (Doling, 1997, pp. 82ff., Hoekstra, 2005, Schwartz & Seabrooke, 2008).

This article addresses the original opposition of these country groups, but takes a refined look at the differences between the English-speaking settler countries (Veracini, 2011)—with the United States as exemplary case—and the more settled continental countries, taking Germany as country case. The homeownership trajectory of these settler countries and their cities differs from the British motherland in that they all started from higher historical levels of homeownership, particularly in young cities, and that therefore their twentieth-century rise was not as steep as in the United Kingdom. The article thus takes a path-dependence approach to explaining homeownership differences.

Existing explanations of these pronounced international homeownership differences have relied on cultural, socio-economic, demographic and institutional factors, using variables from recent decades. I review these explanations in the first section of this article to highlight two major limitations: on the one hand, they cannot account for the persistent level-differences between Anglo-Saxon and German homeownership rates that existed even prior to the large-scale post-Second World War government interventions. On the other hand, by comparing nations, national housing policy and general economic trends, existing explanations tend to neglect characteristic differences in urban form as a crucial explanatory level.

This article goes beyond the limitations of existing approaches by arguing that it was the historical form of cities and their main building types, established in large part during the big urbanization waves starting in the nineteenth century, that accounts for today's level-differences in homeownership rates. In short, urban history matters. I argue more particularly that the creation of suburbanized cities of single-family houses facilitated the development of more homeownership, while the development of compact multi-unit-building cities favoured permanent rental housing.

The article thus provides empirical evidence for a type of path-dependence explanation in housing studies, namely the idea that events and developments that originated over a century ago and require historical analysis are causally important for hard-to-reverse developments at a later time (Bengtsson & Ruonavaara, 2010). While the long-lasting quality of housing units has long been noted, this is, to my knowledge, the first such analysis of long-term dependencies in urban housing markets and building structures. In contrast, some work on long-term patterns of urban systems (Arthur, 1988), settlement densities (Martí-Henneberg, 2005) and housing policies (Malpass, 2011) already exists.

The second section thus sheds light on the different historical starting conditions. Using the United States and Germany as paradigmatic comparative cases, I show how specific urban-policy and housing-finance factors created the sprawling cities in the United States that facilitated homeownership, and the compact cities of multi-storey buildings in Germany, which did not. That section also makes fertile use of the urban history literature to show its relevance for explanations of national housing differences in recent periods. Historical building substance and urban form, however, are only a necessary and not a sufficient condition for later high homeownership because southern or eastern European countries moved to high homeownership despite a multi-unit-building tradition. The third section therefore explains why there is a long-term impact of the historical building structure in Germany and what mechanism kept Germany on its path. The conclusion highlights the importance and limits of the finding and suggests further research along the lines of this study.

#### 2. Existing Explanations

Data on national developments of homeownership for most countries are available only for the twentieth century. The existing, dispersed information on pre-1900 homeownership rates suggests a declining tendency (Collins & Margo, 2011; Petrowsky, 1993). On the one hand, with the bourgeois revolution, rural ownership tended to rise thanks to land distribution, the end of feudalism or simply due to the eviction of non-owners to cities. On the other hand, urban homeownership rates tended to fall as traditional craftsmen's ownership gave way to cities of small capitalist landlords and tenants (Harloe, 1985, p. 2). In the course of growing urbanization and industrialization evermore low-income groups concentrated in urban areas where renting became the most frequent form of tenure. Between roughly 1920 and 1950, the modern tendency of rising homeownership rates set in invirtually all Western countries, only temporarily set back by recessions. Despite these common developments, however, countries such as Germany or Switzerland reached homeownership rates of only 30–40 per cent, while countries such as the United States, Canada or Australia reached levels of 50–70 per cent.

A first and rather popular—though not much academically defended—explanation for the Anglo-German homeownership gap cites long-lasting cultural preferences. But even in the academic literature, one finds explanations such as: "The culture of home ownership is integral to the North American way of life" (Choko & Harris, 1990, p. 74). Existing literature finds that the parental housing environment people grow up in determines their later housing preferences (Lersch & Luijk, 2014; Marcus, 2006). One problem with cultural explanations, however, is that they often do not account for regional variance within countries or for inter-temporal changes in preferences. Moreover, there is no internationally comparative study about homeownership preferences, though there is an abundance of national surveys undertaken from national statistical bureaus, popular magazines or private research institutes often working for agents of the homebuilding and finance industry. The percentages found for those desiring homeownership differ in terms of the extent to which survey questions inquire about mere desires or realizable plans. It is nonetheless surprising that most surveys, including German ones, find over 70 per cent of people desiring homeownership across countries. A second group of important existing explanations relies on socio-demographic and economic factors to explain homeownership variation across nations, regions or individuals. There is a large number of quantitative studies of homeownership variation on the international, interregional and individual level of mostly the post-1980 period (Angel, 2000; Fisher & Jaffe, 2003; Lerbs & Oberst, 2012; Schmidt, 1989). Most of these studies, also for reasons of data availability, account for homeownership differences in terms of socio-economic, demographic and population density variables, and result in quite acceptable levels of explained variance. There are, however, crucial limits to these studies. There is a missing-data problem for all internationally comparative studies, as crucial housing variables such as housing and rent prices are still lacking. Beyond data availability problems, these studies mostly consider only the most recent decades despite the fact that the differences in homeownership levels between various countries range back much further. Moreover, only small percentages of homeowners in a given year are new homeowners who could still potentially be affected by variation in socio-economic variables. Thus, while these studies are good at explaining year-to-year *variation* in homeownership

on various levels, they offer a less convincing account of why the level-differences came about in the first place.

A third group of explanations focuses on different government policies. Kemeny himself offered a first such account: countries such as Sweden or Germany had developed a cost-renting sector of social housing provision, offered comprehensively to a wide range of citizens (Donnison, 1967). The government subsidized construction of such building units and their cheap rents after the mortgage-amortization period tamed the overall rent market and this unitary rental market offered an attractive and accessible alternative to homeownership (Kemeny et al., 2005). A second account, recently offered in this journal, rather highlights the unique German policies in favour of a functioning private rental market, offering a similarly attractive alternative to homeownership (Kemp, 2015; Voigtländer, 2009). A fourth group of studies explains the higher homeownership rates through institutional arrangements favouring household indebtedness as a social policy alternative (Castles, 1998) or even privatized Keynesian demand stimulus (Crouch, 2009). Indeed, a correlation of countries' welfare state expenditures and homeownership (Schmidt, 1989, p. 94) or private debt rates (Dalton & Gifford, 2006, p. 71) can be found for the post-1980 period. The conservative parties in most countries tended to cut back housing and other subsidies (Pierson, 1989), while enabling an international financial market to provide easier access to mortgages (Schwartz, 2009). The limitation of this type of explanation is twofold: on one hand, they cannot explain why the homeownership gap had existed even prior to the first government housing policies. Though housing policies controlling most of the mortgage financing in the post-war eras certainly had a large impact, they did not reverse the initial differences. On the other hand, it remains puzzling why in almost all countries both welfare states and homeownership rates grew in parallel from the 1950s onwards.

The limits of these existing explanations thus seem to call for an explanation relying on more historical factors, especially ones concerning urban space and form, which can nevertheless be shown to have explanatory relevance today. The most natural candidate for such an explanation is offered by the path-dependence approach which, in its most basic form, posits that "history matters" (Sewell in Pierson, 2000, p. 252). In one more refined form (Mahoney, 2000), the approach includes a random initial event of major causal importance which is claimed to be reinforced by different kinds of mechanisms.<sup>2</sup> In housing studies, path-dependency explanations have been spelled out by three conditions: the critical juncture event A, the decision-making process B reacting to A and the mechanism leading from A to B (Bengtsson & Ruonavaara, 2010, p. 196). I deviate from the existing path-dependency definitions to better fit the case under study. First, I do not start the explanation from a random, single event in the nineteenth century. Whether cities turned into single- or multi-family house cities was part of a longer city-building process for which I cite a number of systematic, non-random conditions, which help us to understand the initial divergence. Second, the overall urban and regional building development often was beyond the control of single political-decision-making, which is why this is not a path-dependency of housing policies, but of housing structures.<sup>3</sup> The application of path dependence to housing structures should seem intuitive: housing structure is the most durable consumer good, it depends on even more durable patterns of land structures or amenity investments and is linked to other durable structures, such as families, neighbourhoods and enduring housing institutions (Kemp, 2015).

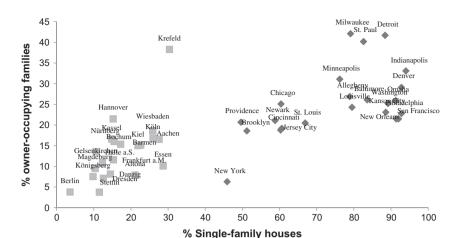


Figure 1. Urban homeownership and single-family house rates around 1900. Source: Baron (1911); RWZ (1918); Tygiel (1979).

#### 3. Historical Creation of Suburbanized or Compact Cities

In my explanation, I will take seriously Kemeny's (1992, pp. 123ff.) suggestion to consider city structures as an explanatory factor and I will take into account the most frequently found limitation of existing explanations: the historical dimension of cities. Consider the percentages of single-family houses and homeownership rates of the major German and American cities prior to First World War, at a time when the first urbanization waves had been absorbed by the massively expanding urban fabric.

One can observe two things: first, the historical data reproduce the very same homeownership gap found for later periods at a much earlier point in time, and second, these systematic differences can be reproduced at the urban level and seem to be related to a building-structure variable; that is, the cities of single-family houses seem much more accessible to homeownership than the cities of multi-storey buildings. This relationship also holds intra-nationally, as the west/east clustering of US cities in Figure 1 suggests. The international difference is further confirmed by the earliest systematic, comparative study of 30 German and American cities, undertaken by the British Board of Trade at the beginning of the twentieth century. It distinguishes between two broad types of cities according to their physical structure and layout. At one extreme one finds the British and American case, or also the Belgian case on the Continent, "that is to say, the small house occupied by one or two families is the predominant type, whilst tenement houses play only a very small part, and even where they exist, are rarely of large size" (Board-of-Trade, 1908a, p. viii). At the other extreme, the report finds that "[t]he German working classes are housed almost exclusively in large tenement buildings, frequently constructed round a central courtyard, each building containing a number of separate dwellings" (Board-of-Trade, 1908b, p. xl).

The question to be answered in this section is therefore: what prior causes created these different city types in Germany and the United States? In what follows, I cite four major factors in turn: the absence or presence of feudal shackles, the different urban policy regimes, socio-economic factors and differences in urban housing institutions.

#### 3.1. Absence of Feudal Shackles

Nineteenth-century European and particularly German cities inherited three types of institutional and physical features which privileged a tradition of apartment-living in multi-storey buildings, setting them apart from American ones: strict city limits, an absolutist city-planning style and an apartment-living middle-class of state employees.

Continental cities and German ones in particular kept physical and institutional growth restrictions much longer than did their American counterparts (Jerram, 2007, p. 394). It is not an accident that Max Weber defined cities as "closed settlements" with dense populations and lines of directly attached houses (1980, p. 727). Due to Germany's late nation-building, city walls as a sign of city autonomy and protection played a much more important role in Germany than they did, for instance, in France (Wolfe, 2009). Whereas the Napoleonic wars meant a huge wave of defortifications of German towns, many walls still persisted throughout the nineteenth century, whether for reasons of national security or as defence against suburbanites, city pride or tax collection (Mintzker, 2012, p. 212). This meant that much of the urban population growth accelerating from 1700 onwards had to be absorbed in the existing area by building up and compressing the urban structure sometimes to 90–100 per cent of the built-up area (Spiethoff, 1934). Cities used their walls and remaining restrictions against liberal settlement practices to deny suburbanites political rights of social and police protection and settlement in the city. Prior to 1760, German cities seem to have managed the slow population growth and kept overall urban density below 240 inhabitants per hectare, with some poorer, higher density areas (Weber, 1995). Around 1901, however, German inner cities counted among the most densely settled areas compared with other European or American cities: the number of persons per building ranged from 18.0 in the lower rise Rhenish cities to Berlin's 75.9, averaging at 28.9 for 18 major German cities, while the corresponding American numbers ranged from Philadelphia's 5.4 to Manhattan's 20.4, with an average below 10 (Eberstadt, 1920, pp. 6, 574).

While these factors explain why the existing urban fabric of German cities differed, perhaps unsurprisingly, from that of the newly founded American cities, they do not explain, of course, why the city growth did not occur in the mode of sprawling single-family houses. They also leave unexplained the cases of German cities newly founded in the nineteenth century, such as Oberhausen, whose 14 per cent stock of single-family houses in 1918 (RWZ) was even below the German urban average. More explanatory factors, such as the absolutist city-planning idea of a presentable city, are thus necessary. Attached multi-storey stone constructions, already existing as a building type in the form of insulae in Roman times (Liedtke, 1999), had re-emerged in the twelfth century with the urban renaissance, though they became crucial as an architectural ideal in the Italian republics and in the absolutist town-planning that originated in France after 1648. In this tradition, feudal authorities developed certain building types that private builders, when seeking feudal building favour, had to adopt, the overall goal being to create uniform and symmetrical patterns along the axes linking the monument-bearing squares. This tradition was applied in the few feudal city renovations or extensions such as Berlin's Friedrichstadt or in newly planned towns of feudal residence (Fehl, 2012, pp. 61ff.). Their multi-storey buildings were meant for wealthy families, having at least four rooms that could eventually be subdivided to accommodate various low-income families and boarders (Fehl, 1988). But, especially the more expensive

front apartments were inhabited by wealthy bourgeois who showed renting to be a status-compatible form of living.

This points to a final feudal inheritance that was lacking in the United States, namely an apartment-renting urban middle class consisting of the state apparatus of civil servants and soldiers. These respected social strata were tied to city living, while their general mobility made renting the primary choice. In fortified, garrison and particularly Prussian cities—above all in Berlin—soldiers and their families represented a strong segment of the demand for rentals. They made up to one-third of the population. Not only were they billeted as typical tenants in bourgeois quarters, but the first urban garrison constructions of the eighteenth century are said to have produced a spillover of rental-barrack living into civilian life (Hegemann, 1930, p. 167). Renting soldiers and well-respected officers, enmeshed in civilian life, were a common sight in many towns (Sicken, 1988). "Certainly, once the middle classes become confirmed apartment-dwellers in any town, there is very little chance of escaping from the 'apartment-trap' thus created, even if external restrictions on growth [fortifications] are removed" (Sutcliffe, 1974, p. 9).

#### 3.2. Urban Policy Regimes

The aforementioned factors merely tell a story until the second half of the nineteenth century, when huge urbanization movements changed the face of German and American cities. Between 1871 and 1910 the number of big cities of more than 100,000 inhabitants grew from 8 to 48, while the share of the population living in these cities rose from 4.9 to 21.3 per cent (Schott, 1912, p. 1). Between 1870 and 1910, the number of American cities with more than 100 000 inhabitants grew from 13 to 50 (US-Census, 1902, 1922). The third major factor in explaining the different city shapes has to do with the different urban policy regimes in American and German cities. Sam B. Warner famously described the nineteenth century American city as a "private city," by which he meant that cities were instruments subservient to private business interests and the particularistic political machines mobilizing segregated city districts where equal chances of accessing land or business existed (Warner, 1987, pp. 156, 202). In contrast, and simplifying a bit, I will refer to the German city type as the "public city," in which an aristocratic, entrepreneur-like and real estate owning elite lived. It was supported by a professionalizing municipal administration and developed general city-planning and forms of overall welfare, sometimes referred to as municipal socialism (Krabbe, 1985). These different types of political organization of the city acted on the form of the city and its building stock in the following ways.

German municipalities, looking back on a rich history of local autonomy, could already count on a developed local administration, the civic pride of local residents and a managerial city government of the local elite in the nineteenth century. Property-based electoral rules, established in most German cities until 1918, guaranteed a continuous identification of the middle classes with their city and problems of the urban masses were dealt with collectively through the development of building codes rather than through flight from the city into suburbs. City-extension planning and rigid building norms usually prevented the growth of cities through "wild settlements" which would have facilitated the move to (low-income) homeownership (Fisch, 1989). Even in new industrial cities in Germany, built from scratch such as Oberhausen, orderly city development in multi-storey buildings was common (Reif, 1993, p. 117). Extension-planning, an envied particularity of German city governments of

the late nineteenth century, meant an orderly development along established thoroughfares, where abutters had to carry the cost for street construction and the (municipally provided) sewage and water infrastructure (Wischermann, 1997, p. 412). Where in the United States suburban houses and infrastructure could grow as capital was built up, contemporary reformers criticized cities for imposing on future owners considerable front-load costs, only realizable through higher rise buildings (Eberstadt, 1920, p. 229f). As cities organized the various local network industries—German cities had among the highest number of municipalized enterprises (Pinol & Walter, 2003, pp. 189ff.)—overall city-extension planning remained rather conservative in order to use existing networks at higher capacities.

Especially with regard to local transport, this led to fewer new suburbs and reduced the supply of accessible suburban land. In American cities, meanwhile, land developers instrumentalized private transport to create more clientele for the offered suburban land (and suburban houses). This capitalist mode of city-extension, fuelled by competition between private transport companies, led to stronger centrifugal forces in American cities (Yago, 1984). Thus, as a 1890 US census comparative study reveals, US cities spread over many more acres per inhabitant. Much of that acreage remained unbuilt (US-Census, 1895). This corporately organized suburbanization (Doucet & Weaver, 1991) was mostly targeted at the city centre-fleeing middle classes who, due to universal suffrage, were politically losing the city to ward-based, segmented interests and political machines buying immigrant votes. Exodus from cities was further pushed by (violent) crime rates in American cities that exceeded German ones by several times, while Germany had by far the highest number of policemen per inhabitant (Johnson, 1995, p. 230). Suburbs in the United States after 1900 also developed as politically autonomous units, while German cities continued to incorporate them (Nolte, 1988). Thus, the idea of planning the city as a whole was less established in American cities, except for ostentatious City Beautiful constructions of city centres or romantic curvilinear suburbs (Reps, 1965). Less municipal control of urban development also meant that new constructions and spontaneous suburban development were much less controlled, so that self-constructed suburbs in wooden frame-constructions—in German cities non-flammable, less accessible material was the norm—meant an accessible opportunity for homeownership-seeking lower income classes or immigrants (Harris, 1996; Tyirin Kirk & Kirk, 1981).

#### 3.3. Socio-economic Factors

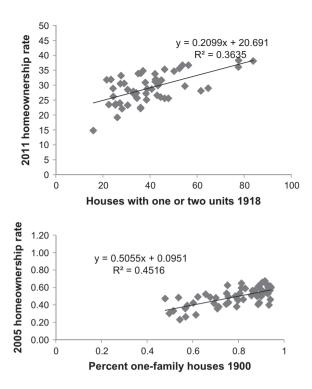
Major economic differences certainly explain part of the strong homeownership variation at the time. As the aforementioned study of the British Board of Trade revealed, Americans had both higher wages, lower costs of living and better housing quality than their European peers (Board-of-Trade, 1911). Writing in 1906, Werner Sombart noted cheaper housing costs as one of the factors impeding the rise of socialism in the United States (1906, pp. 96ff.). At the same time, private horse and streetcar companies pushed suburbanization and made available sufficient urban land for construction (Warner, 1962). Finally, the growing use of prefabrication methods for balloon-frame wooden houses, abundant and easily transportable wood as building material and weak enforcement of building regulations facilitated the construction of homes, often by their owners themselves.

In Germany, on the contrary, *real* wages were much lower, already due to the protection premium on many food items (Board-of-Trade, 1908b). At the same time, most cities were dominated by an elite bourgeois class of property owners for whom the business of rental housing was economically quite attractive and politically almost the only way to absorb the high number of frequently pauperized migrating poor. As apartment ownership remained legally impossible until 1951 (see below), the building structure on offer itself channelled workers into a class of renters in German cities. As homeownership among workers in industrializing Europe did exist—Belgium and some French cities are good examples—the material conditions could not have been the sole cause.

#### 3.4. Urban Housing Institutions

A final, little-noted difference between German and American cities is the composition of the organized urban mortgage markets of the later nineteenth century. While building and loan associations (BLAs) and other deposit-based (specialized) banking institutions became dominant in urban real estate finance in the United States, construction in German cities was increasingly funded by large capital-market-financed mortgage banks (Kohl, 2015). Instead of savings clubs of the BLA type, in which collective savings are employed for individual construction, non-profit organizations emerged in Germany that constructed housing units on their own account to lease to their tenants. BLA-like institutions were not established in Germany prior to the 1920s and only grew to considerable size after Second World War. These differences in real estate institutions were reflected in differences of building types and tenure. The member-based local savings club-like deposit institution BLAs were more likely to finance smaller housing units, often for owner-occupation, and moreover had a strong ideological commitment to homeownership from the 1890s onwards (Bodfish, 1931). Bond-market-financed German mortgage banks, on the other hand, had an organizational preference for larger investments, with less individual administrative costs and constant revenue flows from rents. Weak regulation of the private mortgage banks without state support in the United States led to recurrent defaults and crises of overlending, which meant that bond-financed mortgages were not established prior to the 1930s (Lea, 1996, p. 158; Snowden, 1995, p. 262). The German non-profits, in turn, building for a lower class clientele in urban areas, were thus often forced into building more economic rental buildings of multiple units. As a result, mortgage banks became a driving force for more city-building through multi-storey rental units (which were much criticized by contemporary reformers (Eberstadt, 1920, p. 402)), while the non-profits served the remaining lower tenant strata with reformed tenement buildings (Kantzow, 1980, p. 141, cf. Jenkis, 1973, p. 166). The BLAs, in turn, became associated with the creation of cities of small, often suburbanized houses, giving easy credit to people outside the commercial banking circuits. Much as land and building regulations, governed by property elites, made access to housing difficult, the mortgage market did not provide equal access to credit financing in Germany to the same extent as it did in the United States, reflecting the generally broader political and economic equality there in the nineteenth century.

Many of the above causes not only explain the systematic differences between German and American cities, but equally those between lower rise western and denser north-eastern cities within the United States, also found in Figure 1. Frost (1991) made the interesting observation that these younger western cities within former Anglo-Saxon colonies in general came to share many common characteristics during the "settlement revolution" (Belich, 2009) that distinguished them from their eastern and European counterparts. One of these



**Figure 2.** Single-family house shares and homeownership rate correlation in German (above) and American (below) cities.

Source: City Data Book (2007); RWZ (1918); Tygiel (1979); Zensus (2011).

characteristics was the preponderance of detached single-family housing units compared with multi-family units and apartment-houses, which are more often found in eastern and midwestern cities, such as New York, Cincinnati or Providence. Western cities offered more available land, which was also less encumbered by prior ownership rights or by pre-existing municipalities. Cheap prefabricated wooden house constructions, easy land-division using the gridiron and a higher number of BLAs also set them apart from the east, where an abundance of banks catered to the financing needs of generally richer second-generation immigrants. The later city extensions in the west could also rely on modern transport, which allowed immigrants to found new "settler colonies" (Veracini, 2012) in the suburbs, once the frontier had reached the Pacific coast.

## 4. Relevance of Different Historical Paths Today

From the previous discussion it should be clear that ways of living in *fin-de-siècle* American and German cities were entirely different. In the United States, better real wages, lower building costs, more accessible land, fewer building norm obstructions and easier BLA loans allowed more construction of single-family houses, often owner-occupied, but still quite often rented. By contrast, in Imperial Germany lower income citizens were accustomed to an apartment-living tradition, had less income and less easy access to land and mortgages to get small housing units, while landlord-dominated cities had an interest in developing presentable, rent-income generating cities. The question asked in this section

is, To what extent are the resulting differences in building type—single-family houses or multi-storey buildings—and city shape (compact or suburbanized) still relevant for today's homeownership differences?

To answer this question, I collected data of the pre-First World War building structure and homeownership rates of the 55 American and 56 German largest cities and correlated them with the equivalent contemporary data.<sup>4</sup> The use of such correlations between two variables bridging quite some historical distance has been used in previous path-dependence studies to establish long-term effects over time (Mahoney, 2003; Martí-Henneberg, 2005). As it turns out, correlations between the single-family house rates or homeownership rates of the pre-First World War era and today's homeownership or single-family house rates attain values of between 0.51 and 0.84 (significant at the 0.01 level), which can be considered very high in a social-science context.<sup>5</sup> As most important correlation, Figure 2 displays the strong positive relationship between the historical share of single-family houses and today's homeownership rates in German and American cities.

The preliminary conclusion from these data is that if cities tended to the owner-occupied single-family house direction of urban design and housing tenure more than a century ago, then this still increases their single-family house shares and homeownership rates today. Two reinforcing mechanisms help to explain this surprising influence over a century, one economic, one political.

#### 4.1. Economic Mechanism

The existing housing stock and the encompassing housing experiences prefigure the new supply of and demand for new housing units. Housing preferences might not be the trigger for the initial offer, certainly not in times of rapid urbanization, but once created they can be transmitted in families over generations. The existing offer also becomes the yardstick against which the new offer is evaluated. This is often expressed in terms of building codes or building trade traditions. Through the density of the existing offer, the land prices for further city extensions are already determined. The existing offer itself is also difficult to reverse because urban property, due to high urban property prices and the traditions of small landlordism, is split up in many different lots which are difficult to coordinate. Material land divisions are backed by the vested interest of their owners in maintaining the status quo. Moreover, the economies of scale of local network industries—street-layout, public transport, water, sewage and electric networks—work in favour of constructing cities along established lines, disallowing major revisions.

One particularly crucial time period, during which the influence of this mechanism can be studied, is the post-Second World War era in Germany, in which air raids had destroyed more than 40 per cent of all housing units in larger German cities (von Beyme, 1987, pp. 38ff.). Contrary to the hopes of garden city-inspired planners, the reconstruction showed remarkable patterns of continuity in ownership and building structures. Though some land consolidation and street-layout change took place, leading in some instances to more street area and less dense buildings, compulsory action against property owners was rare overall and plans reconfiguring urban areas as suburbanized garden cities were conspicuous by their absence (Rabeler, 1997, p. 66f).

The economies of scale behind the urban fabric, once constructed, were among the strongest driving forces in favour of continuity: "First of all, the course of city streets could not simply be changed. Second, although the combination of high explosive and fire bombs used during the war had razed many buildings to their foundations it was usually less expensive to rebuild the ruins than to build anew" (Schildt, 2002, p. 145). Instead of using new materials, 25 of 39 surveyed cities organized local rubble-recycling organizations to use the existing (brick) stones for new construction (von Beyme, 1987, p. 106). Reconstructions in the literal sense, such as in Freudenstadt, were rare and traditional, but assimilative construction was the most widespread form (ibid. 178). Architects usually took the old eave height of a building as a starting point, often including an additional floor for economic reasons (Hafner, 1993, p. 64). Third, and most importantly, the almost untouched underground infrastructure determined many of the lines along which cities were reconstructed: "Munich reported damage to its electrical system at 6.58 per cent, its gas system at 15.71 per cent, its water system at 4.21 per cent, its sewer system at 4 per cent and its telephone lines at 40–50 per cent. In Berlin, about 95 per cent of the underground capital survived, including the subway system, underground parking, and underground storage facilities" (Diefendorf, 1993, p. 19). Thus, the connection of housing to the even more durable settlement, land division and public works infrastructure acted as a strongly preserving material force.

#### 4.2. Political Mechanism

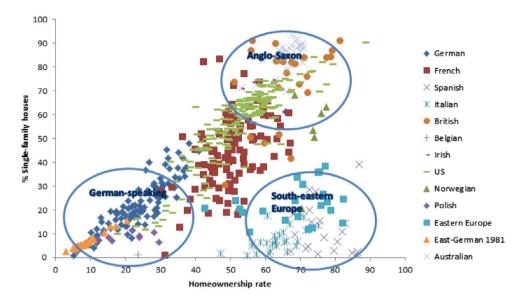
Political reinforcement mechanisms concerning both homeownership and the rental sector were at work in maintaining countries on their respective paths. The critical juncture had left the United States with savings and loan associations, which became an important part of the lobby groups that directed US housing policies in the direction of private homeowner support during the New Deal (Mason, 2004). Both Democrats and Republicans supported homeownership ideas, while the union and Democrat support for public housing in the United States constituted only an intermezzo. In Germany, on the other hand, the cooperative rental sector was organized as a strong local, but also national lobby in favour of more support for rental social housing. The Social Democratic Party (SPD) became their prime political partner: more social rented housing was supported in German states (*Länder*) with SPD governments (Jaedicke & Wollmann, 1983) and large social housing estates, mostly held by non-profit companies—which, moreover, were obliged to use all funds for further construction—loomed large in cities with SPD majorities on the city council (Schöller, 2005, p. 189).

With regard to the private rental sector, the political support for landlords and the legal development of tenancy law and apartment ownership were crucial in connecting historical building structure and today's homeownership rates: all countries with, historically, a single-family house stock turned into high-homeownership countries, while only those countries with multi-unit building stock remained tenant countries, in which national tenancy law protected both tenants and landlord interests and where legal apartment ownership was restricted.

The historical single-family houses, which were still predominantly rented in the United States before the 1940s<sup>67</sup> (Fisher, 1951, p. 94), provided a physical shape that allowed easier legal transfer of the rented unit to the sitting or other tenants, once tenant income allowed for an attractive offer and, more importantly, once federal rent controls pushed landlords into alternative investments, such as industrial or war bonds. In the 1940s alone, an estimated three million units were converted (Fetter, 2013, p. 7). Between 1940 and 1950, the homeownership rate jumped from 43.6 to 55 per cent despite the further urbanization that went along with armament production (US Census). The Bureau of Labor Statistics reported an increase of the homeownership rate from 41 to 47 per cent between 1940 and 1944 alone, for which the declining new construction could hardly have been responsible (BLS, 1946, p. 560). To my knowledge, similar conversion trends for the First World War-period are not reported, but the Second World War-experience seems to suggest that much of the postwar homeownership increase in the United States, supposedly pushed by suburbanization, has a strong competing cause in the conversion of already built single-family houses into properties owned by the tenants.

A similar conversion of multi-storey units in Germany has not taken place for legal and institutional-economic reasons. Legally, in contrast to Scotland or southern European countries, where owner-occupied multi-storey buildings are common, there was no apartment-ownership institution between 1900 and 1951 and even before and after this period, the institution was legally not privileged. Only from the late 1970s onwards did singly owned apartments begin to spread. The main concern with regard to this legal institution was apparently the idea that separate ownership of apartments would not guarantee proper management of the building and would generate too many legal disputes (Thun, 1997, pp. 136ff.). The legal conversion of a singly owned building into various apartments for sale, on the other hand, has been less attractive to landlords due to extended rent restrictions and rights-to-stay for sitting tenants (Thomas, 1992, p. 187). Thus, both private and public rental stock in western Germany was less often converted than in Great Britain (Kemp, 2015), while the east German state or cooperative rental stock was hardly sold to sitting tenants to the same extent as in other post-communist countries. On one hand, the sale of state or cooperative property was not motivated by a social policy in favour of the spread of individual housing ownership. On the other hand, given the attractions of tenancy, tenants did not see the need to pay extra money for owner-occupation of units they could inhabit at good rents anyhow.

The institutional-economic reason has partially been put forward already by Voigtländer in this journal (2009). Part of the reason why German landlords did not sell off individual units had to do with the generous housing investment policies and the moderate interventions in rent control, while nevertheless developing tenant-protecting legislation. On one hand, the tendency to decree national rental ceilings, as witnessed in countries with higher inflation rates such as France, has been unknown in Germany and its return to free market rents was the earliest in Europe, accompanied by tenant subsidies, which continuously grew to cover around 3.4 million households in 1991 (BRBS, 1998; Voldman, 2013, p. 146). Compared with the United States, where rent legislation failed to become nationally regulated (Malpezzi, 2011, p. 86), on the other hand, German tenants have been better protected from arbitrary evictions and excessive rent increases. This intermediate position is also reflected in Malpezzi's international rent control index of about 1990 in which countries tend to fall either into highly regulated or highly unregulated regimes, while Germany ranks in the middle (Malpezzi & Ball, 1993). To the extent that rents develop more or less in line with prices for sales of individual units, landlords have no particular incentive to get rid of their investment in entire buildings. When compared with French or southern European cities, therefore, German cities still have a much higher degree of buildings owned by single landlords.



**Figure 3.** Varieties of urban form and tenure. *Source*: Eurostat urban audit, calculated averages 1989–2012; US City-data book 1994; GDR (Destatis, 1994); Australian Population Census 2000.

#### 4.3. Varieties of Urban Form and Tenure

The building structure alone, therefore, does not distinguish and explain the particular German development, if tenure type is not taken into account. Combining thus single-family house and homeowner percentages in various cities of the period 1990–2000, the roughly three filled quadrants in Figure 3 summarize the outcome of the historical mechanisms mentioned.

Wherever single-family houses dominate the building structure, cities became high-homeownership. This holds not only for English-speaking countries, but also Belgium and even Scandinavian countries, reflecting a historical building-structure frontier across north-western Europe, which runs counter to the usual regime classifications of these countries (cf. Hoekstra, 2005). Wherever multi-unit buildings prevailed, apartment ownership remained less developed and a political tenant-landlord compromise was found—as in German-speaking and some neighbouring countries—low-homeownership cities remained as they were. Note the extreme point that the historical GDR cities occupy as examples of Soviet urban housing. Moreover, south-eastern European cities, where private or public rental stock has been sold to tenants, turned into high-rise, high-homeownership cities. This could give further weight to considering southern Europe as distinct housing regime (Allen, 2004). Finally, almost all French cities and a number of American ones fall in the centre of the plot and cannot be clearly attributed to one of the more extreme types.

#### 5. Conclusion

In an attempt to answer the question of the German–American homeownership gap, this article mainly makes two contributions: First, the "methodological nationalism" (Wimmer & Glick Schiller, 2002) underlying many studies, in two-case or quantitative comparisons,

should at least be broken down into smaller units of analysis, if it does not start from them. I opted for considering *urban* homeownership differences, both because of their salience and their importance in terms of population. Secondly, the focus on very recent explanatory factors should at least be supplemented by more historical ones. If I am right, then the long-term influence of land-parcel, city and building structures could equally be looked for in cases of other explananda in the housing literature.

The findings support path-dependence approaches as applied to housing phenomena. The above explanation shares the feature with path-dependence explanations that it reveals the importance of historically distant occurrences for today's outcomes. It differs, however, in that no single event-like, contingent critical juncture can be easily identified. City-building and re-building is too much of a continuous process. The other difference is that I do not claim that the initial differences were due to some chance events, but that one can clearly indicate explanatory factors that created either the suburbanized or compact city type. The economic and political mechanisms detailed above also show that the initial differences do not suffice to understand the varieties of twentieth-century city developments. Otherwise, the case of east and south European cities would be difficult to understand. The article thus addresses the need to also explain changes in path-dependence processes (Ebbinghaus, 2005; Malpass, 2011): the urban *layering* involved in suburbanization and the *conversion* of existing stock into different uses best describe the institutional processes of change involved (Streeck & Thelen, 2005).

The explanation given here complements rather than replaces the existing ones. It sheds more light onto causes that historically precede those usually cited. Cultural and policy explanations point to powerful mechanisms that reinforce different historical patterns. Regarding the policy explanations, there are good indications that the historical conditions mentioned above helped to shape the very institutions that national housing policies were later to set up (Kohl, 2015). For future explanations of today's homeownership-rate variations, the use of lagged variables measuring the historical building structure should become a common procedure.

The story about urban historical differences and their long-term influences has the potential to be extended to other countries and cities, particularly other Anglo-Saxon settlement societies and Austria and Switzerland. A comparison between Spanish and Anglo-Saxon settler societies or the explanations of European outliers such as Belgium or England/Wales could be fruitful next steps. Quantitative comparisons of historical cities especially open up avenues to new findings that could shed even more light on today's housing environments. It was beyond the scope of this article to follow more closely the precise mechanisms through which urban homeownership rates were kept stable over time. More research into the inheritance of urban real estate, the social structure of landlordism and urban land reform politics would be required to answer these more intricate questions. Finally, a comparison of the Scottish or southern European with the German case could reveal what conditions furthered the sale of apartments to sitting or other tenants in those countries and whether this might be related to housing policy as an alternative to pension policy. This could help to explain the surprisingly homogeneous national clusters in the urban varieties of housing form and tenure.



#### Notes

- 1. See for a list of these surveys in Germany (Biedenkopf & Miegel, 1978, pp. 18ff.) and in the United States (Megbolugbe & Linneman, 1993, p. 660).
- 2. A second, more elaborate form consists of citing specific sequences of events, where the order of events makes a difference to the outcome.
- 3. Epistemologically, the approach followed here is in the critical realist tradition (Bhaskar, 2005).
- 4. The sources for the United States are the Censuses of 1900, 1920 and the City Data Book 2007.
- 5. In two OLS-regressions for the cities of each country I further controlled for population size, household structure and economic city variables and the effect of the century-lagged variables on today's homeownership rates remained significant. The different variable definitions do not allow for a harmonization of the two countries' city datasets.
- 6. In large US cities of more than 100 000 inhabitants in 1900, there was an average singlefamily house rate of 65.7 per cent, while the homeownership rate was only 21.7 per cent (US-Census, 1902).
- 7. German data refer to house-owners generally, not only owner-occupiers and are therefore even overestimated. Due to low construction in the war years I am able to combine the German 1918 building structure with the 1907 ownership data.)

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#### References

Allen, J. (2004) Housing and Welfare in Southern Europe (Oxford: Blackwell).

Angel, S. (2000) Housing Policy Matters. A Global Analysis (Oxford: Oxford University Press).

Arthur, B. W. (1988) Urban systems and historical path-dependence, Stanford Institute for Population and Resource Studies, Working paper series 12.

Baron, A. (1911) Der Haus- und Grundbesitzer in Preußens Städten einst und jetzt [Private landlords in Prussian cities Now and Then] (Jena: Fischer).

Belich, J. (2009) Replenishing the Earth (Oxford: Oxford University Press).

Bengtsson, B. & Ruonavaara, H. (2010) Introduction to the special issue: Path dependence in housing, Housing, Theory & Society, 27(3), pp. 193–203.

von Beyme, K. (1987) Der Wiederaufbau. Architektur und Städtebaupolitik in beiden deutschen Staaten [The Reconstruction, Architecture and Urban Construction Policy in Both German States] (München: Piper).

Bhaskar, R. (2005) The Possibility of Naturalism. A Philosophical Critique of the Contemporary Human Sciences, 3rd ed. (London: Routledge).

Biedenkopf, K. & Miegel, M. (1978) Wohnungsbau am Wendepunkt: Wohnungspolitik in der sozialen Marktwirtschaft [Housing Construction's Turning Point: Housing Policy in the Social Market Economy] (Stuttgart: Verlag Bonn Aktuell).

BLS (1946) Effect of Wartime Housing Shortage on Home Ownership (Washington: Bureau of Labor Statistics, Monthly, U.S. Department of Labor).

Board-of-Trade (1908a) Cost of Living in Belgian Towns (London: Darling & Son).

Board-of-Trade (1908b) Cost of Living in German Towns (London: Darling & Son).

Board-of-Trade (1911) Cost of Living in American Towns (London: Darling & Son).

Bodfish, H. M. (1931) History of Building and Loan in the United States (Chicago, IL: United States Building and Loan League).

BRBS (1998) Wohngeld- und Mietenbericht 1997 [Report on Housing Allowances and Rent Prices 1997] (Bonn: Bundesministerium für Raumordnung, Bauwesen und Städtebau).

Castles, F. G. (1998) The really big trade-off: Home ownership and the welfare state in the new world and the old, *Acta Politica*, 33(1), pp. 5–19.



Choko, M. & Harris, R. (1990) The local culture of property: A comparative history of housing tenure in Montreal and Toronto, Annals of the Association of American Geographers, 80(1), pp. 73–95.

Collins, W. J. & Margo, R. A. (2011) Race and home ownership from the civil war to the present, NBER working paper no. 16665.

Crouch, C. (2009) Privatised keynesianism: An unacknowledged policy regime, The British Journal of Politics & International Relations, 11(3), pp. 382–399.

Dalton, C. & Gifford, B. (2006) Home ownership, social insurance, and the welfare state, Sociological Forum, 21(1), pp. 55–82.

Destatis (1994) Sonderreihe mit Beiträgen für das Gebiet der ehemaligen DDR. Heft 15. Ausgewählte Zahlen der Volks- und Berufszählungen und Gebäude- und Wohnungszählungen 1950 bis 1981 [Special Issue for the Former GDR. Selected Statistics of the Population and Housing Census, 1950–1981] (Wiesbaden: Statistisches Bundesamt).

Diefendorf, J. M. (1993) America and the rebuilding of urban Germany, in: H. Lehmann (Ed) American Policy and the Reconstruction of West Germany, 1945-1955, pp. 331-352 (Cambridge: Cambridge University Press).

Doling, J. (1997) Comparative Housing Policy. Government and Housing in Advanced Industrialized Countries (Basingstoke: Macmillan).

Donnison, D. (1967) The Government of Housing (Harmondsworth: Penguin).

Doucet, M. & Weaver, J. (1991) Housing the North American City (Montreal: McGill-Queen's University Press).

Ebbinghaus, B. (2005) Can path dependence explain institutional change? Two approaches applied to welfare state reform, MPIfG discussion paper 2.

Eberstadt, R. (1920) Handbuch des Wohnungswesens und der Wohnungsfrage [Handbook of Housing and the Housing Question] (Jena: Fischer). Original edition, 1909.

Fehl, G. (1988) "Der Kleinwohnungsbau, die Grundlage des Städtebaus"? Von "offenen Kleinwohnungen" in Berlin und vom unbeirrt seit 1847 verfolgten Reformprojekt der "abgeschlossenen Kleinwohung" [The Construction of Small Houses as Foundation of City Construction?], in: J. Rodriguez-Lores & G. Fehl (Eds) Die Kleinwohnungsfrage: zu den Ursprüngen des sozialen Wohnungsbaus in Europa, pp. 95-134 (Hamburg: Christians).

Fehl, G. (2012) Landschaft in der Stadt: Berlin und London um 1800: eine vergleichende Skizze zweier Planungskulturen [Landscape in the City: Berlin and London around 1800: a Comparison of Two Planning Cultures], Forum Stadt, 39(1), pp. 58–82.

Fetter, D. K. (2013) The home front: Rent control and the rapid wartime increase in home ownership, NBER working paper 19604.

Fisch, S. (1989) Administratives Fachwissen und private Bauinteressen in der deutschen und französischen Stadtplanung bis 1918 [Administrative Knowledge and Private Real Estate Interests in the German and French Administration until 1918], in: E. V. Heyen (Ed) Formation und Transformation des Verwaltungswissens in Frankreich und Deutschland (18./19. Jh.), pp. 221-262 (Baden-Baden: Nomos Verlagsgesellschaft).

Fisher, E. M. (1951) Urban Real Estate Markets. Characteristics and Financing (New York, NY: NBER). Fisher, L. M. & Jaffe, A. J. (2003) Determinants of international home ownership rates, Housing *Finance International*, September, pp. 34–42.

Frost, L. (1991) The New Urban Frontier. Urbanisation and City-building in Australasia and the American West (Kensington: New South Wales University Press).

Hafner, T. (1993) Vom Montagehaus zur Wohnscheibe. Entwicklungslinien im deutschen Wohnungsbau 1945–1970 [Developments in German Housing Construction 1945-1970] (Basel: Birkhäuser).

Harloe, M. (1985) Private Rented Housing in the United States and Europe (Beckenham: Croom Helm). Harris, R. (1996) Unplanned Suburbs. Toronto's American Tragedy, 1900 to 1950 (Baltimore, MD: Johns Hopkins University Press).

Hegemann, W. (1930) Das steinerne Berlin [The Berlin of Stones] (Berlin: Kiepenheuer).

Hoekstra, J. (2005) Is there a connection between welfare state regime and dwelling type? An exploratory statistical analysis, *Housing Studies*, 20(3), pp. 475–495.



Jaedicke, W. & Wollmann, H. (1983) Wohnungsbauförderung im Bundesländervergleich. Macht Landespolitik einen Unterschied? [Housing Subsidies in Comparative Länder Perspective: Does Regional Housing Policy Make a Difference?], Stadtbauwelt, 77, pp. 47–53.

Jenkis, H. W. (1973) Ursprung und Entwicklung der gemeinnützigen Wohnungswirtschaft. Eine wirtschaftliche und sozialgeschichtliche Darstellung [The Origin and Development of the Nonprofit Housing Associations (Bonn: Domus-Verl).

Jerram, L. (2007) Bureaucratic passions and the colonies of modernity: An urban elite, city frontiers and the rural other in Germany, 1890–1920, *Urban History*, 34(3), pp. 390–406.

Johnson, E. A. (1995) Urbanization and Crime (Cambridge: Cambridge University Press).

Kantzow, W. T. (1980) Sozialgeschichte der deutschen Städte und ihres Boden- und Baurechts bis 1918 [A Social History of German Cities and Their Land and Construction Laws Until 1918] (Frankfurt/ Main: Campus Verlag).

Kemeny, J. (1980) Home ownership and privatization, International Journal of Urban and Regional Research, 4(3), pp. 372-388.

Kemeny, J. (1981) The Myth of Home Ownership. Private versus Public Choices in Housing Tenure (London: Routledge).

Kemeny, J. (1992) Housing and Social Theory (London: Routledge).

Kemeny, J., Kersloot, J. & Thalmann, P. (2005) Non-profit housing influencing, leading and dominating the unitary rental market: Three case studies, *Housing Studies*, 20(6), pp. 855–872.

Kemp, P. A. (2015) Private renting after the global financial crisis, *Housing Studies*, 30(4), pp. 1–20. Kohl, S. (2015) The power of institutional legacies: How nineteenth century housing associations shaped twentieth century housing regime differences between Germany and the United States, *European Journal of Sociology*, 56(2), pp. 271–306.

Krabbe, W. R. (1985) Kommunalpolitik und Industrialisierung. Die Entfaltung der städtischen Leistungsverwaltung im 19. und frühen 20. Jahrhundert. Fallstudien zu Dortmund und Münster [Municipal Policy and Industrialization. The Development of German Municipal Administration in the 19th and Early 20th Century in Dortmund and Münster] (Stuttgart: Verlag W. Kohlhammer).

Lea, M. (1996) Innovation and the cost of mortgage credit: A historical perspective, *Housing Policy* Debate, 7(1), pp. 147–174.

Lerbs, O. & Oberst, C. (2012) Explaining the spatial variation in homeownership rates: Results for German regions, CESifo working paper.

Lersch, P. M. & Luijk, R. (2014) The effect of socialisation on later-life homeownership in Europe, HOWCOME working paper series 5.

Liedtke, C. (1999) Rom und Ostia [Rom and Ostia], in: W. Hoepfner (Ed) Geschichte des Wohnens. Band 1. 5000 v.Chr. - 500 n. Chr. Vorgeschichte. Frühgeschichte. Antike [History of Housing. Volume 1. 5000 BC Until 500 AC], pp. 679–736 (Stuttgart: Deutsche Verlags-Anstalt).

Mahoney, J. (2000) Path dependence in historical sociology, *Theory and Society*, 29(4), pp. 507–548. Mahoney, J. (2003) Long-run development and the legacy of colonialism in Spanish America, *American Journal of Sociology*, 109(1), pp. 50–106.

Malpass, P. (2011) Path dependence and the measurement of change in housing policy, Housing, *Theory & Society*, 28(4), pp. 305–319.

Malpezzi, S. (2011) Private rented housing in the United States, in: K. Scanlon & B. Kochan (Eds) Towards a Sustainable Private Rented Sector. The Lessons From Other Countries, pp. 77–96 (London: LSE).

Malpezzi, S. & Ball, G. (1993) Measuring the urban policy environment, Habitat International, 17, pp. 39-52.

Marcus, C. C. (2006) House As a Mirror of Self: Exploring the Deeper Meaning of Home (Berkeley, CA: Nicholas-Hays).

Martí-Henneberg, J. (2005) Empirical evidence of regional population concentration in Europe, 1870–2000, Population, Space and Place, 11(4), pp. 269–281.

Mason, D. L. (2004) From Buildings and Loans to Bail-outs. (Cambridge: Cambridge University Press). Megbolugbe, I. F. & Linneman, P. D. (1993) Home ownership, Urban Studies, 30(4-5), pp. 659-682.

Mintzker, Y. (2012) The Defortification of the German City, 1689-1866 (Cambridge: Cambridge University Press).



Nolte, P. (1988) Eingemeindungen und kommunale Neugliederung in Deutschland und den USA bis 1930 [Incorporations and Municipal Restructuring in Germany and the US Until 1930], Archiv für Kommunalwissenschaften, I, pp. 14-42.

Petrowsky, W. (1993). Arbeiterhaushalte mit Hauseigentum. Die Bedeutung des Erbes bei der Eigentumsbildung [Worker Households and Homeownership. The Significance of Inheritance for Ownership Formation] (Bremen: Dissertation).

Pierson, P. (1989) Cutting against the grain: Reagan, thatcher and the politics of the welfare state retrechment, ProQuest dissertations and thesis, UMI Dissertation Publishing.

Pierson, P. (2000) Increasing returns, path dependence, and the study of politics, The American Political Science Review, 94(2), pp. 251–267.

Pinol, J.-L. & Walter, F. (2003) La ville contemporaine jusqu'à la Seconde Guerre mondiale [The Contemporary City Until the Second World War], in: J.-L. Pinol (Ed) Histoire de l'Europe Urbaine. II. De l'Ancien Régime à nos jours. Expansion et limite d'un modèle, p. 9ff. Paris: Éd. du Seuil.

Rabeler, G. (1997) Wiederaufbau und Expansion westdeutscher Städte 1945-1960 im Spannungsfeld von Reformideen und Wirklichkeit. Ein Überblick aus städtebaulicher Sicht [Reconstruction and Expansion of West-German Cities 1945-1960. Tensions of Reformer Ideals and Reality. An Overview from a City-building Perspective] (Bonn: Deutsches Nationalkomitee für Denkmalschutz).

Reif, H. (1993) Die verspätete Stadt. Industrialisierung, städtischer Raum und Politik in Oberhausen 1846–1929 [The Belated City. Industrialization, Urban Space and Policy in Oberhausen, 1846–1929] (Köln: Rheinland-Verl).

Reps, J. W. (1965) The Making of Urban America. A History of City Planning in the United States (Princeton, NJ: Princeton University Press).

RWZ (1918) Reichswohnungszählung [Imperial Housing Census]. Edited by Statistisches Reichsamt (Berlin: Höbbing).

Schildt, A. (2002) Urban reconstruction and urban development in Germany after 1945, in: F. Lenger (Ed) Towards an Urban Nation. Germany Since 1780, pp. 141-161 (Oxford: Berg).

Schmidt, S. (1989) Convergence theory, labour movements, and corporatism: The case of housing, Scandinavian Housing & Planning Research, 6, pp. 83-101.

Schöller, O. (2005) Die Blockstruktur. Eine qualitative Untersuchung zur politischen Ökonomie des westdeutschen Großsiedlungsbaus [Block Structure. A Qualitative Investigation Concerning the Political Economy of West-German Housing Estate Construction (Berlin: Verlag Hans Schiler).

Schott, S. (1912) Agglomerationen des Deutschen Reichs 1871-1910, Schriften des Verbandes deutscher Städtestatistiker [Agglomerations in Imperial Germany 1871-1910] (Breslau: Verlag von Wilh. Gottl. Korn).

Schwartz, H. (2009) Subprime Nation. American Power, Global Capital, and the Housing Bubble (Ithaca, NY: Cornell University Press).

Schwartz, H. & Seabrooke, L. (2008) Varieties of residential capitalism in the international political economy: Old welfare states and the new politics of housing, Comparative European Politics, 6, pp. 237-261.

Sicken, B. (1988) Landstreitkräfte in Deutschland 1815-1914. Beobachtungen zur Struktur und zu den militärisch-zivilien Beziehungen [Territorial Armies in Germany 1815–1914], in: B. Sicken (Ed) Stadt und Militär 1815–1914. Wirtschaftliche Impulse, infrastrukturelle Beziehungen, sicherheitspolitische Aspekte, pp. 105–151. Paderborn: Ferdinand Schöningh.

Snowden, K. A. (1995) Mortgage securitization in the United States: Twentieth century developments in historical perspective, in: M. D. Bordo (Ed) Anglo-American Financial Systems, pp. 261–298. Burr Ridge, IL: Irwin.

Sombart, W. (1906) Warum gibt es in den Vereinigten Staaten keinen Sozialismus? [Why is There No Socialism in the United States? (Tübingen: Verlag von J.C.B. Mohr).

Spiethoff, A. (1934) Boden und Wohnung in der Marktwirtschaft, insbesondere im Rheinland [Land and Housing in Market Economies] (Jena: G. Fischer).

Streeck, W. & Thelen, K. (2005) Introduction: Institutional change in advanced political economies, in: W. Streeck & K. Thelen (Eds) Beyond Continuity: Institutional Change in Advanced Political *Economies*, pp. 1–39 (Oxford: Oxford University Press).



Sutcliffe, A. (1974) Introduction, in: A. Sutcliffe (Ed) Multi-storey Living. The British Working-Class Experience, pp. 1–19. New York, NY: Barnes & Noble Books.

Thomas, M. M. (1992) Umwandlung von Miet- in Eigentumswohnungen in Düsseldorf. Ablauf und Auswirkungen eines jüngeren innerstädtischen Wandlungsprozesses auf dem Wohnungsmarkt [The Transformation of Rental into Owner-occupied apartments in Düsseldorf] (Düsseldorf: Zenon-Verl).

Thun, N. (1997) Die rechtsgeschichtliche Entwicklung des Stockwerkseigentums. Ein Beitrag zur deutschen Privatrechtsgeschichte [A Law-history of Apartment Ownership] (Hamburg: Lit).

Tygiel, J. (1979) Housing in late nineteenth-century. American cities: Suggestions for research, *Historical Methods*, 12(2), pp. 84–97.

Tyirin Kirk, C. & Kirk, G. W. (1981) The impact of the city on home ownership: A comparison of immigrants and native whites at the turn of the century, *Journal of Urban History*, 7(4), pp. 471–498.

US-Census (1895) Report of the Social Statistics of Cities in the United States at the Eleventh Census 1890 (Washington, DC: Government Printing Office).

US-Census (1902) Twelfth Census of the United States taken in the year 1900, Vol. Population Part – 2 Census Reports Volume 2 (Washington, DC: United States Census Office).

US-Census (1922) Fourteenth Census of the United States Taken in the Year 1920 Population (Washington: US Bureau of the Census).

US Department of Commerce, Bureau of the Census (2007) County and City Data Book [United States] (Washington, DC: US Department of Commerce, Bureau of the Census).

Veracini, L. (2011) Introducing, Settler Colonial Studies, 1(1), pp. 1–12.

Veracini, L. (2012) Suburbia, settler colonialism and the world turned inside out, Housing, Theory & Society, 29(4), pp. 339-357.

Voigtländer, M. (2009) Why is the German homeownership rate so low? *Housing Studies*, 24(3), pp. 355-372.

Voldman, D. (2013) L'encadrement des loyers depuis 1900, une question européenne [Rent Control Since 1900, a European Question], Le Mouvement Social, 245, pp. 137–147.

Warner, S. B. (1962) Streetcar Suburbs. The Process of Growth in Boston, 1870-1900 (Cambridge, MA: Harvard University Press).

Warner, S. B. (1987) The Private City. Philadelphia in Three Periods of its Growth (Philadelphia, PA: University of Pennsylvania Press). Original edition, 1968.

Weber, M. (1980) Wirtschaft und Gesellschaft. Grundriß der verstehenden Soziologie. 5., revidierte Auflage [Economy and Society], in: J. Winckelmann (Ed) Grundriss der Sozialökonomik, III Abteilung (Tübingen: Verlag von J.C.B. Mohr). Original edition, 1921/2.

Weber, K.-K. (1995) Stadt und Befestigung: Zur Frage der räumlichen Wachstumsbeschränkung durch bastionäre Befestigungen im 17. und 18. Jahrhundert [City and Fortification], Die alte Stadt, 4, pp. 301–321.

Wimmer, A. & Glick Schiller, N. (2002) Methodological nationalism and beyond: Nation-state building, migration and the social sciences, Global Networks, 2(4), pp. 301–334.

Wischermann, C. (1997) Mythen, Macht und Mängel: Der deutsche Wohnungsmarkt im Urbanisierungsprozeß [Myths, Power and Shortages: The German Housing Market During Urbanization], in: J. Reulecke (Ed) Geschichte des Wohnens. Band 3. 1800-1918. Das Bürgerliche Zeitalter, pp. 333–502 (Stuttgart: Deutsche Verlags-Anstalt).

Wolfe, M. (2009) Walled Towns and the Shaping of France. From the Medieval to the Early Modern Era (New York, NY: Palgrave Macmillan).

Yago, G. (1984) The Decline of Mass Transit (Cambridge: Cambridge University Press).

Zensus. 2011. https://ergebnisse.zensus2011.de.