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HOUSING SPECULATION AND *NOUVEAU RICHE* TASTE IN LATE-NINETEENTH-CENTURY BERLIN

After Germany experienced a series of economic booms in the late-nineteenth century, the city of Berlin was transformed by intense land speculation and rapid housing construction. This paper considers both the tenement market and the suburban housing market in the context of a pervasive entrepreneurial culture and 'gold-rush' mentality that defined nouveau riche society in Berlin. After mining the tenement market in the north and east of Berlin, this expanding middle class fled the city and moved to affluent low-density suburbs to the west of Berlin called "villa colonies," where they sought to display their newfound wealth. The pastoral but cosmopolitan and technologically vibrant villa colony was gradually constructed in the imagination of Berliners as the "bling" of the nouveau riche and an antithesis to the poverty of the tenement. The distinctive architecture of the villa colonies thus came to demonstrate the success of local government's laissez-faire attitudes towards the speculators – even if a dwelling in such suburbs was only available to those members of society who had themselves exploited the tenement market. As this paper argues, it was through architecture that the perceived successes of real estate were made tangible and the tastes and values of an expanding bourgeoisie were given expression.

For a tourist visiting Berlin in the late nineteenth century, the best place for a panorama of the city was the Berlin town hall (Rotes Rathaus) near Alexanderplatz, where they could glimpse a stony urban landscape of densely built tenement blocks, church spires and smokestacks through the thickness of the factory haze. However, as a commentator from *Vorwärts* (the mouthpiece of the Social Democratic Party of Germany) declared, the most striking (and unsettling) view from the panorama was the one facing west: "It expresses itself so self-evidently [...] up here no one can totally fail to notice it. Even a stranger who knows nothing of the distinctive character of the individual city districts of Berlin, by walking around the pinnacle of the town hall tower would hardly be left in any doubt where the dwelling districts of the well-off and where the dwelling districts of those without means were to be found."¹

Like the other major nineteenth-century metropolises of Paris, London and Vienna, Berlin was a city transformed by fervent land speculation which flourished with the complicity of local government. Like Paris, Berlin's emerging bourgeois class capitalised on rent generated from a large-scale apartment industry – and, like London, this class then went on to create a highly profitable suburban villa industry. Speculators were able to thrive in both major housing markets, and for that reason the city excelled, perhaps more than any other nineteenth-century European city, in the art of uneven housing development.² However, the ways in which housing design served to highlight, normalise or distort socioeconomic segregation remains unexplored in relation to nineteenth-century Berlin.³ As this paper argues, it was through architecture that the perceived successes of real estate were made tangible and the tastes and values of an expanding bourgeoisie were given expression.

Two housing types dominated Berlin's post-industrial housing market: the first was the tenement block, which dominated the dense north-eastern side of Berlin and housed the working class and petit bourgeoisie, while the second was the luxury dwelling within the *Villenkolonien* (villa colonies), which were located in the west and housed both the *Wirtschaftsbürgertum* (business middle classes) and *Bildungsbürgertum* (educated middle classes). This paper reflects briefly on the tenement in order to highlight the monopolistic forces at play within Berlin's late nineteenth-century housing market and the subsequent commodification of working-class housing, and then turns to the villa colonies to explore the specific architectural and urban qualities of Berlin's luxury suburban housing market.

Tenement Blocks

The old eighteenth-century fortifications that once characterised the provincial city of Berlin came down gradually during the 1860s. Surrounding these walls were concentrations of shantytowns, where working-class families lived in horrid conditions but nonetheless cultivated their own domestic lifestyles through the construction and maintenance of their shanty.⁴ As the walls came down piecemeal, however, this kind of grassroots enterprising spirit within the urban fringes was gradually replaced with a more authoritarian kind of urban expansion and a more ruthless enterprising spirit. The Hobrecht Plan of 1862 extended the city's layout, replacing the shanties with an extensive series of housing blocks and ring roads. Led by urban planner James Hobrecht under the auspices of the Prussian urban planning authority (*Baupolizei*), the plan was intended as a far-sighted solution to Berlin's rapidly increasing immigrant population, which had almost tripled between 1840 and 1871.⁵ Hobrecht initially intended for the grid to serve as a *tabula rasa*, and believed that matters of urban design were not the responsibility of the public sector but rather that of the private sector.⁶ On the basis of Germany's *laissez-faire* liberal theory, the types of living conditions desired by the market would naturally create more competition and would thus create a higher standard of housing.

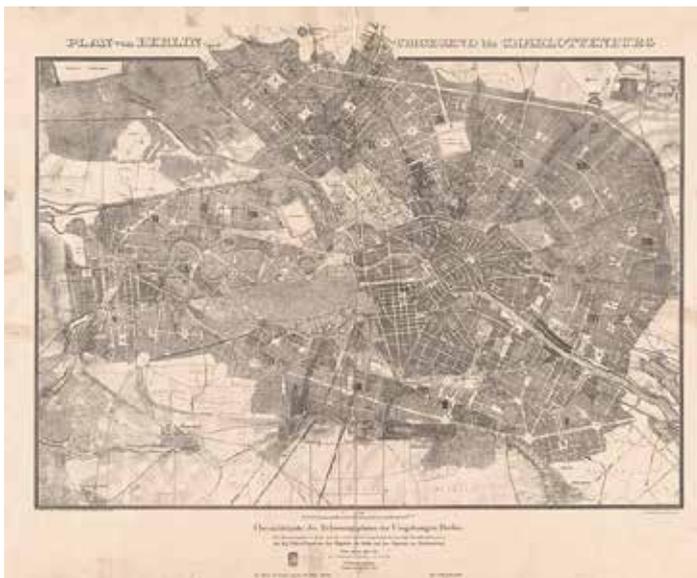


FIGURE 1 The Hobrecht Plan, 1862 (source: Wikimedia commons)

Yet, Hobrecht perhaps underestimated the reality of monopolistic forces at play within the local private sector. The section of Berlin society which ultimately benefitted most from the plan was not the working classes who inhabited the grid but rather those who controlled the parcelling of the land. Most individuals with vested interests in the swift privatisation of the Hobrecht Plan belonged to the *Wirtschaftsbürgertum* (an expanding portion of whom were *nouveau riche*), consisting of a heterogeneous group of “real estate corporations, banks, individual speculators, contractors and landlords.”⁷ This left the vast majority of the *petit bourgeoisie* and the working class to bear the brunt of excessively high rental prices – forcing them in many cases to take on lodgers. The *Wirtschaftsbürgertum*’s various spheres of activity formed a growing and pervasive real estate culture in Berlin which circulated around daily stock exchange newspapers such as the *Berliner Börsen-Zeitung*. The flurry of industrial and commercial activity brought on by the Hobrecht Plan was so characteristic of this era that it came to be known as the *Gründerzeit* (literally founders’ years, in reference to the speculators who founded the joint-stock companies). To be sure, there were efforts from social reformers to change legislation, curb the monopoly over the housing market and improve living conditions during this period. However, the idea of workers’ housing as belonging to the realm of commodity exchange became such a deep-seated mentality that any efforts to reform housing legislation remained futile during the *Gründerzeit*.

Yet, the social reformers were largely justified in their claims that the *laissez-faire* morality of the government had created a series of highly unfortunate and altogether bizarre urban conditions. As mentioned, land prices were extremely high due to the vast credit amounts being granted to land speculators, which created an artificial short supply in the local housing market.⁸ Hobrecht had purposely created deep housing blocks in his plan with the idea that property owners would naturally be inclined to leave space behind a street-facing house for a large garden.⁹ However, high land prices forced property owners to maximise space within their block. The regulations to control the utilisation of land space did little to improve urban conditions. The famous building ordinances of 1853 dictated a maximum height for a residential building of 22 m that was limited to 5 stories, and a minimum courtyard size of 5.60m².¹⁰ Builders maximised these regulations, resulting in narrow courtyards and dark, dank tenement interiors. These tenements were typically composed of a street-facing house known as the front house (*Vorderhaus*), with the addition of side wings (*Seitenflügel*) as well as a rear building accessible only through the narrow courtyard known as the back house (*Hinterhaus*). These structures were erected ad hoc around an already settled urban fabric; a painting from 1875 by Friedrich Kaiser titled *Tempo der Gründerzeit* (*Tempo of the Gründerzeit*) indicates that the land on which the tenements were constructed was still relatively rural. With no objective shortage in buildable land, the density of the tenements signalled an urban planning impasse between the profit-driven speculators and the *laissez-faire* politics of the *Baupolizei* that prevented the more creative approaches towards housing that Hobrecht had initially envisaged.



FIGURE 2 Friedrich Kaiser, *Tempo der Gründerzeit*, 1875. Oil on Canvas (source: Wikimedia commons)

Operating within the general stylistic confusion typical of the Gründerzeit, speculators adorned workers' housing with elaborate historicist façades to increase the building's artificial value, causing a proliferation of beautifully ornate buildings that often concealed horrible conditions within – much to the frustration of reformers such as Karl Scheffler and Rudolph Eberstadt, who argued that tenants were being misled regarding the value of their rental.¹¹ Apartment interiors were likewise adorned with “tiled stoves, painted ceilings, stucco decoration and the like, all of which give the impression of expensive manufacturing in order to gain a high fire insurance appraisal and consequently more favourable mortgage terms (the highest aspiration of the entrepreneur). These false ‘adornments’ are of the lowest quality and are not durable in the most frequently used areas.”¹²

For critics like Eberstadt, the Mietskaserne were essentially commodity products selling false luxury to the lower classes. However, conservative critics rejected the notion of any deceit on the part of the speculators and upheld the belief that speculation only worked if there was a market need. Berliners did not want to live in what many critics considered the universal ideal of the single-family detached dwelling; they simply preferred multi-story apartment living. As the contemporary conservative critic Andreas Voigt argued, drastically inflated land prices did not represent a monopoly but was instead simply the “inevitable result of a completely objective process, the ever more intensive use of land, evident in the vertical dimensions of our buildings and the increase in the number of floors.”¹³

Villa Colonies

Voigt's claim was seriously undermined by later patterns in speculative real estate development outside the Hobrecht Plan – patterns that were altogether different from what had occurred within the plan. If such processes were truly as objective as Voigt had claimed, further outward urban expansion of the Mietskaserne would have continued at the same velocity as was depicted in Friedrich Kaiser's 1875 painting. Instead, low-density residential luxury suburbs called “villa colonies” were constructed. Entrepreneurs and their joint-stock companies (*Aktiengesellschaft*, AG hereafter) founded these real estate ventures, effectively absorbing the capital of the Wirtschaftsbürgertum, who invested in company shares. Additionally, the new estates provided this class with a luxury suburban residence away from the miserable conditions of the metropolis they themselves had played a part in creating.

For the most part, establishing a villa colony in Berlin's outskirts was a highly profitable venture until the stock market crash of 1873 put a halt to housing developments. The relative success of these ventures during the 1860s and early 70s was at least partially due to the farsightedness of the entrepreneurs, who planned the colonies around the Grunewald forest, i.e. the public park and former royal hunting ground roughly midway between Berlin and Potsdam (the slightly shaded area dominating the left of the map in Figure 3). The area around the forest was distinctly rural, consisting mainly of grazing land and isolated villages with modest agricultural produce which was “brought by horse and carriage to Berlin.”¹⁴ With its picturesque rivers, dense forestation and sparsely settled village life, the area surrounding the Grunewald was an ideal region in which to establish Berlin's wealthiest residential districts. The earliest villa colonies established within this area were Lichterfelde in 1865, Westend in 1866; Alsen in 1869, Friedenau in 1871 and Fichtenberg in 1872. Westend was approximately seven kilometres from the centre of Berlin, while Alsen, at 25 km from Berlin, was closer to Potsdam.



FIGURE 3 Map from the 1885 Baedeker guide, cropped by the author. Grunewald forest is the shaded area on the left. The areas of Lichterfelde and Zehlendorf are indicated in the lower right. (source: Wikimedia commons)

In addition to Berlin's ideal scenery in the west, the villa colony entrepreneurs found themselves in a position to capitalise on very favourable local legislative and economic conditions by building within these areas. During this period, land was incredibly cheap to buy outside of the circular ring (the *Ringbahn* was finished in 1851 and is marked prominently in Figure 3).¹⁵ As Berlin's wealthiest residents flooded into the colonies, transit systems, roads and other modern amenities were established and increased the value of the land. However, speculators were still being taxed on the land's minimal agricultural value, since the incremental tax on land (*Wertzuwachssteuer*) was only introduced to Berlin's outer suburbs in 1907.¹⁶ Independent municipalities, who encouraged tax evasion, managed the colonies during this early period.¹⁷ There were no building regulations governing these areas until the publication of the *Building Regulations for Berlin's Suburbs (Baupolizeiordnung für die Vororte Berlins)* in 1892, indicating that Berlin's suburban land (*Vororte*) outside the Ringbahn was seen as distinctly separate from the image of the metropolis in the eyes of the Baupolizei. Yet, in the public's imagination, these areas were seen as fundamentally connected and inseparable from the image of Berlin and its network much earlier.¹⁸ Thus, real estate entrepreneurs were able to reap huge investment returns speculating on Berlin's future outward expansion, a vision that was not shared by the Baupolizei until much later in the century.

Furthermore, as architectural historian Heinz Reif remarked, the AGs that founded the colonies functioned particularly closely with the banks, which would have their own land department, thus amplifying the success, but equally amplifying the risk, of the speculative ventures.¹⁹ This relationship consequently brought bankers to live in the villa colonies themselves, establishing a wealthy presence within the area upon its founding that drove up sale prices and preserved the villa colony as a luxury commodity, thus securing the bankers' financial investments.²⁰ As this sort of pre-established collective prestige in the colonies was forged, gradually those belonging to other spheres of the *Wirtschaftsbürgertum* and *Bildungsbürgertum*, including businesspeople, bankers, architects, industrialists and lawyers, settled into the colonies.²¹

These general characteristics of the suburban villa colony were exemplified in Lichterfelde, which was first established as the private initiative of businessman Johann Anton Wilhelm Carstenn. Carstenn founded Lichterfelde well beyond the village ring and subsequently established streetcars to connect the colony to the city (the train lines of which can be seen running prominently through the map in Figure 3). These train lines serviced most of the southwest colonies and connected them to the heart of Friedrichstadt. Trains would run frequently upon their initial establishment. Within a decade, train frequency almost tripled (from eighteen per day in 1870 to fifty per day in 1880), and by 1901, 330 trains ran daily.²²

The technological vibrancy of Lichterfelde certainly contributed to its exclusive image, yet its architecture perhaps played an even more crucial and conspicuous role in this regard. As the first parcels of land began to sell, clients hired Schinkel school architects who built compact villas in the neoclassical tradition but with the incorporation of more eclectic stylistic elements. Carstenn had originally attempted to recommend a particular building style oriented towards the "English cottage type," which he had observed in the British Queen Anne style, in order to give the villa colony a more unified character.²³ Carstenn's quest to establish a more modest architectural vocabulary was perhaps undermined by his own purchasing of an extravagant eighteenth-century neoclassical manor situated within Lichterfelde, securing his paternal presence over the colony and inadvertently setting its architectural vocabulary.



FIGURE 4 Gropius & Schmieden, Villa of the Baron Steinäcker. From *Architektonisches Skizzenbuch H108/3*, 1871.

Schinkel school architects, including Martin Gropius, Heino Schmieden, Hermann von der Hude and Johannes Otzen, continued in this tradition and erected around a dozen palatial villas there in the late 1860s. They were generally praised in the most important architectural journal, *Deutsche Bauzeitung*, for their sophisticated and cosmopolitan mixture of styles; while Gropius' and Schmieden's Villa Steinäcker incorporated "a more romantic element with its steeply sloping rooftops and spiked turret,"²⁴ other villas designed by Otzen attempted to "intertwine a gothic brick shell with Italian roof and facade motifs."²⁵

The Gründerzeit came to an end with the economic crash of 1873, which halted new construction in Lichterfelde and bankrupted Carstenn. However, in the 1880s, following the recovery of the stock market, another surge in villa construction took place, in which the neoclassical villa as the general yardstick was disregarded in favour of medieval castles and baroque mansions with various Oriental details, Jugendstil patterns and vernacular elements. Even the villas that borrowed from a neoclassical vocabulary attempted to radically reinvent the style as if to outdo previous efforts in Lichterfelde, and to give expression to a new era of economic prosperity.²⁶ Yet, the villa colony as an idea relied on this kind of architectural competition to maintain the cultural prestige of those who lived there. It also ensured the exclusivity of the colony, promising high investment returns for property owners and shareholders. The urban planning principles and architectural eclecticism of the villa colonies certainly helped to construct the image of Berlin's west as pastoral, cosmopolitan and technologically and intellectually vibrant. These new suburbs were thus constructed in the imagination of Berliners as an antithesis to the failures of the Mietskasernen – even if that lifestyle was only accessible to the most privileged members of urban society.

The turn of the century marked a second era of speculative building that continued to cater to Berlin's luxury housing market. The Kurfürstendamm AG founded the Grunewald colony in 1889; the Zehlendorf-West Land AG founded the Zehlendorf-West colony in 1904; and the Homestead AG founded the Nikolassenee, Schlachtensee and Carlshorst colonies in 1901. Unlike their predecessors during the Gründerzeit, these housing estates were accompanied by a plethora of catalogues and brochures explicitly targeted at tenement dwellers. Browsing through the catalogues produced by the Homestead AG, for example, one finds a diverse stylistic range of dwellings represented in quaint model house replicas, etchings of ready-made medieval castles and coloured photographs displaying interior spaces, containing walls complete with hunting trophies to remind the buyer of the house's proximity to the former royal hunting ground of the Grunewald.²⁷ This kind of choice in architectural style would undoubtedly have appealed to the petit bourgeois section of Berlin metropolitan society wishing to escape the notorious monotony of their tenement existence.

Particularly popular were colourful prints, such as the one held in the Zehlendorf Heimatmuseum archive, which displayed a map of the Zehlendorf-West villa colony indicating the parcels of land available for purchase and highlighted the colony's ideal position between the Grunewald forest and the channels of Schlachtensee and Krumme Lanke. All this functioned to set the urban layout of the villa colony apart from Hobrecht-style planning, yet the railway line seen cutting vertically through Zehlendorf-West's centre indicated a fundamental interconnectedness between the colony and the speed and density of the city.

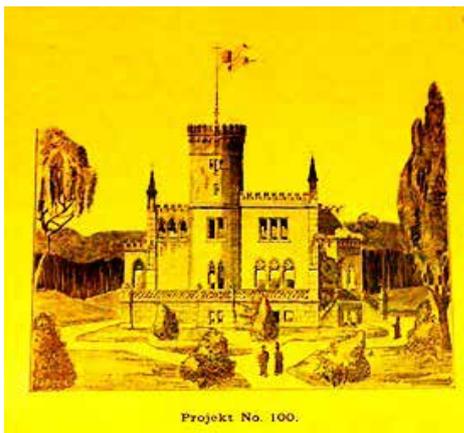


FIGURE 5 “Project 100”: Etching of a ready-made house available in Schlachtensee (source: *Die Villen-Kolonieen an den Bahnhöfen: Schlachtensee, Nikolassee, Wannsee, Carlshorst, Mahlow* (Berlin: Heimstätten-Aktien-Gesellschaft, 1901)

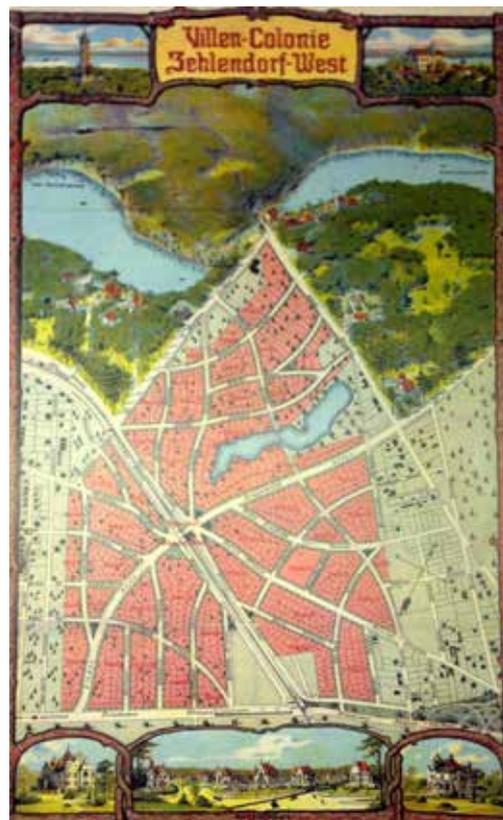


FIGURE 6 Print of Zehlendorf-West indicating parcels available. (source: Zehlendorf Heimatmuseum archive)

Conclusion

The architectural values exemplified in the catalogues of the Zehlendorf-West AG and the Homestead AG were subjected to increasing public scrutiny in the first decade of the twentieth century as the *Lebensreform* (life reform) movement took hold of Germany society. The total planning approach expounded by Ebenezer Howard’s garden city model was transported to Germany in the form of the *Deutsche Gartenstadtgesellschaft* (German Garden City Society, henceforth DGG), which formed in 1902. Originally an obscure left-wing movement, the DGG was able to capitalise on the popularity of the Lebensreform movement in order to convey to the public the urgency of reforming Berlin’s suburbs. The movement did much to expose profit-driven speculators and to change attitudes concerning the ethics of speculative real estate. To be sure, the real estate speculator was already an odious figure in German society since the stock market crash of 1873 which caused the public to question their faith in laissez-faire liberalism and its chief representative, the exploitative entrepreneur. However, as tastes and attitudes shifted in the early years of the twentieth century, the architecture of Lichterfelde became more intimately associated with the Carstenn era and was subject to a more pervasive distrust. In a tone much more critical than that found in the *Deutsche Bauzeitung*, one critic from the *Berliner Tageblatt* commented retrospectively in 1911 on the building projects occurring there in the 1870s: “They [the clients in Lichterfelde] built miniaturized palazzos with open halls that did not correspond to our climate and, at most, could be used as summerhouses. They copied Florentine roofs or Veronese window arches. Greek models with porticos were utilized, which stood like mini temples between green bushes and a front garden that sloped downward so that the expensive flower beds could be seen and would testify to the prosperity of their owner.”²⁸

Speculators began to catch on to this shift in taste towards English garden city planning and quickly co-opted the term to sell cheaply made housing estates. In a 1911 edition of the *Berliner Tageblatt*, a reporter writing about the activities of the DGG assured readers that the movement he was discussing had “nothing in common with the villa colonies that clever land speculators adorn with the name ‘Garden City’.”²⁹ Thus, while speculative housing projects continued to determine Berlin’s uneven urban expansion, they were considerably more inconspicuous in their architectural vocabulary than their nineteenth-century precursors. Despite appearing in the guise of social reform, these housing estates inspired by the DGG only repeated, and helped normalise, the logic of socioeconomic segregation (i.e. the logic of the bourgeois elite’s right to the suburbs) that had previously characterised the Gründerzeit.

In providing the basic historical foundations of Berlin’s late-nineteenth-century housing expansion, this paper has suggested the relationship between real estate and architecture to be much more complex than is generally accepted by architectural historians. The claims of speculative housing to represent legitimate architectural principles were subject to fluid and constantly changing societal values. Much more research needs to be undertaken in this area to more fully understand the specific social, moral and architectural ideals being articulated within and against these forms of speculative housing and the capitalistic forces underpinning them.

Endnotes

- 1 Vorwärts, “[Town Hall Tower Panorama],” in *Metropolis Berlin 1880–1940*, ed. Iain Boyd Whyte and David Frisby (Berkeley: University of California Press, 2012), 44.
- 2 The theme of uneven development and the creation of ideal middle-class environments is a familiar one for historians of nineteenth-century urbanisation. See Robert Fishman, *Bourgeois Utopias: The Rise and Fall of Suburbia* (New York City: Basic Books, 1987) and David Scobey, *Empire City: The Making and Meaning of the New York City Landscape* (Philadelphia: Temple University Press, 2002).
- 3 For the most authoritative account of the Berlin tenement, see Werner Hegemann, *Das steinerne Berlin: Geschichte der größten Mietskasernenstadt der Welt*, (Berlin: Verlag Ullstein, 1963). For the most authoritative account of Berlin’s suburban expansion, see Harald Bodenschatz, “Städtebau – Von der Villenkolonie zur Gartenstadt,” in *Villa und Eigenheim: Suburbaner Städtebau in Deutschland*, ed. Tilman Harlander and Harald Bodenschatz (Stuttgart: Deutsche Verlags-Anstalt, 2001), 75–105. There is currently no critical analysis of these speculative housing forms in relation to the specific design values they articulated.
- 4 Kristin Poling, “Shantytowns and Pioneers Beyond the City Wall: Berlin’s Urban Frontier in the Nineteenth Century,” *Central European History* 47, no. 2 (2014): 245–274. doi:10.1017/S0008938914001241.
- 5 Horst Matzerath, “Berlin, 1890–1940,” in *Metropolis, 1890–1940*, ed. Anthony Sutcliffe (Chicago: University of Chicago Press, 1984), 293.
- 6 Claus Bernet, “The Hobrecht Plan (1862) and Berlin’s Urban Structure,” *Urban History* 31, no. 3 (2004): 6.
- 7 Bodenschatz, *Platz frei für das neue Berlin*, (Berlin: Transit, 1987), 53.
- 8 Håkan Forsell, *Property, Tenancy and Urban Growth in Stockholm and Berlin, 1860–1920* (Aldershot: Ashgate Publishing, 2006), 168.
- 9 Brian Ladd, *Urban Planning and Civic Order in Germany, 1860–1914* (Cambridge: Harvard University Press, 1990), 83.
- 10 Nicholas Bullock and James Read, *The Movement for Housing Reform in Germany and France, 1840–1914* (Cambridge: Cambridge University Press, 1985), 91.
- 11 See Karl Scheffler, “The Tenement Block,” in *Metropolis Berlin 1880–1940*, 158–163.
- 12 Rudolf Eberstadt, *Die Spekulation im neuzeitlichen Städtebau: eine Untersuchung der Grundlagen des städtischen Wohnungswesens. Zugleich eine Abwehr der gegen die systematische Wohnungsreform gerichteten Angriffe* (Jena: G. Fischer, 1907), 55.
- 13 Quoted in Bullock and Read, *The Movement for Housing Reform*, 171.
- 14 Werner Hegemann, *Das steinerne Berlin*, 245.
- 15 Hegemann, *Das steinerne Berlin*, 245.
- 16 Bullock and Read, *The Movement for Housing Reform*, 177.
- 17 Heinz Reif, “Dynamics of Sub-Urbanisation - the Growing Periphery of the Metropolis. Berlin 1890–2000,” in *The European Metropolis 1920–2000: Proceedings of a Conference at The Centre of Comparative European History* (Berlin, 2003), 3, accessed 14 February 2016, <http://dhl.handle.net/1765/1020>.

- 18 One contemporary commentator remarked thusly: "Despite being outside of the municipality of Berlin, these buildings [in Berlin's villa colonies] are viewed as an inseparable appendage of Berlin"; Architekten-, Ingenieur-Verein zu Berlin and Vereinigung Berliner Architekten, *Berlin und seine Bauten 2/3*, (Berlin: Ernst, 1896), 151.
- 19 Heinz Reif, "Villa Suburbana – Berlin im Europäischen Metropolenvergleich 1870–1914," in *Reden über die Stadt*, ed. Lydia Bauer (Berlin: Guardini-Stiftung, 2002), 91.
- 20 Reif, "Villa Suburbana...," 91.
- 21 Thomas Wolfes, *Die Villenkolonie Lichterfelde: Zur Geschichte eines Berliner Vorortes (1865–1920)* (Berlin: Techn. Univ., 1997), 71.
- 22 Dittmar Machule and Lutz Seiberlich, "Die Entwicklung der Wohngebiete," in D. R. Frank, *Berlin und seine Bauten IV Bd. A*, (Berlin: Ernst & Sohn, 1970), 104.
- 23 Harald Bodenschatz, "Villenstadt Lichterfelde bei Berlin," in Tilman Harlander and Harald Bodenschatz, *Villa und Eigenheim*, 107.
- 24 "Mitteilungen aus Vereinen," *Deutsche Bauzeitung* 22 (1869): 262.
- 25 "Die Berliner Bau-Ausstellung 1874," *Deutsche Bauzeitung* 83 (1874): 334.
- 26 Examples of these villas can be found in Julius Posener, *Villen und Landhäuser in Berlin* (Berlin: Nicolai, 1989).
- 27 *Die Villen-Kolonieen an den Bahnhöfen: Schlachtensee, Nikolassee, Wannsee, Carlshorst, Mahlow* (Berlin: Heimstätten-Aktien-Gesellschaft, 1901).
- 28 "Berliner Vorortvillen," *Berliner Tageblatt (Wohnungsanzeiger)*, 5 February 1911: 66.
- 29 "Deutsche Gartenstadtbewegung," *Berliner Tageblatt (Morgen Ausgabe)*, 29 September 1911: 10.